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and
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Entrepreneurship and Development:
The Idea of Inclusive Opportunity Creation
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Introduction

This volume covers the proceedings of the 13th International Entrepreneurship Forum Conference held in Bogota, Colombia. The volume includes only those papers which were submitted by the deadline and presented in full at the conference. We, therefore, had to exclude a number of papers which were either incomplete or which were not returned to the conference organisers on time. Although most of the papers are in English, there are few which were submitted in Spanish. We did not receive the translated versions. This set of proceedings does not include the various presentations made at the conference. Details of these extra presentations should be available on the 13th IEF conference web site.

The volume is divided into eight sections which represent the various sub-themes of the conference. As readers will note they cover various topics of entrepreneurship and innovation in society ranging from inclusion, to development, social venturing, gender issues, policy and technology. This was how the participants perceived and understood the main theme of the conference, and the eighteen papers display the depth and breadth of thought and practice in entrepreneurship across various parts of the world. We are particularly pleased to put together the proceedings which break away from the ‘over-squeezed’ narrative and discourse on entrepreneurship with its overwhelming reference to normative enquiry in the West. However, unformed and raw as some of the conceptualisation, methods and findings might be, they articulate an understanding and representation practice in their emergent forms in the South. In their expression these papers raise questions about and pose challenges to how we think about and value entrepreneurship and innovation in different contexts.

We hope readers will find the papers of interest as much as we did in encouraging their inclusion and further development over time.

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Sub-Theme 1: Community Enterprise and Inclusive Development

13th International Entrepreneurship Forum
Entrepreneurship and Development:
The Idea of Inclusive Opportunity Creation

31 July – 2 August, 2014
Bogota, Colombia

**POLITICAS PÚBLICAS DE FINANCIAMIENTO EMPRESARIAL EN
COLOMBIA: ÉXITO O FRACASO DE LAS INICIATIVAS
EMPRESARIALES**

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RESUMEN

La creación de nuevas empresas es un factor determinante en el desarrollo económico de cualquier localidad, Colombia ha trabajado en procura de alcanzar ese derrotero, desde los años 90 el gobierno estableció leyes orientadas a la creación de organismos y programas donde los potenciales empresarios obtuvieran financiamiento.

Con el ánimo de contribuir con evidencia empírica del resultado de estos programas y evidenciar su efectividad, y a partir de allí, establecer la capacidad emprendedora en Colombia de los proyectos creados bajo programas de financiamiento del gobierno, todo ello medido bajo el éxito o fracaso de las iniciativas empresariales, en especial del programa de mayor impacto en la financiación de nuevas iniciativas, el Fondo Emprender, se desarrolló la presente investigación.

La investigación es de carácter cualitativo, donde se exploró los diferentes programas de financiamiento empresarial en Colombia. Se utilizó estadística descriptiva para establecer: el dinamismo empresarial considerando: el número de proyectos financiados; monto de financiación; zonas geográficas; sectores económicos; el género y perfil emprendedor. Se utilizó el modelo logit para integrar las respuestas cualitativas y cuantitativas, que encontrara los elementos que inciden en el éxito o fracaso de las iniciativas emprendedoras financiadas. Mediante un sondeo de opinión se consultó a los diferentes emprendedores que han recibido financiación de fondos estatales, permitiendo esto obtener el perfil del emprendedor y la relación con el éxito o fracaso.

Los diferentes países, experimenta la necesidad de la iniciativa empresarial como una estrategia para lograr fomentar el espíritu empresarial, especialmente entre los jóvenes desempleados y por la rápida industrialización de la economía tal como lo enuncia (Das, 2012); surgen las instituciones de apoyo a la creación de empresa (Urbano y Toledano. 2007); y la educación empresarial como caballo de batalla de los gobernantes (Connor, 2013).

El éxito o fracaso dependen: del monto de inversión, la generación y gestión de ventas, la ejecución y gestión presupuestal, la generación y gestión de empleo, la ubicación y del tipo de sociedad.

Palabras claves: Financiamiento, emprendimiento, política pública, capacidad emprendedora.

PUBLIC POLICY IN COLOMBIA BUSINESS FINANCING: SUCCESS OR FAILURE OF BUSINESS INITIATIVES

ABSTRACT

The creation of new businesses is a key factor in economic development of any city, has worked in Colombia seeks to achieve that course, since the 90s, the government established aimed at creating laws agencies and programs where potential entrepreneurs obtain financing.

With the aim to contribute empirical evidence of the result of these programs and to demonstrate its effectiveness, and from there, establish entrepreneurship projects in Colombia created under government funding programs, all measured on the success or failure of business initiatives, especially the greatest impact on program funding new initiatives, the entrepreneurship Fund, this research develops.

The research is qualitative, where different business financing programs in Colombia was explored. Descriptive statistics were used to establish: entrepreneurial dynamism considering: the number of funded projects; amount of funding; geographical areas; economic sectors; gender and entrepreneurial profile. The logit model was used to integrate qualitative and quantitative responses, to find the elements that influence the success or failure of funded entrepreneurial initiatives. Using a poll to different entrepreneurs who have received funding from state resources were consulted, allowing it to obtain the profile of the entrepreneur and the relationship with the success or failure.

Different countries, experiencing the need for entrepreneurship as a strategy for promoting entrepreneurship, especially among the young unemployed and the rapid industrialization of the economy as enunciated Das, institutions arise to support business creation (City and Toledano 2007.) and entrepreneurship education as a workhorse of the rulers (Connor, 2013).

Success or failure depends on: the amount of investment, generation and sales management, implementation and budget management, employment generation and management, location and the type of society.

Keywords: Financing, entrepreneurship, development, public policy, capacity entrepreneurial.

1. INTRODUCCIÓN

Esta investigación busca establecer la capacidad emprendedora en Colombia de los proyectos creados bajo programas de financiamiento del gobierno, medido de acuerdo al éxito o fracaso de las iniciativas empresariales, en especial del programa de mayor impacto en la financiación de nuevas iniciativas, el Fondo Emprender, partiendo de la premisa válida de que el emprendimiento enfocado a la generación de empresas es el motor de crecimiento de la economía, factor determinante en el desarrollo económico de las localidades.

Colombia desde los años 90 ha trabajado en la formulación de políticas públicas de financiamiento empresarial, creando leyes orientadas a la creación de organismos y programas donde los potenciales empresarios puedan obtener financiamiento, principal obstáculo en la creación y fortalecimiento empresarial.

Para cumplir con el objetivo de la investigación y así contribuir con evidencia empírica del resultado de estos programas y comprobar su efectividad, fue necesario estudiar los principales programas; identificar la zona geográfica con mayor capacidad emprendedora; establecer el perfil de los emprendedores y determinar que incide en el éxito o fracaso de las nuevas iniciativas empresariales.

En el desarrollo fue necesario la utilización de varias herramientas metodológica, no sin antes anotar que se trató de una investigación cualitativa con elementos cuantitativos, se utilizó estadística descriptiva, el modelo logit y se realizó un sondeo a los emprendedores permitiendo así construir el perfil de los emprendedores.

El emprendedor se ha visto desde diferentes ópticas, se considera que si hay emprendedores exitosos, estos generan empleo, y el empleo genera dinámica económica y por ende desarrollo. De igual manera el emprendimiento es estudiado desde la perspectiva de política regional y como herramienta de competitividad.

Trabajos empíricos y teóricos, muestran que el emprendedor está ligado a nuevas empresas ideadas, estructuradas e implementadas por personas jóvenes y que además se deben emprender proyectos innovadores (Echecopar, G., Angelelli, P., Galleguillos, G. y Schorr, M. 2006); otros trabajan las microfinanzas (Das, S. 2012); el emprendimiento social (Choi y Majumdar 2014); determinantes que inciden en las iniciativas (Mai Thi Thanh Thai; Ekaterina Turkina. 2013); la capacidad emprendedora desde el punto de vista de desarrollo, pero también hay investigadores que estudian que el espíritu empresarial, no debe verse sólo como un factor de producción, sino también como un fin en sí. (Gries y Naudé 2011);

dinamismo explicado como resultado de las características del emprendedor, el mercado, estructura de la industria, estrategia de negocio, la motivación para crecer y el entorno (Federico, Kantis y Rabetino, 2009; Sandberg, 1986; Nitcher y Goldmark, 2009) y se hacen comparaciones entre países y regiones (GEM 2011-2012).

La investigación logra establecer que el éxito o fracaso dependen: del monto de inversión, la generación y gestión de ventas, la ejecución y gestión presupuestal, la generación y gestión de empleo, la ubicación y del tipo de sociedad. De igual manera se evidencia que las zonas geográficas con mayor capacidad emprendedora considerando el número de proyectos financiados y la cantidad de recursos asignados son: Cundinamarca, Huila, Valle del Cauca, Cauca y Antioquia.

2. OBJETIVOS

Establecer la capacidad emprendedora en Colombia de los proyectos creados bajo programas de financiamiento del gobierno, medido de acuerdo al éxito o fracaso de las iniciativas empresariales.

3.1 Objetivos Específicos

Describir los diferentes programas de financiamiento empresarial que ofrece el gobierno colombiano.

Identificar la zona geográfica con mayor capacidad emprendedora, de acuerdo al número de proyectos aprobados y cantidad de recursos asignados.

Establecer el perfil de los emprendedores que participan en el programa que auspicia nuevas iniciativas emprendedoras

Estipular que incide en el éxito y fracaso de las nuevas iniciativas empresariales

3. REVISIÓN DE LA LITERATURA

Los principales elementos teóricos y empíricos que sustentan la investigación, se estudiaron desde diferentes perspectivas de análisis e interpretaciones del emprendimiento. Para ello fue necesario hacer una revisión sistemática en temas diversos, destacando: los principales exponentes del emprendimiento como concepto; la inversión o financiamiento empresarial

desde el estado y otras alternativas; el desarrollo local; la política pública orientada a la creación o fortalecimiento empresarial y el dinamismo empresarial.

- Configuraciones del emprendimiento

El emprendimiento empresarial puede observarse desde distintos ángulos, como el económico, el histórico, el político, el social, (Ordóñez, 1998) o incluso el reflexivo o filosófico. Desde el punto de vista histórico la palabra entrepreneur fue introducido por Richard Cantillon, definiendo al entrepreneur como el: “agente que compra los medios de producción a ciertos precios y los combina en forma ordenada para obtener de allí un nuevo producto” (Castillo, J. O. (2009); (Burnett 2000) agrega que “entrepreneur” es un individuo líder, previsor, tomador de riesgos y evaluador de proyectos, y que moviliza recursos desde una zona de bajo rendimiento a una de alta productividad. Desde la política, autores como (Anthony y Giddens, 2000) coinciden en ver a la empresa como el elemento generador de riqueza, en rededor del cual conseguir equilibrio social, al decir: “La inversión en áreas decisivas de ciencia y tecnología es un factor significativo”. A su vez para Schumpeter, el emprendimiento es el impulso fundamental que pone y mantiene en movimiento a la máquina capitalista, procede de los nuevos: bienes de consumo, métodos de producción y transporte, mercados, formas de organización industrial que crea la empresa capitalista (Schumpeter, 1996).

El emprendedor está ligado a nuevas empresas ideadas, estructuradas e implementadas por personas jóvenes, y que además se deben emprender proyectos innovadores (Echecopar et al. 2006); otros hacen análisis orientados al estudio de las microfinanzas (Das, S. 2012); de igual manera se aborda el tema del emprendimiento con enfoque social (Choi et al, 2014); trabajos empíricos alrededor de los determinantes que inciden en las iniciativas emprendedoras (Mai Thi Thanh Thai et al. 2013); son varias las miradas en búsqueda de establecer la capacidad emprendedora desde el punto de vista de desarrollo, pero también hay investigadores que afirman que el espíritu empresarial, no debe verse sólo como un factor de producción, sino también como un fin en sí. (Gries y Naudé 2011); adicionalmente se han realizado estudios de análisis históricos que permiten ver la evolución de la iniciativa empresarial (Minniti y Lévesque 2008) y por último se gestan uniones o redes que permiten hacer comparaciones entre países y regiones (GEM 2011-2012) entre otros.

- El emprendimiento visto como generador de desarrollo

Desde la óptica de autores (McClelland, Schumpeter y Hagen 1989), el espíritu emprendedor se ha identificado como uno de los factores principales que explican el desarrollo económico. Desde 1990 el desarrollo económico en el mundo se planifica desde la localidad, en la Revista Asturiana de Economía, (Vásquez, 1996) "... ha surgido un considerable número de iniciativas de desarrollo local...", el Banco Mundial impulsó en Colombia su iniciativa "alianzas para la superación de la pobreza" con base en la localidad, iniciativas reportadas a lo largo y ancho del mundo, contando con el potencial endógeno de las localidades, en términos de su fuerza de trabajo, el capital disponible, los recursos naturales, la tecnología presente y potencialmente creable, pero por ser sobre todo, el espíritu imaginativo, emprendedor, realizador de sus agentes.

La evidencia empírica revela que los empresarios tienen una función importante en la economía, así lo demuestra la revisión sistemática elaborada por C. Mirjam basado en 57 estudios, encontrando que contribuyen a la creación de empleo, crecimiento de la productividad y la producción y comercialización de innovaciones de alta calidad. (C. Mirjam van Praag., Peter H. Versloot. 2007).

- El emprendimiento desde la perspectiva de política regional

El emprendimiento estudiado desde la perspectiva de política regional y como herramienta de competitividad e incremento en las tasas, en regiones menos favorecidas y en Latinoamérica, revela por un lado que existe una tensión entre el uso de la política empresarial como una herramienta para mejorar la competitividad regional, o para hacer frente a las desventajas económicas y sociales, y por otro sugiere que los países latinoamericanos necesitan ganar dinámica empresarial y desarrollo económico (competitividad), transformando su accionar en empresas que generen valor. (Huggins, R., Williams, N. 2011; Amorós, J.E., Fernandez C, Tapia, J. 2012).

Trabajos empíricos como el realizado por MasVerdú analiza si las políticas están dirigidas a proyectos empresariales específicos o no en la región de Valencia, revelando un alto grado de

diseño de política horizontal, donde las características, como experiencia previa, edad, etc, no parecen relevantes en cuanto a la recepción de los fondos públicos. (MasVerdú, F, Baviera Puig, A, Martinez-Gomez, V.2009). Por lo tanto los responsables políticos pueden influir positivamente en el espíritu empresarial, mediante el fomento de la educación empresarial y la formación, estimulando salidas de IED y el comercio internacional. (Acs, Z.J., Desai, S., Hessels, J. 2008).

- **Dinamismo empresarial**

Cuando se habla de dinamismo empresarial, se debe partir del hecho que no hay un criterio único, que permita establecer cuál es la unidad de medida para determinar si una empresa es dinámica o no.

El dinamismo empresarial podría ser explicado principalmente como resultado de las características del emprendedor, las dimensiones del capital relacional, las características del mercado, la estructura de la industria en la cual la empresa compete, estrategia de negocio, acercamiento al mercado, la motivación para crecer y la proximidad con el entorno (Federico, Kantis y Rabetino, 2009; Sandberg, 1986 y Nitcher y Goldmark, 2009)

Los trabajos empíricos manifiestan que el crecimiento o dinamismo empresarial debe contener, criterios financieros y no financieros, (Ramanujam, Venkatraman y Camillus 1986; Tosi y Gómez1994); que está relacionado con el comportamiento de la industria, el crecimiento en las ventas y el retorno sobre la inversión. (Dalton y Kesner, 1985; Hambrick y Lei 1985); adicionalmente quienes opinan que los indicadores de medición son las ventas, las utilidades, edad y desempeño general (Cuba, Decenzo y Anish 1983; el elemento crecimiento medido a través del incremento de empleo, el cual minimiza los problemas de inflación, del uso de diferentes monedas y la diferencia en las normas contables, en una posible comparación internacional es otra medida comúnmente usada para determinar el dinamismo (Federico et al. 2009); medidas de índole financiera y no financiera como: utilidad operativa, retorno sobre activos, crecimiento en utilidades, productividad, calidad de producto, desarrollo de nuevos productos, y desarrollo de mercados (King–Kauanui, Dang–Ngoc y Ashley–Cotleur 2006); el dinamismo se da si hay un incremento en ventas de los últimos tres años comparado con el promedio del crecimiento de las ventas de la industria (McDougall, Robinson y Denisi 1992) y

desde la teoría de desbordamiento del conocimiento de iniciativa empresarial, (Lawrence A. Plummer, Zoltan J. Acs 2014).

Es importante resaltar que los criterios más usados para determinar el dinamismo empresarial son: generación y aumento de empleos en un periodo de tiempo, incremento en ventas, rentabilidad de la inversión, retorno y participación en el mercado. (Gilbert et al 2006; Weinzimmer, Nystrom y Freeman, 1998; Wiklund, Patzelt y Shepherd 2009).

Para el estudio en particular aquí planteado se midió el dinamismo empresarial o efectividad del programa objeto de estudio, es decir, el Fondo Emprender, considerando indicadores propios del Fondo, como el número de empleos generados, cumplimiento del presupuesto, producción y mercado y otros elementos a juicio de la investigadora como el sector al que pertenece el proyecto, zona geográfica, constitución jurídica o tipo de empresa y género, permitiendo todo ello determinar la capacidad emprendedora en Colombia de los proyectos creados programas de financiamiento del gobierno, medido de acuerdo al éxito o fracaso de las iniciativas empresariales.

4. MÉTODOS

El estudio se desarrolló mediante los procedimientos propios de una investigación cualitativa de carácter empírica, en la cual fue necesario explorar los diferentes programas que fomentan la creación de nuevas iniciativas y fortalecimiento empresarial en Colombia, y a partir de allí determinar el programa de mayor impacto, logrando cumplir con el objetivo de establecer la capacidad emprendedora de acuerdo al éxito o fracaso de las iniciativas.

Se construyó una matriz bibliográfica bajo el enfoque de análisis sistemático. De igual manera se preguntó mediante un sondeo de opinión a diferentes emprendedores que han recibido financiación de fondos estatales destinados al desarrollo empresarial, permitiendo esto obtener el perfil del emprendedor.

Se utilizó estadística descriptiva para establecer: el número de proyectos financiados; monto total de la financiación del estado en el desarrollo empresarial, tanto de iniciativas nuevas como en el fortalecimiento; zonas geográficas con mayor dinámica emprendedora; sectores económicos más dinámicos; participación emprendedora considerando el género y perfil

emprendedor. De igual manera se decidió utilizar el modelo Logit¹, dado que era necesario aplicar un modelo de regresión que integrara las respuestas cualitativas y cuantitativas, que encontrara los elementos que inciden en el éxito de las iniciativas emprendedoras financiadas por la entidad de mayor impacto, es decir, el Fondo emprendedor, para ello se utilizó el programa Gretl² y el programa SPSS.

- Tamaño de la población

Después de analizar cada una de las diferentes fuentes de financiamiento empresarial, se toma la decisión de establecer la capacidad emprendedora en Colombia de los proyectos creados bajo programas de financiamiento del gobierno, medido de acuerdo al éxito o fracaso de las iniciativas empresariales, escogiendo el programa del Fondo Emprender. Es importante aclarar que se toman todos los proyectos financiados en las convocatorias nacionales desde la No 1 en el año 2005 hasta la No 32 en el año 2013, y posteriormente se hace un filtro seleccionando solo los proyectos que tuvieron éxito o fracaso.

Tabla 1 Composición de la población objeto de estudio

| CONVOCATORIAS | No de Emprendedores Financiados |
|---|------------------------------------|
| Cerradas o regionales (no es del interés de la investigación) | 489 |
| Convocatorias Nacionales (población objeto de estudio) | 3197 |
| Total emprendedores | 3686 |

Fuente: Elaboración propia con base en la información del SENA

- Unidades muestrales sujeto de la investigación

¹ La modelización Logit es similar a la regresión tradicional salvo que utiliza como función de estimación la función logística en vez de la lineal. Con la modelización Logit, el resultado del modelo es la estimación de la probabilidad de que un nuevo individuo pertenezca a un grupo o a otro, mientras que por otro lado, al tratarse de un análisis de regresión, también permite identificar las variables más importantes que explican las diferencias entre grupos. Tomado de LLANO DÍAZ Laura Rosa, MOSQUERA CAICEDO Viardin. El modelo logit una alternativa para medir probabilidad de permanencia estudiantil. trabajo de grado para obtener el título de especialista en finanzas, Universidad Nacional De Colombia .sede Manizales junio de 2006 pag 13.

² Gretl es un software [econométrico](http://gretl.sourceforge.net/) de libre distribución. Tiene una interfaz gráfica y puede interactuar con [R-project](#) (el cual es un software estadístico de distribución libre muy utilizado). gretl incluye la posibilidad de producir salidas en [LaTeX](#), y también permite importar archivos de diversos formatos: CSV (coma separated values), GNumeric, Excel, Stata, Eviews, JMulTi, RATS, OpenDocument Spreadsheet, entre otros. <http://gretl.sourceforge.net/> mayo 08 de 2014.

De la población total de 3197 emprendedores, se llega a la muestra de 2119, clasificados como exitosos y no exitosos, la diferencia numérica se clasifica en un grupo que presenta características diferentes. Los proyectos exitosos son aquellos emprendedores que logran cumplir con los indicadores preestablecidos por la entidad y los no exitosos, son aquellos que no alcanzaron a cumplir con esos indicadores.

Para poder establecer la capacidad emprendedora medida por medio del éxito o fracaso, se aplicó el modelo Logit, para el caso puntual del programa del Fondo Emprender.

En el modelo Logit la función de la distribución logística (acumulativa)³ está dada por:

$$P_i = E(Y = 1 | X_i) = \frac{1}{1 + e^{-Z_i}} \quad \text{Donde } Z_i = \beta_1 + \beta_2 X_i; \quad e = 2.71828$$

β = Coeficiente

X_i = Variables regresoras

En el análisis la variable dependiente (P_i) se denomina emprendedores la cual se divide en:

$P_i = 1$ Emprendedores exitosos: son aquellas personas que colocaron a funcionar su proyecto y la empresa permanece.

$P_i = 0$ Empresarios no exitosos: son aquellas personas cuyos proyectos fueron seleccionados para ser financiados, de los cuales algunos colocaron en funcionamiento su proyecto y fracasaron, y otros ni siquiera colocaron en funcionamiento su negocio.

Para la interpretación de los datos fue necesario tener en cuenta algunas consideraciones:

³ GUJARATI Damodar. Econometría. Mc Graw Hill México 2006 Cuarta edición. ISBN 970-10-3971-8 p. 574

a. Lo que interesa en el modelo Logit, son los signos esperados de los coeficientes de regresión (β) y su importancia práctica y/o estadística, en la ecuación del modelo cada coeficiente de pendiente es un coeficiente parcial⁴ y mide el cambio en el Logit estimado, correspondiente a una unidad de cambio del valor de la regresada dada. Si el signo del coeficiente es positivo sugiere una relación positiva, si el signo es negativo sucede lo contrario.

b. En los resultados arrojados por el Gretl, se revisa la probabilidad individual y valor-p de cada variable (X_i), la probabilidad global del modelo (P_i), con el fin de determinar la importancia o significancia de cada variable en el modelo.

c. Se calcula el R^2 McFadden, siendo ésta una medida que define que tanto explica la variable independiente a la variable dependiente, los valores varían entre 0 y 1.

d. Se calcula otra medida de ajuste simple y es la denominada *cuenta R^2* , que se define así:

Cuenta R^2 = Número de predicciones correctas / Número total de observaciones.

e. Para determinar la significancia o importancia estadística de un coeficiente β , se utiliza el estadístico Z de la distribución normal, esto significa que las inferencias estadísticas se basan en la tabla de distribución normal.

La probabilidad crítica a tomar en la regla de decisión es del 5% y consiste en:

Valores de probabilidad >0.05 el coeficiente es no significativo.

Valores de probabilidad <0.05 el coeficiente es significativo

f. Adicionalmente se genera la prueba de significancia global, la cual se efectúa por el estadístico RV en donde se confronta que los coeficientes de la regresión son estadísticamente significativos simultáneamente o no significativos (iguales a cero). La hipótesis a contrastar es:

⁴ Ibid, pag 585

Ho: $\beta_1 = \beta_2 \dots \beta_n$ es igual a cero

Ha: algún β es diferente de cero.

g. Debido a que la inmersión de todas las variables explicativas que se tienen, presentan relación lineal casi perfecta entre ellas, y con la regresada, se procede a quitar alguna de estas en búsqueda de solucionar este inconveniente.

Para el caso de establecer el perfil de los emprendedores y la relación de este con el éxito o fracaso de las iniciativas emprendedoras, se aplicó un sondeo de opinión de manera aleatoria a los emprendedores éxitos y no exitosos, localizados en diferentes partes del país, se utilizó el programa SPSS.

5. RESULTADOS

Una vez revisada la política pública en Colombia en materia de desarrollo empresarial, se encontró que los tres programas que cumplen con las características de auspiciar el empresariado desde el apalancamiento financiero eran: Finagro, Fondo Emprender y Fondo Nacional de Garantías, la figura 2 permite reseñar cada programa.

Figura 1 Resumen de los programas

| PROGRAMA | QUIES ES | OBJETIVOS |
|-----------------------------|--|--|
| FONDO NACIONAL DE GARANTIAS | El Fondo Nacional de Garantías S.A. es la entidad a través de la cual el Gobierno Nacional busca facilitar el acceso al crédito para las micro, pequeñas y medianas empresas, mediante el otorgamiento de garantías. | Objeto social consiste en obrar de manera principal pero no exclusiva como fiador, o bajo cualquier otra forma de garante de toda clase de operaciones activas de las instituciones financieras con los usuarios de sus servicios, sean personas naturales o jurídicas, así como actuar en tales calidades respecto de dicha clase de operaciones frente a otra especie de establecimientos de crédito legalmente autorizados para desarrollar actividades, sean nacionales o extranjeros, patrimonios autónomos constituidos ante entidades que legalmente contemplen dentro de sus actividades el desarrollo de estos negocios, las entidades cooperativas y demás formas asociativas del sector solidario, las fundaciones, las corporaciones, las cajas de compensación familiar y otros tipos asociativos privados o públicos que promuevan programas de desarrollo social. |
| FONDO EMPRENDER | 'Es un Fondo creado por el Gobierno Nacional para financiar iniciativas empresariales. Las condiciones de beneficiarios del Fondo Emprender se establecen ampliamente en el Acuerdo 004 del 26 de marzo del 2009. | El objetivo del Fondo Emprender es apoyar proyectos productivos que integren los conocimientos adquiridos por los emprendedores en sus procesos de formación con el desarrollo de nuevas empresas. |
| FINAGRO | 'Es un fondo que contribuye al desarrollo integral, competitivo y sostenible del sector agropecuario, facilitando el acceso al financiamiento y a los demás instrumentos de apoyo establecidos en la política pública. | Objeto es la financiación de las actividades de producción en sus distintas fases y/o comercialización del sector agropecuario, a través del redescuento de las operaciones que hagan las entidades pertenecientes al Sistema Nacional de Crédito Agropecuario. Los objetivos de Finagro son: 1. Política Sectorial: Contribuir activamente en la formulación y comprometerse en la ejecución de la política para el desarrollo rural integral y sostenible. 2. Financiamiento: Asegurar recursos oportunos y suficientes para el financiamiento del desarrollo del sector rural. 3. Innovación: Innovar permanentemente en los productos y servicios de financiamiento, que aseguren la generación de valor, la competitividad y el desarrollo del sector rural. 4. Fortalecimiento Institucional: Alcanzar altos niveles de desempeño y excelencia organizacional, con seguridad jurídica y creación de valor superior a los grupos sociales objetivo. |

Fuente: Elaboración propia.

Al analizar detalladamente cada programa año tras año, desde el 2006 al 2013, se procedió a sistematizar el monto de los recursos asignados, el número de proyectos o beneficiarios y la zona o región del territorio colombiano, con este insumo se logra establecer la zona geográfica con mayor dinámica emprendedora. Mediante promedio simple se encuentra que los tres lugares del territorio nacional más dinámicos son: Cundinamarca, Antioquia y Valle del Cauca, ciudades estas importantes dentro de la dinámica económica colombiana.

Tabla 2 Zona geográfica con mayor dinámica emprendedora: Programas FINAGRO, FONDO EMPRENDER Y FONDO NACIONAL DE GARANTIAS

| PROGRAMA | RECURSOS ASIGNADOS | # DE BENEFICIARIOS | ZONA GEOGRAFICA DE MAYOR INCIDENCIA | RECURSOS ASIGNADOS PROMEDIO |
|-----------------------------|------------------------------|--------------------|---|-----------------------------|
| FINAGRO | \$ 35.496.642.000.000 | 1.591.432 | Antioquia Cundinamarca Valle del Cauca Tolima Santander | \$ 22.304.844 |
| FONDO EMPRENDER | \$ 207.571.123.477 | 3.197 | Cundinamarca Huila Valle del Cauca Cauca Antioquia | \$ 64.926.845 |
| FONDO NACIONAL DE GARANTIAS | \$ 40.292.841.000.000 | 2.141.339 | Cundinamarca Antioquia Valle del Cauca Costa Santander | \$ 18.816.657 |
| TOTALES | \$ 75.997.054.123.477 | 3.735.968 | | \$ 20.341.998 |

Fuente: Elaboración propia.

Nótese que a pesar de que El Fondo Emprender es el que menos recursos asignado y financiar menos proyectos, es el fondo que aporta más recurso financiero por cada proyecto o beneficiario.

Una vez analizados los diferentes programas de financiamiento empresarial promovidos desde la política pública colombiana, se decide escoger el programa del Fondo Emprender para determinar la capacidad emprendedora medida de acuerdo al éxito o fracaso de las iniciativas empresariales. La escogencia se sustenta en varias razones, pero quizás la más importante, es el hecho, de que el programa aporta capital semilla para que los emprendedores hagan realidad su sueño de ser empresarios.

- **Sector económico:** las nuevas iniciativas empresariales auspiciadas por el programa, presentan una participación concentrada en tres sectores económicos: el sector agricultura y pesca con una participación del 38 %, seguida muy de cerca con manufacturera o industria con el 34.47 % y en tercer lugar aparece el sector servicios con el 21,45 %. El sector comercio y extractiva solo alcanzan el 6.08 % de participación

Lo anterior permite concluir que el éxito o fracaso de los proyectos financiados por el Fondo Emprender, dependen básicamente de: el monto de los recursos o contrato, la generación y gestión de ventas, la ejecución y gestión presupuestal, la generación y gestión de empleo, la ubicación en el departamento de Cauca o Valle del Cauca, y del tipo de sociedad, (EU, SAS o LTDA).

Razones que justifican la escogencia:

- Es un programa que aporta capital semilla, que estimula a los emprendedores para que formulen y creen sus nuevas unidades de negocio.
- La financiación es un préstamo condonable, el cual una vez se cumpla el proceso de puesta en marcha del negocio y se verifique por los interventores el cumplimiento de los indicadores establecidos previamente desaparece del pasivo a nombre del emprendedor.
- El emprendedor tiene acompañamiento durante todas las etapas de la formulación, evaluación y puesta en marcha de la idea emprendedora.
- Es un programa abierto a toda la población.
- El monto de la financiación está sujeta al número de empleos a generar.
- No condiciona la financiación a un sector de la economía ni a una actividad específica.
- Tiene abiertas convocatorias todo el año, con diferentes fechas de cierre, que amplía la posibilidad de participación.
- No limita las veces de participación, es decir, el emprendedor puede participar cuantas veces sea necesario hasta lograr su cometido.
- Las convocatorias son a nivel nacional.
- La participación puede ser grupal o individual.
- Los recursos son permanentes.

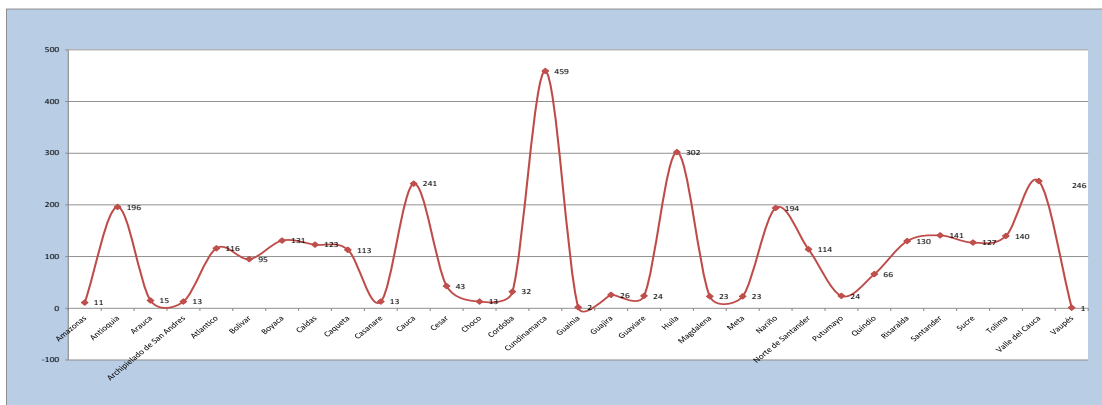
Por consiguiente desde el punto de vista de capacidad emprendedora fue importante determinar cuál es la tendencia de las nuevas iniciativas emprendedoras financiadas por el programa Fondo Emprender, considerando elementos propios del tipo de sociedad, la zona geográfica con mayor incidencia medido por el número de proyectos financiados y el monto de recursos asignados y el sector al que pertenecen. En primer plano se hace el análisis del total de las iniciativas financiadas y luego se examina que paso en los proyectos exitosos y los no exitosos.

- **Conformación Jurídica:** de las 3197 empresas que fueron financiadas desde el nacimiento del Fondo Emprender con su primera convocatoria y la convocatoria 32 del año 2013, periodo

de análisis de la investigación, no es posible establecer con exactitud qué tipo de conformación jurídica tienen las empresas, por falta de información, el 43% de los datos no presenta información relacionada. Sin embargo la tendencia está dada hacia la conformación de empresas de sociedad anónima simplificada, justificada en los beneficios que trae este tipo de conformación jurídica, seguida de la figura empresa unipersonal.

- **Zona geográfica:** las zonas geográficas con mayor capacidad emprendedora considerando el número de proyectos financiados y la cantidad de recursos asignados son: Cundinamarca, Huila, Valle del Cauca, Cauca y Antioquia, tal como se muestra en la gráfica siguiente:

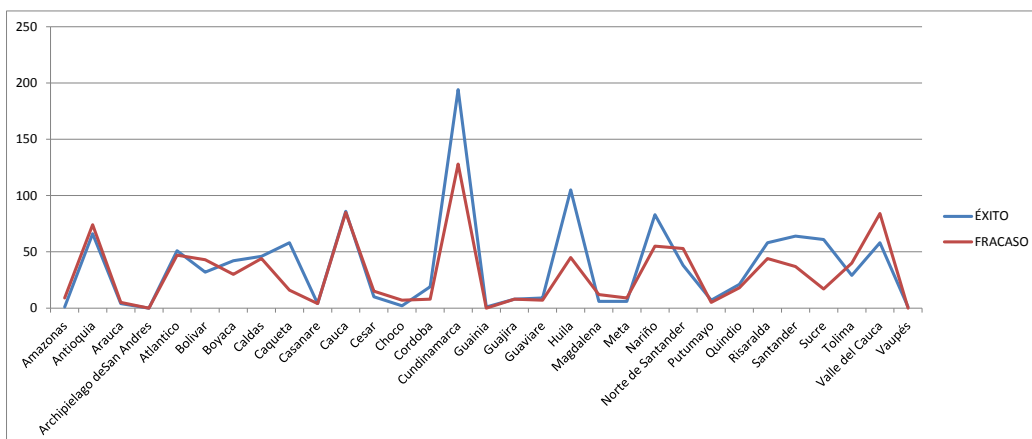
Grafica 1 Zona geográfica con mayor capacidad Emprendedora



Fuente: Elaboración propia

Al analizar la muestra de las iniciativas empresariales exitosas de las no exitosas, se encuentra que la tendencia es igual a las de la población total, obsérvese la gráfica siguiente:

Grafica 2 Zona geográfica más dinámica considerando el número de proyectos exitosos y los no exitosos.



Fuente: Elaboración propia

- **Sector económico:** las nuevas iniciativas empresariales auspiciadas por el programa, presentan una participación concentrada en tres sectores económicos: el sector agricultura y pesca con una participación del 38 %, seguida muy de cerca con manufacturera o industria con el 34.47 % y en tercer lugar aparece el sector servicios con el 21,45 %. El sector comercio y extractiva solo alcanzan el 6.08 % de participación. La tabla 3 muestra este mismo análisis considerando los emprendedores con proyectos exitosos y los no exitosos.

Tabla 3 Sector económico más dinámico de los proyectos exitosos y los no exitosos

| SECTOR ECONOMICO | ÉXITO | % | FRACASO | % |
|---------------------|-------|-----|---------|-----|
| Servicios | 229 | 20% | 206 | 22% |
| Manufacturero | 353 | 30% | 405 | 43% |
| Agricultura y Pesca | 532 | 45% | 252 | 27% |
| Comercio | 52 | 4% | 79 | 8% |
| Extractiva | 4 | 0% | 7 | 1% |
| TOTALES | 1170 | 1 | 949 | 1 |

Fuente: Elaboración propia

Con relación al perfil de los emprendedores que participan en el programa Fondo Emprender se encontró que:

- La edad oscilan en un 65% entre los 21 y 30 años, época en la cual poseen una vida laboral activa, entonces comienzan a adquirir experiencia en el campo laboral razón por la cual pueden tener mayor claridad en la toma de decisiones, son profesionales, enérgicos, arriesgados en sus proyectos. Al analizar por separado los emprendedores exitosos se encuentro que el 59% está entre 21 y 30 años y un 28% entre los 31 y 40; mientras que los no exitosos se concentran en un 92% en el rango de los 21 y 30 años y un 8% entre los 31 y 40 años.
- El 62% de los emprendedores son hombres y el 38% las mujeres.
- El 70 % de los emprendedores tiene pregrado o está en curso, el 17 % está cursando o tiene postgrado y solo el 11% llegan a la educación básica. El comportamiento de los exitosos es similar al total de la muestra. Por su parte los no exitosos son personas profesionales o que están cursando su pregrado representado en el 84%.
- Los emprendedores son personas profesionales, que tienen un empleo definido. Cuanto más alta es la formación académica de los individuos, estos son más

propensos a ser emprendedores corporativos (son aquellos comportamiento del emprendedor dentro de organizaciones) que emprendedores independientes (“Un individuos o grupo de individuos, actuando independiente de cualquier asociación con una organización existente crean una nueva organización”)* por otra parte, los emprendedores fundadores clásicos, o independientes de menor cualificación profesional suelen aceptar y sortear con más soltura situaciones de mayor riesgo e incertidumbre⁵.

- Los emprendedores prefieren conformar su empresa de manera individual, resaltando que los no exitosos son más arriesgados. Cuando toman la decisión de agruparse lo hace por amistad y complementariedad de conocimientos.
- Dentro de las características personales no hay un resultado que sobre salga, no obstante al seleccionar se encuentra coincidencia entre las características generales de la muestra y las de los exitosos y no exitosos, resaltando que los no exitosos presentan la característica planeador con un mayor porcentaje, curiosamente.

Para establecer la relación que tiene la edad y el nivel de formación de los emprendedores en el éxito o fracaso se formularon las hipótesis encontrando que:

- Edad de los emprendedores

Ho: $p \leq 40\%$ Menos de los 40% de la población con edad entre veintiuno y treinta años tienen mayor posibilidad de éxito empresarial.

Ha: $p > 40\%$ Más del 40% de la población con edad entre veintiuno y treinta tienen mayor posibilidad de éxito empresarial.

Con un nivel de significancia del 2,5%, se tienen los siguientes datos.

$$\alpha = 0.025$$

$$n = 67$$

$$Z = \frac{\hat{p} - P}{\sqrt{\frac{pq}{n}}}$$

* Emprendedor corporativo e independiente disponible en Internet en: <http://emprendedor20.blogspot.com/2010/01/emprendedor-corporativo-corporate.html>

⁵ DETHER, Mario. “Factores para el surgimiento emprendedor: enfoque de las identidades, la intencionalidad y la actuación emprendedora” (publicado en línea). Carta con contenido. Marzo 2004 no 28 Vol.: VII. Disponible en línea <http://www.es24.tv>

$$P = 0.40$$

$$Q = 0.60$$

Se tiene que:

$$Z = 1,96 \text{ (Valor de la tabla normal)}$$

$$\hat{p} = 0,52$$

Se construyen las regiones de aceptación o rechazo de la hipótesis nula.

$$RA: \{ \hat{p} \leq 0,52 \} \quad RR: \{ \hat{p} > 0,52 \}$$

Verificación: se les aplicó el sondeo a 67 emprendedores, de las cuales 55 se clasificaron como exitosos; 32 tienen una edad entre los 21 y 30 años es decir $\hat{p} = 32/55 = 59\%$. La proporción muestral se encuentra en la región de rechazo.

Decisión: se rechaza la hipótesis nula, con un nivel de significancia del 2,5%, se puede concluir que más del 40% de la población con edad entre veintiuno y treinta tienen mayor posibilidad de éxito empresarial.

Nivel de formación académica

Ho: $p \leq 45\%$ Menos del 45% de la población bajo estudio que al momento de emprender el proyecto contaban con un mayor nivel de formación (pregrado concluido en adelante), son quienes tienen mayor posibilidad de éxito empresarial

Ha: $p > 45\%$ Más del 45% de la población bajo estudio que al momento de emprender el proyecto, contaban con un mayor nivel de formación (pregrado concluido en adelante), son quienes tienen mayor posibilidad de éxito empresarial.

Con un nivel de significancia del 2,5%, se tienen los siguientes datos.

$$\alpha = 0.025$$

$$n = 67$$

$$Z = \frac{\hat{p} - P}{\sqrt{\frac{pq}{n}}}$$

$$P = 0.45$$

$$Q = 0.55$$

Se tiene que:

$$Z = 1,96 \text{ (Valor de la tabla normal)}$$

$$\hat{p} = 0.57$$

Se construyen las regiones de aceptación o rechazo de la hipótesis nula.

$$RA: \{ \hat{p} \leq 0.57 \} \quad RR: \{ \hat{p} > 0.57 \}$$

Verificación: se encuestaron a 67 empresarios emprendedores, de las cuales 55 pusieron en marcha el proyecto emprendedor y 33 de ellos han alcanzado un nivel educativo superior al pregrado concluido, es decir $\hat{p} = 33/55 = 60\%$. La proporción muestral se encuentra en la región de rechazo.

Decisión: se rechaza la hipótesis nula, con un nivel de significancia del 2.5%, se puede concluir que más del 45% de la población bajo estudio que al momento de emprender el proyecto, contaban con un mayor nivel de formación (pregrado concluido en adelante), son quienes tienen mayor la posibilidad de éxito empresarial.

Finalmente dando cumplimiento al objetivo de estipular que incide en el éxito y fracaso de las nuevas iniciativas empresariales, como ya se mencionó en la parte metodológica, para identificar la efectividad del financiamiento empresarial, a través de los factores que inciden en la permanencia o no de las empresas, creadas mediante programas de emprendimiento en Colombia., se utilizó el modelo Logit, aplicado a los 2119 emprendedores financiados por el Fondo Emprender. Es importante mencionar que para establecer con mayor certeza la pertinencia de las variables en el éxito o fracaso de los emprendedores, se procedió a correr el modelo dos veces, filtrando o eliminando las variables pocos relevantes.

Primera observación

Tabla 4 Variables que influyen en el éxito o fracaso empresarial de los proyectos financiados por el Fondo Emprender, se corre el modelo considerando todas las variables.

| | Coefficiente | Desv. Típica | z | Valor p | |
|-------------------|--------------|--------------|---------|-----------|-----|
| const | -3,20395 | 0,826154 | -3,878 | 0,0001 | *** |
| VALOR_CONTRATO | -1,71288e-07 | 2,14828e-08 | -7,973 | 1,55e-015 | *** |
| VENTAS | 1,37444e-08 | 3,02984e-09 | 4,536 | 5,72e-06 | *** |
| EMPLEOS | 0,0642891 | 0,0259916 | 2,473 | 0,0134 | ** |
| EJECUCION_PRESUP~ | 1,67155e-07 | 2,13593e-08 | 7,826 | 5,04e-015 | *** |
| BOGOTA | 0,175380 | 0,260633 | 0,6729 | 0,5010 | |
| CAUCA | -0,572982 | 0,303123 | -1,890 | 0,0587 | * |
| HUILA | 0,0901201 | 0,317430 | 0,2839 | 0,7765 | |
| NARINO | 0,593804 | 0,327380 | 1,814 | 0,0697 | * |
| VALLE | -0,597769 | 0,304897 | -1,961 | 0,0499 | ** |
| SEXO | -0,279918 | 0,164412 | -1,703 | 0,0887 | * |
| AGRICULTURA | 0,163677 | 0,242299 | 0,6755 | 0,4993 | |
| COMERCIO | 0,467648 | 0,411162 | 1,137 | 0,2554 | |
| MANUFACTURA | -0,213365 | 0,223642 | -0,9540 | 0,3401 | |
| OTRAS_DE_SERVICI~ | 0,132833 | 0,357874 | 0,3712 | 0,7105 | |
| GESTION_DE_VENTAS | 1,17780 | 0,254499 | 4,628 | 3,69e-06 | *** |
| GESTION_DE_EMPLE~ | 2,35523 | 0,193582 | 12,17 | 4,68e-034 | *** |
| GESTION_PRESUPUE~ | 1,74083 | 0,724472 | 2,403 | 0,0163 | ** |
| EU | 0,612108 | 0,290151 | 2,110 | 0,0349 | ** |
| SAS | 0,687260 | 0,322655 | 2,130 | 0,0332 | ** |
| LTDA | 0,656386 | 0,331224 | 1,982 | 0,0475 | ** |

Número de casos 'correctamente predichos' = 1894 (89,4%)

f(beta'x) en la media de las variables independientes = 0,133

Contraste de razón de verosimilitudes: $\chi^2_{cuadrado}(14) = 1811,06 [0,0000]$]

| | | | |
|------------------------|-----------|-----------------------|----------|
| Media de la vble. dep. | 0,552408 | D.T. de la vble. dep. | 0,497363 |
| R-cuadrado de McFadde | 0,621748 | R-cuadrado corregido | 0,607329 |
| Log-verosimilitud | -550,8978 | Criterio de Akaike | 1143,796 |
| Criterio de Schwarz | 1262,618 | Crit. de Hannan-Quinn | 1187,298 |

Como se observa algunas variables no son poco relevantes, lo cual obliga a realizar un primer filtro y correr nuevamente el modelo

Segunda observación

Tabla 5 Variables que influyen en el éxito o fracaso empresarial, de los proyectos financiados por el Fondo Emprender (Primer filtro)

Modelo 1: Logit, usando las observaciones 1-2118

Variable dependiente: PROYECTO

Desviaciones típicas basadas en el Hessiano

| | Coeficiente | Desv. Típica | z | Valor p | |
|------------------------|--------------|-----------------------|----------|-----------|-----|
| const | -3,18357 | 0,800190 | -3,979 | 6,93e-05 | *** |
| VALOR_CONTRATO | -1,69505e-07 | 2,12717e-08 | -7,969 | 1,61e-015 | *** |
| VENTAS | 1,33127e-08 | 2,93625e-09 | 4,534 | 5,79e-06 | *** |
| EMPLEOS | 0,0666390 | 0,0252920 | 2,635 | 0,0084 | *** |
| EJECUCION_PRESUP~ | 1,64119e-07 | 2,11395e-08 | 7,764 | 8,25e-015 | *** |
| CAUCA | -0,608925 | 0,298342 | -2,041 | 0,0412 | ** |
| NARINO | 0,463625 | 0,316395 | 1,465 | 0,1428 | |
| VALLE | -0,683421 | 0,296544 | -2,305 | 0,0212 | ** |
| SEXO | -0,225412 | 0,161706 | -1,394 | 0,1633 | |
| GESTION_DE_VENTAS | 1,25473 | 0,243839 | 5,146 | 2,66e-07 | *** |
| GESTION_DE_EMPLE~ | 2,38131 | 0,190517 | 12,50 | 7,54e-036 | *** |
| GESTION_PRESUPUE~ | 1,73784 | 0,721870 | 2,407 | 0,0161 | ** |
| EU | 0,647120 | 0,287617 | 2,250 | 0,0245 | ** |
| SAS | 0,747283 | 0,319202 | 2,341 | 0,0192 | ** |
| LTDA | 0,677217 | 0,328264 | 2,063 | 0,0391 | ** |
| Media de la vble. dep. | 0,552408 | D.T. de la vble. dep. | 0,497363 | | |
| R-cuadrado de McFadden | 0,619766 | R-cuadrado corregido | 0,609467 | | |
| Log-verosimilitud | -553,7843 | Criterio de Akaike | 1137,569 | | |
| Criterio de Schwarz | 1222,442 | Crit. de Hannan-Quinn | 1168,642 | | |

Número de casos 'correctamente predichos' = 1889 (89,2%)

f(beta'x) en la media de las variables independientes = 0,136

Contraste de razón de verosimilitudes: Chi-cuadrado(14) = 1805,29 [0,0000]

Fuente: Elaboración propia

Como se observa nuevamente a parecen variables poco relevantes, lo cual obliga a realizar un segundo filtro y correr nuevamente el modelo

Tercera observación

Tabla 6 Variables que influyen en el éxito o fracaso empresarial de los proyectos financiados por el Fondo Emprender (Segundo filtro)

Modelo 2: Logit, usando las observaciones 1-2118

Variable dependiente: PROYECTO

Desviaciones típicas basadas en el Hessiano

| | Coeficiente | Desv. Típica | z | Valor p | |
|------------------------|--------------|-----------------------|----------|-----------|-----|
| const | -3,27794 | 0,802245 | -4,086 | 4,39e-05 | *** |
| VALOR_CONTRATO | -1,70393e-07 | 2,13032e-08 | -7,998 | 1,26e-015 | *** |
| VENTAS | 1,30454e-08 | 2,92461e-09 | 4,461 | 8,17e-06 | *** |
| EMPLEOS | 0,0660694 | 0,0255203 | 2,589 | 0,0096 | *** |
| EJECUCION_PRESUP~ | 1,65529e-07 | 2,11698e-08 | 7,819 | 5,32e-015 | *** |
| CAUCA | -0,633056 | 0,297779 | -2,126 | 0,0335 | ** |
| VALLE | -0,735661 | 0,293253 | -2,509 | 0,0121 | ** |
| GESTION_DE_VENTAS | 1,19899 | 0,242449 | 4,945 | 7,60e-07 | *** |
| GESTION_DE_EMPLE~ | 2,37303 | 0,189679 | 12,51 | 6,52e-036 | *** |
| GESTION_PRESUPUE~ | 1,69934 | 0,728586 | 2,332 | 0,0197 | ** |
| EU | 0,680626 | 0,285481 | 2,384 | 0,0171 | ** |
| SAS | 0,770979 | 0,317189 | 2,431 | 0,0151 | ** |
| LTDA | 0,691900 | 0,326295 | 2,120 | 0,0340 | ** |
| Media de la vble. dep. | 0,552408 | D.T. de la vble. dep. | 0,497363 | | |
| R-cuadrado de McFadden | 0,618205 | R-cuadrado corregido | 0,609279 | | |
| Log-verosimilitud | -556,0582 | Criterio de Akaike | 1138,116 | | |
| Criterio de Schwarz | 1211,673 | Crit. de Hannan-Quinn | 1165,047 | | |

Número de casos 'correctamente predichos' = 1886 (89,0%)

f(beta'x) en la media de las variables independientes = 0,134

Contraste de razón de verosimilitudes: Chi-cuadrado(12) = 1800,74 [0,0000]

Fuente: Elaboración propia

Lo anterior permite concluir que el éxito o fracaso de los proyectos financiados por el Fondo Emprender, dependen básicamente de: el monto de los recursos o contrato, la generación y gestión de ventas, la ejecución y gestión presupuestal, la generación y gestión de empleo, la ubicación en el departamento de Cauca o Valle del Cauca, y del tipo de sociedad, (EU, SAS o LTDA).



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Cuadro 1 Relación con el éxito de los proyectos financiados por el Fondo Emprender.

| | VARIABLES | TIPO | RELACION |
|----|------------------------------|-----------|----------|
| Y | ÉXITO O FRACASO DEL PROYECTO | REGRESADA | 1 |
| C | VALOR DEL CONTRATO | REGRESORA | NEGATIVA |
| V | VENTAS REALES | REGRESORA | POSITIVA |
| E | EMPLEOS | REGRESORA | POSITIVA |
| P | EJECUCION PRESUPUESTAL | REGRESORA | POSITIVA |
| Z2 | PERTENECE A CAUCA | REGRESOSA | NEGATIVA |
| Z5 | PERTNECE A VALLE | REGRESORA | NEGATIVA |
| GV | GESTION DE VENTAS | REGRESORA | POSITIVA |
| GE | GESTION DE EMPLEO | REGRESORA | POSITIVA |
| GP | GESTION PRESPUETAL | REGRESORA | POSITIVA |
| M1 | EU | REGRESORA | POSITIVA |
| M2 | SAS | REGRESORA | POSITIVA |
| M3 | LTDA | REGRESORA | POSITIVA |

Fuente: Elaboración propia

Ahora obsérvese que las variables valor del contrato, pertenece al departamento del Cauca y Valle, son variables que influyen negativamente en el éxito de los proyectos financiados por el Fondo Emprender.

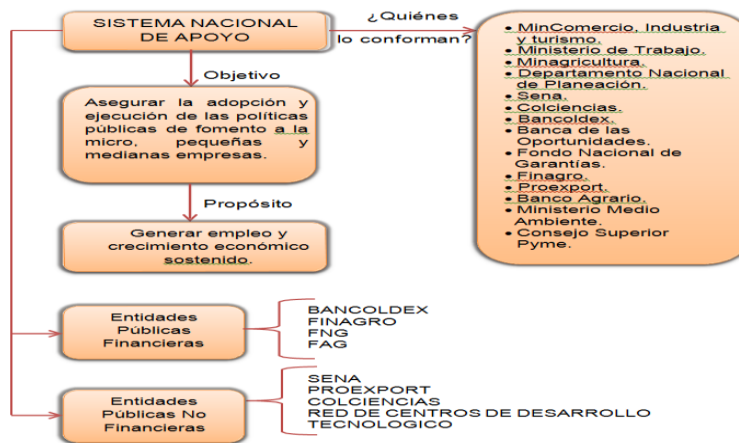
6. DISCUSIÓN

En naciones de economía emergente, avocadas a la flexibilización laboral, los cambios en la legislación, hicieron al desempleo persistente, eliminando la estabilidad laboral, los contratos laborales son de corta duración, sin importar el tipo de organización pública o privada en cuestión, mientras los salarios se hacen relativamente bajos, en el afán equivocado de los gobiernos y empresarios en competir con productos de bajo precio en vez de productos de calidad. Ante ello es necesario fortalecer los programas orientados a crear más y mejores empresas, en especial sí con estas se dinamiza el acceso a la creación de riqueza por parte de los jóvenes, personalizados en estudiantes y profesionales recién graduados.

El financiamiento en Colombia como mecanismo coordinador de la política nacional de fomento a la creación y fortalecimiento de las nuevas empresas, está dado por entidades gubernamentales: BANCOLDEX, FINAGRO Y FIDUCOLDEX, bancos de segundo nivel de economía mixta, con participación mayoritaria del gobierno nacional.

En concordancia con la normatividad, existe un esquema para apoyar y financiar el emprendimiento, desde dos frentes: la creación de nuevas empresas y apoyo financiero a empresarios ya constituidos en diferentes sectores, que jalonean la economía.

Figura 2 Entidades que apoyan y financian el emprendimiento empresarial en Colombia



Fuente: Elaboración propia

Con la existencia de estas entidades estatales encargadas de financiar el emprendimiento empresarial, se han creado programas con propósitos específicos: programas para financiar iniciativas empresariales (Fondo Emprender); programas de apoyo a la pequeña, mediana y gran empresa (Bancolorex, Proexport, Fondo Nacional de la Productividad y la Competitividad); programas de apoyo al agro (Finagro) y programas especiales (oportunidades para la equidad rural).

El dinamismo o capacidad emprendedora está explicado desde diferentes ópticas: como resultado de las características del emprendedor; el mercado; estructura de la industria; estrategia de negocio y la motivación para crecer y el entorno (Federico, et al, 2009; Sandberg, 1986; Nitcher et al 2009) o quienes opinan que los indicadores de medición son las ventas; las utilidades; edad y desempeño general (Cuba, et al 1983; Khan et al 1982), al hacer el análisis se logra evidenciar que las zonas geográficas con mayor capacidad emprendedora considerando el número de proyectos financiados y la cantidad de recursos asignados son: Cundinamarca, Huila, Valle del Cauca, Cauca y Antioquia. De igual manera el éxito o fracaso de los proyectos financiados por el Fondo Emprender, dependen básicamente de: el monto de los recursos o contrato, la generación y gestión de ventas, la ejecución y gestión presupuestal, la generación y gestión de empleo.

Un estudio de América Latina, encontró que: la edad de los empresarios oscila entre los 42 años, y a la fecha de fundación contaban con 35 a 37 años; un alto porcentaje de los empresarios tienen estudios universitarios (Kantis, et al. (2002). Comparando este dato con lo encontrado en la investigación, el 89% de los emprendedores tienen entre 21 y 40. Esto expresa un rico panorama empresarial futuro para las regiones colombianas, pues los nuevos emprendedores son en su mayoría gente menor a los 41 años por lo cual tienen un horizonte productivo superior a los 25 años, si se considere como esperanza de vida para hombres y mujeres en Colombia de 70 años promedio. Desde otra mirada, podría decirse que la falta de experiencia podría ser un factor no positivo para las nuevas empresas. El otro elemento es la formación académica, el 70 % de los emprendedores tienen pregrado o está en curso, el 17 % está cursando o tiene postgrado y solo el 11% llegan a la educación básica, de igual manera concuerdan con la investigación citada.

Las personas que evidencien un elevado control interno, alta necesidad de logro, capacidad para asumir riesgos y una alta tolerancia a la ambigüedad, tienen mayores oportunidades de crear empresa (Brockhaus y Horwitz, 1986). El hecho de sentirse libre y el deseo de influir en los demás, está relacionado con el deseo de realización personal y la necesidad de poder (Abramson, Seligman, y Teasdale, 1978). Con relación a este elemento no se evidencia relación directa entre las características personales y el éxito o fracaso, pues en el sondeo aplicado a los emprendedores todos le apuntan a características iguales, no se resalta un rasgo distintivo entre uno u otro.

El 62% de los emprendedores son hombres y el 38% las mujeres, podría preguntarse ¿a qué se debe esto?, según Sharon G. Hadary⁶, los hombres suelen hacerlo para ser el "jefe" y su objetivo es que su negocio crezca lo más posible. Las mujeres lo hacen como un desafío personal y para integrar trabajo y familia, y quieren mantenerse en un tamaño que puedan manejar personalmente en todos los aspectos.

7. CONCLUSIONES

El desarrollo local requiere la existencia de espíritu empresarial a nivel local, asimilado como la fuerza interior que permite a las personas crear y operar una empresa en cualquier sector económico: industria, agricultura, servicios, comercio o minería.

⁶ Sharon G. Hadary es la fundadora y ex directora ejecutiva del Centro para la Investigación de las Mujeres Empresarias. También es profesora en la Universidad de Maryland. Artículo publicado por The Wall Street Journal, Desafío de la mujer empresaria, 31 de mayo de 2010.

Las zonas geográficas con mayor capacidad emprendedora considerando el número de proyectos financiados y la cantidad de recursos asignados son: Cundinamarca, Huila, Valle del Cauca, Cauca y Antioquia.

Se encontró que el 62 % son emprendedores hombres y el 39 % mujeres; las actividades se concentran en tres sectores económicos: Agricultura-pesca, Manufacturero y servicios; el 55% está representada por proyectos exitosos y un 45 % de los emprendedores no exitosos; la conformación jurídica que más escogen los emprendedores es la empresa Unipersonal con una participación del 47.4 %; el 89% de los emprendedores tienen entre 21 y 40 años, lo cual expresa un panorama empresarial futuro para las regiones colombianas, pues los nuevos emprendedores son en su mayoría gente menor a los 41 años por lo cual tienen un horizonte productivo superior a los 25 años, si se considere como esperanza de vida para hombres y mujeres en Colombia de 70 años promedio.

Dentro de los emprendedores el nivel de educación es alto, se observa que el 40% tienen pregrado universitario concluido; el 30% están cursando el pregrado; posgrado universitario en curso 10% y un 7% concluidos; un 9% con estudios de secundaria y tan solo un 8% tienen educación básica.

Las nuevas iniciativas empresariales auspiciadas por el programa, presentan una participación concentrada en tres sectores económicos: el sector agricultura y pesca con una participación del 38 %, seguida muy de cerca con manufacturera o industria con una participación del 34.47 % y en tercer lugar aparece el sector servicios con una participación del 21,45 %. Encontrando que el sector comercio y extractiva solo alcanzan una participación del 6.08 %.

Al analizar la edad y formación académica como factor de éxito se logra concluir que más del 40% de la población con edad entre veintiuno y treinta tienen mayor posibilidad de éxito empresarial y más del 45% de la población bajo estudio en el momento de emprender el proyecto, contaban con un mayor nivel de formación (pregrado concluido en adelante), son quienes tienen mayor la posibilidad de éxito empresarial.

El éxito o fracaso de los proyectos financiados por el Fondo Emprender, dependen básicamente de: el monto de los recursos o contrato, la generación y gestión de ventas, la ejecución y gestión presupuestal, la generación y gestión de empleo, la ubicación en el departamento de Cauca o Valle del Cauca, y del tipo de sociedad, (EU, SAS o LTDA). Ahora obsérvese que las variables valor del contrato, pertenece al departamento del Cauca y Valle,

son variables que influyen negativamente en el éxito de los proyectos financiados por el Fondo Emprender.

8. IMPLICACIONES

La investigación permitirá colocar a consideración de la comunidad académica, el gobierno y los empresarios, la conveniencia de mantener e incrementar recursos del estado para fomentar las iniciativas empresariales en Colombia, y así, poder establecer correctivos en pro de que los recursos asignados sean realmente elemento de generación de dinámica económica de las localidades colombianas.

Desde el punto de vista de la efectividad del programa del Fondo Emprender, es importante revisar que está sucediendo, pues a pesar de que los esfuerzos físicos y financieros son significativos, estas no logran cumplir con la meta de asignación de recursos, ni mucho menos dinamizar las regiones de Colombia vía desarrollo local con el fomento de nuevas empresas, pues de las 32 convocatorias analizadas desde el nacimiento del Fondo hasta el año 2013, se presentaron un total de 17.468 iniciativas empresariales, siendo seleccionadas solo para ser financiados el 18 %, es decir, 3157 proyectos, cifra bastante baja y situación de análisis en futuras investigaciones.

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**Indigenous rights, the formation of social capital and the creation of
new ventures**

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Abstract

The paper presents an examination of the evolution and growing importance of the processes by which inalienable rights held by First Nations and Aboriginal peoples in Canada are leveraged as a means for explaining the developmental pathways of their communities. A social capital perspective is used as a framework for evaluating some of the foundational tenets of native rights as an under researched and significant antecedent to entrepreneurship. Illustrative examples are presented that set out the processes by which Indigenous rights may be leveraged and their potential outcomes. Implications for social capital, strategic alliance and entrepreneurship theory are discussed. The paper concludes that by understanding the relationship of native rights to the formation of social capital, an important contribution can be made to understanding and predicting the development fortunes of Indigenous peoples globally.

1. Introduction

The purpose of this paper is to define the relationship between native rights and title and the formation of social capital within First Nations communities as a necessary but not sufficient antecedent to entrepreneurship and the unlocking of economic capital. Many scholars posit that new venture creation is a valid means for creating value while social capital theory is viewed as an appropriate predicate perspective for understanding the entrepreneurial process and predicting performance (Dees, 1998; Lepak et al., 2007; Tsai and Ghoshal, 1998; Woolcock, 2001; Hindle, 2010; Porter and Kramer, 2011; Dana and Light, 2013). In this respect, the processes by which First Nations are attempting to rebuild their communities through leveraging their resources to facilitate enterprise creation provide an excellent context for building theory on developmental entrepreneurship in particular and contributing back to social capital theory in general.

While there are no agreed upon conceptualizations of social capital, it is most commonly defined as embedded within the networks of a particular social milieu or context that may serve the purpose of enabling access to information, supports and various resources (Coleman, 1988; Burt, 2000; Adler and Kwon, 2002). In a First Nations context, the formation of these networks is now more than ever, reliant upon partnerships with corporations. This research thus provides an interesting context for understanding the antecedents to the formation of social capital within Indigenous communities. It also may help to shed light on

how native rights may be leveraged to stimulate the creation of wholly owned or joint ventures: a critical aspect of establishing socioeconomic independence and self determination for oppressed groups, communities or nations (Anderson, et al., 2006; Gedajlovic, et al., 2013).

This research is important for several reasons. First, resource development in Canada and around the world is booming and the necessity for gaining access to territorial and occupied lands held by Indigenous people is of significant importance to industry (OAGC, 2012; Langton and Longbottom, 2012; Lazenby, 2013). Second, through the hegemonic process of colonization, the social capital of First Nations peoples in Canada and Indigenous peoples across the world has been critically eroded through a combination of government policies, societal exclusion and a lack of control of their own resources (Shan et al., 2012; Foley and O'Connor, 2013; White et, al. 2013). As social capital is evidenced as being an important yet intangible resource embedded within social structures that may be drawn upon to drive wealth creation, the lack of it within First Nations communities is potentially detrimental to their development activities (Fukuyama, 2001, etc).

Our approach to examining these problems is both theoretical and observational. We present two broad pathways for leveraging native rights and title observed within the Canadian context and use social capital theory to set up propositions for understanding them. The first is through government policies and programs that have been developed for aiding Aboriginal communities. The second is through processes that involve the function of the courts and/or the legal infrastructure available through the marketplace, namely, negotiated agreements with governments and corporations (O'Faircheallaigh, 2009; Caine and Krogman, 2010). We devise a propositional framework that may be used to explain the relationship between native rights, the processes for leveraging them and how these processes may impact the formation of social capital used that may then be used to create new ventures.

2. PREDICATE PERSPECTIVES

2.1 What is social capital?

Social capital may be defined as the ability to obtain resources by virtue of social relationships and/or membership. As noted by Fukuyama "Social capital is an instantiated informal norm that promotes co-operation between individuals" (2001, p. 7). Coleman pointed out that – in

contrast to human capital – social capital “comes about through changes in the relations among persons that facilitate action. If physical capital is wholly tangible, being embodied in observable material form, and human capital is less tangible...social capital is less tangible yet” (1988, p. S100). Coleman (1988) examined social capital and the social structural conditions under which it arises; he distinguished between three forms of social capital: (i) obligations and expectations; (ii) information channels; and (iii) social norms.

Hyden (1997), and Woolcock (1998) focused on social capital as it pertained to economic development. Woolcock (1998) also addressed social capital and poverty, as did Narayan (1999). Krishna (2000) emphasized the difference between relationship social capital and institutional social capital. Relationship social capital is the capacity of an individual to obtain valued goods by virtue of relationships and/or memberships. Institutional social capital is the capacity of a group to enjoy benefits of collective action by virtue of participation, trust or commitment. In his study of religion and community development, Candland (2000) focused on faith as a social capital. Putnam (2000) suggested that among several resources, social capital provides information that could become an inclusive bridging lubricant. Putnam (2000), and later Adler and Kwon (2002), suggested that social capital could enhance trust via the bonding of individuals. This trust keeps organizations cohesive.

2.12 What are the other forms of capital and how are they convertible?

There are many forms of capital that have been identified and conceptually modeled. For the purposes of this paper we concentrate on four: economic capital, human capital, social capital and cultural capital. Each form of capital has characteristics that are both general and distinct. Most important to this paper, is the property of convertibility. Forms of economic capital, such as land assets are directly convertible. In theory, human and social capital is convertible into economic capital, albeit, indirectly. Furthermore, the convertible value from one form to another is not always equivocal. Adler and Kwon (2002) suggested that social capital could be converted to cultural capital and vice versa, introducing the concepts of social reproduction, exclusion and regulation into the study of entrepreneurship.

2.13 What is the relationship between social capital and entrepreneurship?

In their study of human and social capital, Davidson and Honig (2003) found that bridging and bonding social capital (consisting of strong and weak ties) was a robust predictor of who

became an entrepreneur. That study found human capital to be a predictor for entry, but only weakly for carrying on to successful completion. Baron and Markman (2003) confirmed the view that a high level of social capital – including an extensive social network and a positive reputation – assisted entrepreneurs in gaining access to important persons, but once such access is attained; outcome was influenced by social competence. Light and Dana (2013) distinguished between social capital as catalyst for entrepreneurship and suppressive social capital; they suggested that social capital promotes entrepreneurship only when supportive cultural capital is in place; they argued that social capital only helps entrepreneurship in the presence of a business supportive habitus (Bourdieu, 1977) and commensurate cultural capital (Bourdieu, 1986), or the necessary bridging ties to either external markets or resources.

2.14 The depletion of social capital in First Nations Communities

Communities which suffer from depleted stocks of social capital are more prone to long term impacts upon their wealth and well being (Flanagan and Beauregard, (2013). The colonization of Canada, much like in other areas of the world, was a process wherein first peoples came to be dominated by a hegemony that imposed their own worldviews, laws and values. In principle, this was a systematic means for depleting the social capital upon which much of the socioeconomic systems of First Nations people was based (Kayseas, 2010). As the basis of all freedom is economic at its root (De Soto, 2000), the outcomes of this process were catastrophic and enduring (RCAP 1996).

The economic outcomes of entrepreneurship is viewed by First Nations people as a means to rebuild their communities and economies on their own terms (Anderson, et al. 2008; Hindle and Moroz 2010).

Although social capital has been an important and growing area of research for scholars of Indigenous entrepreneurship (Foley, 2008, 2013; Light and Dana, 2013), it has only recently been explored as a means for exploring the relationship between native rights, corporate partnerships and new venture creation (Flanagan and Beauregard, 2013; Moroz and Kayseas, 2014).

2.2 Native Rights and Development in Canada

2.21 What are native rights?

Section 35(1) of the Constitution Act, 1982, provides recognition of native rights and affirms native peoples' interests in traditional lands (Wright and White, 2012). The Constitution Act states:

The existing Aboriginal and treaty rights of the Aboriginal Peoples of Canada are hereby recognized and affirmed (Constitution Act, 1982).

Although the Constitution Act (1982) secures Aboriginal rights over common law, federal legislation, or provincial legislation, according to Wright and White, "it does not create them; Aboriginal rights are inherent, collective rights based on their original occupancy of the land (Wright and White, 2012). In his review of the 1970 first edition of *Native Rights in Canada*, author Thomas R. Berger wrote, "the rights of native people in Canada are founded upon Aboriginal title...treaties, reserves, hunting and fishing rights all spring from Aboriginal title" (Berger, 1972). Inherent native rights based on Aboriginal title exist "independently of any form of legislation or executive recognition" and are based on notions of joint rights and jurisdictional-based legal concepts and ideas that existed before colonial contact (Berger, 1972). Although these models were fundamentally different from those of European common law these collective rights are based on native's original occupation of territory lands and pre-existing institutions of private property and native rights (Alcantara, 2003). Notwithstanding the pre-existing systems of rights to lands and private property, the British and Canadian colonial powers embarked on two centuries of highly constraining and aggressive colonial policy rooted in the denial of native rights which has since resulted in significantly delayed native economic development, dismal social pathologies and third world living conditions both on and off reserves (Alcantara and Flanagan, 2002).

The recognition of native rights as a means to emancipate native peoples in Canada is gaining widespread attention against the backdrop of resource-based economic development on reserve lands. The recognition of native rights has both practical implications for economic development and growth within first nations communities and also involves other important social and economic objectives such as distributional and social justice (Keay and Metcalf,

2011). The exact nature of the link between native rights and rights to lands and resources intertwined with Aboriginal title is best understood as a means to re-gain pre-colonial exercise of authority over their land through the application of inherent rights to self-government and freedom from collective property currently subject to Canadian political management.

2.22 History and current status of native rights and development (the last twenty years)

Over the course of 20 years a considerable discourse on native rights jurisprudence and Rulings by the Supreme Court point to one of the longest winning streaks in current history. By no means does this body of legal precedence represent all relevant factors in the examination of the history and current status of native rights in Canada over the past twenty years. However, these cases are indicative of the evolutionary process and numerous evolving mechanisms that are working together to provide the legal system with mechanisms to respond to the critical issues surrounding native rights and the extent to which native rights “holders need to be directly involved in decision making” (Keay and Metcalf, 2011). We do not suggest that rights litigation over the past twenty years has not contained critical flaws in the system of legal reasoning but instead only to suggest that these decisions represent the progression of aboriginal rights litigation. These cases symbolize an long past due attempt to move the obviously invalid and inappropriate native rights legislation towards a more fair, equitable, balanced and level field.

2.23 Native rights as an antecedent to the formation of social capital

In this paper, we are particularly interested in the relationship between Indigenous communities and the corporate sector as each pursues its own interests in resource-related projects on traditional Indigenous Lands. Generally, the corporate objectives are clear. A company has identified a resource-based project for which it believes a profitable business case can be made. The company’s challenge is to make this case to the other players in the socioeconomic system and secure the social license to proceed. To this end they must address the concerns, objections, and requirements of the other parties, including the Indigenous community or communities impacted by the project. And, past experience has shown that some companies have developed a strategic approach that includes a willingness to go a considerable distance to do so (for a more in-depth discussion see Mikkelsen, Camp & Anderson, 2008).

At the same time, Indigenous communities have their own views about projects being proposed and considerable ability to impact the form it will take or even affect whether it will be undertaken at all. The communities' power to do is grounded in a particular kind of capital that extends from their inalienable rights to their lands and may be best conceptualized as a form of "Indigenous Rights" capital that may be indirectly converted into economic capital through a multitude of pathways. This capital has arisen as a result of interaction of the multitude of players in that exist in the contemporary global economy. For example state governments in Canada, Australia, New Zealand and elsewhere and the associated legal systems have recognized to varying degrees the Indigenous rights especially as related to traditional lands and resources. Supranational organizations such as the United Nations, the World Bank and the International Labour Organizations have done the same (Mikkelsen, Camp & Anderson, 2008). Organizations in the civil sector including human rights groups and environmental organizations and such things as fair trade associations and business associations (e.g. in mining, forestry and agriculture) also recognize the existence of Indigenous Rights and the need to acknowledge these rights and the potential for unlocking/converting the capital inherent within them.

We are interested in exploring how these rights, socioeconomic forces, and major players might come together to the mutual benefit of Indigenous communities, the companies involved and society as a whole through sustainable resources development. We think there is good potential for Indigenous people to attain their development objectives (economic, environmental, social and cultural) through innovative and cooperative resource projects in partnership with corporations. These projects will also have to satisfy the others in the socioeconomic system; notably governments and civil section organizations, particularly environmental groups. In what follows in this paper, we develop and explore a model that we think captures the forces that will influence the nature of the outcome of interaction between Indigenous communities and companies in the resource sector and how conversion of Indigenous rights capital into social capital may be the most compelling pathway to pursue.

3. EVALUATING THE PATHWAYS: NATIVE RIGHTS, SOCIAL CAPITAL AND NEW VENTURE CREATION

In this section, we construct theory on the relationship between native rights, social capital and new venture creation, considering several potential pathways that First Nations communities

might take. In short, theory is “a statement of relations among concepts within a set of boundary assumptions and constraints” (Bacharach, 1989, p.1). Our theoretical treatise is formulated into a clear model so as to satisfy the qualities pertaining to good theory, that of generality, accuracy and simplicity, and qualities aligned with practical outcomes, that of functionality, utility and transferability (McKelvey, 2004; Weick, 1995). The model thus provides a generalization of processes and outcomes that are not distinct, but that represent patterns that are most observed, but are potentially interrelated or overlapping in certain specific contexts.

2.3 The processes/pathways for leveraging native rights

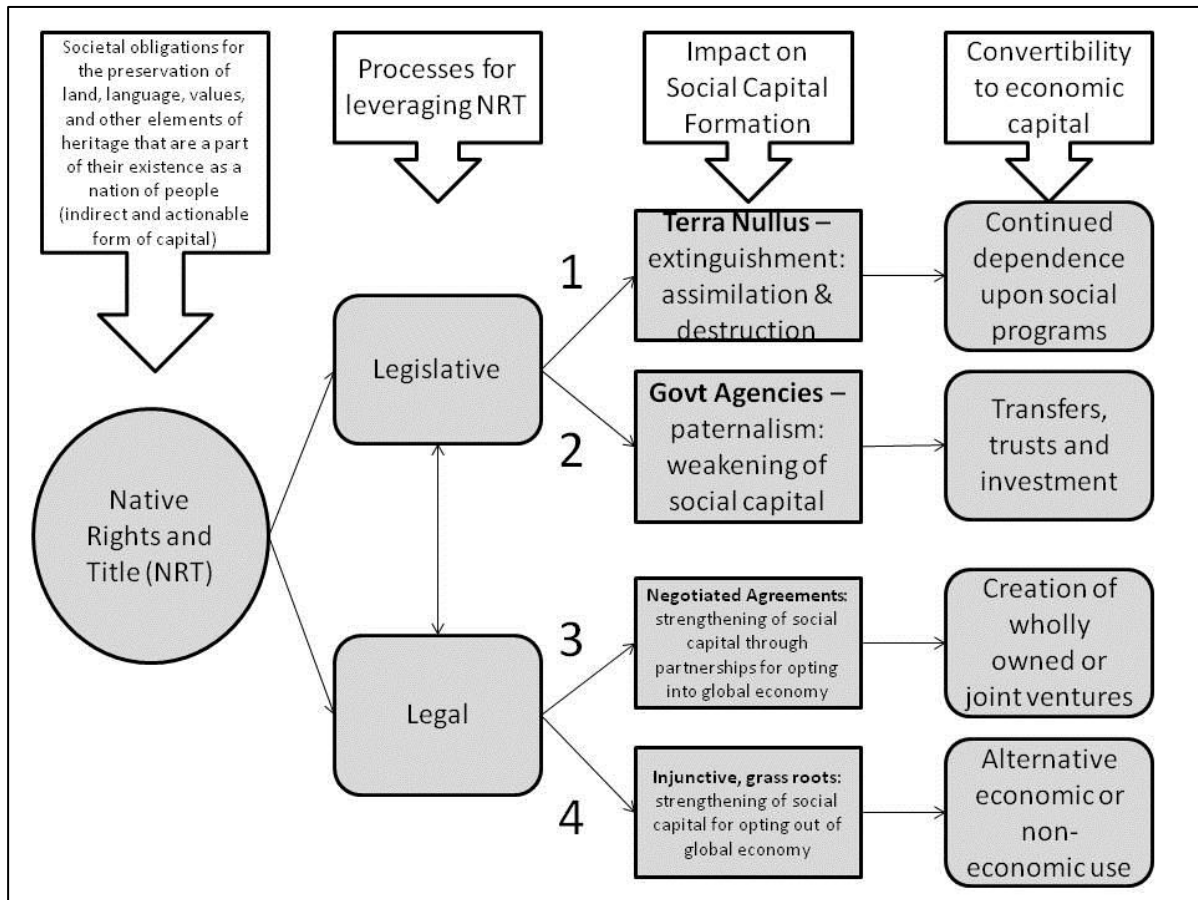
As with all forms of rights, civil or property, they are contestable and must be continually exercised and thus require actionable processes to be realized, activated, transferred or converted (Schlager and Ostrum, 2002; Demsetz, 1967). Indigenous rights differ from property rights in that they are not directly convertible into economic capital. Indigenous worldviews and laws are not subject to interpretation by western laws and thus native rights require an additional form of social action, either through institutional agents of the dominant society or through Indigenous agents upholding the interpretation of their laws through the legal means available of the dominant society. Although there are various ways to exercise rights, we limit this study to the consideration of two highly generalized processes by which native rights may be leveraged: legislative and legal. The first is based on indirect means that involve government agents or mechanisms that have been legislatively put in place to deal with the rights attributed to First Nations peoples. The latter is based on direct means that involve individual and collective usage of legal actions or infrastructure in order to challenge existing relationships or seek to proffer new ones through a variety of means. While each pathway is not distinct in absolute terms, and overlap of legislative and legal conditions are unavoidable, the use of either process is proposed to be interlinked with the evolution and development of the other over time.

Each process leads to differing pathways that are of course, somewhat dependent upon context and that impact upon the formation/depletion of social capital germane to opting in or out of the global economy. Pathway one considers the extinguishment of native rights through government action. In some jurisdictions, the rights of Indigenous people have been abrogated through various means deployed by dominant societies. The objective is to assimilate the minority population and provide de facto protection under laws established by

the state. In this case, the collective social capital of aboriginal peoples is depleted and replaced by the capacity to develop a form of social capital individually within the socioeconomic system of the dominant society (Foley, 2008). In almost all instances, this has led to even greater dependency, as the full value of native rights are converted into a much lower level of economic capital through social programs and transfers. Pathway two allows for native rights to be converted into economic capital at a much higher level of value, but without the concomitant impact on social capital formation necessary for participating in the marketplace. Government agencies formulate and monitor the conversion processes that are often highly influential on how First Nations communities interact with the marketplace, form partnerships and direct resources. While the conversion of rights into transfers, trusts and eventual investment under the partial control of First Nations does provide a greater leveraging of economic capital, social capital may actually be weakened through this process.

The third pathway involves the usage of legal infrastructure provided by the dominant society to force the interpretation of Indigenous rights through existing treaties, charters and constitutions. As much as possible, First Nations communities seek to act on their own behalf and through this process, seek to leverage their rights as their own agents. This may involve partnerships, strategic alliances and/or negotiated agreements through the legal infrastructure provided. These agreements further solidify the rights exercised and leads to the formation of social capital through the leveraging of these agreements to participate in the global economy with and through other corporate partners, on their own terms. Rights are thus first converted into social capital before they are again converted into economic capital through the creation of new ventures. Lastly, social capital can also be formed through injunctive or grass roots processes where legal actions and challenges of existing relationships and economic activities. The social capital formed may then either be used to leverage economic capital through legal actions, or to opt out of the global economy so as to allow for alternative economic or non economic uses that entail traditional practices and lifestyles or actions that serve to enforce and protect Indigenous worldviews of sustainability (see figure 1).

Figure 1. Framework: native rights, social capital formation and new venture creation



One important note on this framework is that it is limited to the convertibility of native rights into different forms of capital. We do not make any normative assessments on the outcomes, as there are many. While First Nations may be similar in many respects, their contexts, aspirations and cultures differ, making it difficult to rank the value attributed to each pathway. The next section does provide illustrated examples of both pathways with several implications to be drawn from the specific cases.

2.4 Observed outcomes of two different pathways for leveraging native rights

The approach to development of oil and gas resources taken by a Saskatchewan First Nation and four communities that for many years were collectively known as ‘Hobbema’ is a good example of how Indigenous communities can effectively leverage their traditional rights and what might occur when they do not. The Onion Lake Cree Nation, a community that straddles the Alberta and Saskatchewan provincial borders is located approximately two hours west of Edmonton. The four ‘Hobbema’ First Nations are also located in close proximity to Edmonton being located one hour south. The approach that these communities have taken offers a

contrast that illustrates the impact of asserting the right to control development based on their right as owners of the resource versus allowing external government agencies to develop and manage the resource. Their stories follow.

There are four First Nations that have been collectively referred to as, 'Hobbema' since 1891. These four communities have been 'home to the largest production of oil and gas on Indian lands in all of Canada.' Approximately half a billion barrels of oil have been produced since 1952 from the 290 square kilometer territory that these four communities encompass (Berger, 1994). In 1983, at the height of the oil boom, the four communities were receiving \$185 million a year in royalties (Notzke, 206). York captures the sad outcome of the wealth that was realized by the Maskwacis First Nations by stating a number of tragedies; from 1985 to 1987 there was a violent death almost every week within one of the communities; the suicide rate among young men was eighty-three times the national average; there was as many as 300 suicide attempts by 'Hobbema Indians' every year (York, 1990: 89. 91 in Notzke, 1994, 206).

The Maskwacis First Nations are part of the 617 'bands' in Canada that were provided selected lands (Indian reserves) set aside for the exclusive use and possession of 'Indians' – as enshrined in the 1763 *Royal Proclamation* (Boldt, 1993, 4). The 'Indian Reserves' are federal Crown lands set aside for Indigenous communities. The oil and gas assets are considered part of those lands and thus the federal government "retains specific and direct control over the occupation and development of these lands." The money made from the sale of oil and gas by the producer is collected by Indian Oil and Gas Canada and deposited into a 'capital' account in Ottawa.

Laws regarding the development of non-renewable resources provide for the federal government's department responsible for First Nations to have a significant and lead role on Canadian reserves. A department within Aboriginal Affairs and Northern Development Canada, the Indian Oil and Gas Canada (previously Indian Minerals West) is responsible for all phases of development, from exploration to well abandonment. In the mid-1980s Indian Minerals West was, "found lacking in even the most fundamental prerequisites necessary to fulfill its mandate for the Indian bands of western Canada by a multi-stakeholder task force" (Notzke, 207). Another report pointed out deficiencies of what was then the Department of Indian Affairs (currently the department of Aboriginal Affairs and Northern Development Canada), it found;

1. The general (Indian) community and most of the leaders are dreadfully uninformed of regarding how their resources assets can and should be developed; and

2. With only a few exceptions, the Indian community receives little enduring benefit from development. Technical and managerial learning does not take place (Notzke, 207).

While the Onion Lake Cree Nation (OLCN) is subject to all of the laws, rules and regulations regarding oil and gas development that the Maskwacis communities had to deal with the leadership there took a very different approach. The people of the OLCN believe they have an inherent right to their land and to govern their affairs as a nation (Chief Wallace Fox, 2014). The community is located approximately 50 kilometres north of the Lloydminster, Saskatchewan. Oil and gas production has occurred in the region since the first commercial well was drilled in 1943. Onion Lake Cree Nation initiated the development of oil and gas on their reserve lands much later than the Maskwacis communities. It was sometime in the early 1990s a natural gas utility was launched and around 2002 that the community of approximately 5,000 people first negotiated an agreement with a drilling company for the exploration and development of oil resources (Dillon, 2014).

The typical status quo is Indian Oil and Gas Canada makes the deal with company a, b or c...What we did over 15 years ago was to create an entity called Onion Lake Energy. And we (Onion Lake 'band' government) issued all license, drilling, exploration rights and permits to our own company who then farmed out and called for tenders. We never included them (IOGC) in our deal. And they (AANDC) wouldn't issue the permit to our own company...I had to fly to Ottawa and meet with the Minister of Indian Affairs and present a business case and 20 minutes later he told us, "I have to phone Calgary head office" and then the IOGC issued a permit to Onion Lake Energy (Chief Wallace Fox).

The OLCN formed the only natural gas utility 100 percent owned and operated by an Indigenous community with the resource accessed solely on reserve land. Former Councillor George Dillon stated described how when the federal government told Chief Fox, "you cannot build a gas utility company without my approval." Chief Fox's response was, "get the heck off my reserve, I'm just going to do it anyway. I'll invite you for the grand opening. And that's what he did" (George Dillon, 2014).

So in 1994 we developed a business plan and we created Onion Lake Gas Utility...We did a business plan. We went and got a loan and developed our own gas utility to service our residential and commercial units on reserve. Our own people went and took training. Our own members operate that, install the lines, install the meters, furnaces, everything, we do it ourselves. Three years ago the loan was paid up. So everyone that pays the gas bill, heating bill today is a profit and people are starting to see that because we use our own gas from our own resources (Chief Wallace Fox, 2014).

Then in 2002 an agreement was signed with a resource company that provided a 12 percent royalty. This first agreement was described as being the most 'negative' by former Councillor George Dillon, he stated, "they (the resource company) just took advantage of us because they knew we didn't know anything about oil and gas" (Dillon, 2014). A new agreement with Black Pearl Resources Inc. led to a joint venture that provides for a 34.5 percent royalty on each barrel of oil produced. A percentage of the royalty still goes to the capital account in Ottawa, however the balance goes to the band controlled Onion Lake Energy. Revenues are directed into a trust fund to back capital projects or are re-invested into business development. As of fall 2013 Black Pearl was producing about 5,000 barrels per day. Another venture with Fogo Energy allows for a 50/50 split on revenues from each barrel of oil. As of February 2013 the First Nation was producing about 14,000 barrels per day from approximately 400 wells. To conclude, a statement made by Chief Fox during an interview with the authors summarizes the outcomes of the development as experienced by him;

And when you look at the big picture again, the more people are trained, the more they go into employment, the less dependency on the social assistance budget. And then the lifestyles of our people change. The self-esteem, the self-worth, the pride that we once had comes alive again. I see this in Onion Lake. I can name you many families that were on social assistance 5-6 years ago. Today...When you look into their communities and their homes, nice furniture, no more alcohol, no more drugs. The next generation, their children are now finishing school cause they see they got to work, they got to go to school. They got to work to get these things that they have. And that generation, that mentality slowly changing in our community where you have to get a job, first you have to finish grade 12, take your vocational technical post-

secondary, then you go to work. And this is what's been happening in our community. It's taken 3 decade to get to where we are (Chief Wallace Fox, 2014).

4. DISCUSSION

The theoretical framework developed and the illustrative examples provided serve to promote discussion on several issues. First, the proposed model reflects the obvious and growing importance of native rights in Canada, but seeks to explain the general processes and pathways that First Nations may already find themselves upon or may be in the process of considering without the consideration of the others. It also shows the relationship between Indigenous rights, social capital and economic capital when it comes to exploring some of the issues of convertibility and goals that may be attributed to these pathways. With respect to its contribution to the discussion on the value of social capital theory to the study of entrepreneurship (and Indigenous entrepreneurship in particular), it provides a rich context for examining antecedents, processes and outcomes to the formation of social capital. Furthermore, this paper sets out a research agenda whereby each of the pathways may be evaluated to determine if the propositional quality may be upheld through further empirical testing.

As well, there are many limitations of this research, mainly drawn from the highly general framework provided. It should be stressed that our assumptions on the convertibility of native rights to economic capital do not limit for new ventures to be solely the domain of the third pathway suggested, only that the probability for the creation of new ventures to be realized by this pathway should be predictably much higher. New ventures may be realized in any of the four pathways. The same consideration should be given to the discreteness of the convertibility of natural rights in each of the other pathways. Lastly, while the model developed in this paper is focused on the nexus of natural resource sector corporations and First Nations communities with respect to alternatives and their valuation, its analytical power should only be extended to all First Nations communities loosely. There are many communities that may not have the same access to resources, may need to consider circumstances that involve the integrity of the community, its governance, socioeconomic positions, instances of dislocation and status with respect to recognition of treaties, agreements and institutional/state relations with (national) government.

5. CONCLUSION

There is an evolution occurring in Canada regarding the recognition of the inalienable rights held by First Nations and Aboriginal peoples. Canadian courts have recognized the inherent and traditional rights of Indigenous Canadians which, in many cases, has created opportunity within their communities. The examination of how the rights of Canadian Indigenous peoples are leveraged and the outcomes, economic, social and human, obtained is an important area of study. More and more Indigenous groups are being impacted by mining and/or oil and gas projects and there is quite a diverse reaction to these projects amongst the diversity that makes up the overall Canadian Indigenous population. One area of research that could support the various economic players involved is the interactions that are occurring between Indigenous groups and corporate Canada. How can win/win arrangements be accomplished within an area that has often left Indigenous peoples feeling left out and ignored? How can these communities engage in practices that can not only heal some of the adverse affects of colonization within their communities but also contribute to the economic power, and thus freedom, of their peoples? We believe there are ways of accomplishing this. The Onion Lake Cree Nation is but only one example. We hope to discover more as we pursue greater understanding of the intersection of Indigenous rights and the natural resource sector.

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How Government Advisers Change Institutions: A Case of Institutional Entrepreneurship in a Developing Country

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Abstract

This research seeks to develop a better understanding of how government advisers function and affect both economy and society changes while they work for the government. Economic advisers are experts that occupy high government offices and have some jurisdiction over policy domains from which operate as command posts. By “command posts”, Zald and Lounsbury (2010) 'refer to traditional centers of societal power (e.g. varied governmental agencies and the military) that regulate, oversee, and aim to maintain social order in society and economy, both at regional, nation-state and inter-state levels'. Taking into account this definition, I propose in this study to research the actions of experts which are represented in government advisers that embed their domain within and amidst a wider field of organizations, cultural beliefs, and critical interests that shape policy formulation and key decisions of the government. Particularly, I

explore the dynamics of this process by examining in-depth a case of a successful state-driven attempt to reconfigure the institutional infrastructure for the function of an organizational field.

Keywords: Institutional entrepreneurship, government advisors, institutional change.

1. Introduction

With many states facing economic and social underdevelopment, the question of how to reform the dominant institutions supposes a challenge. Nowadays, the concern in understanding the process of institutional change represents a need in a world where man-made political and economic institutions underlies the social and economic success — or the lack of it — of most countries (Acemoglu & Robinson, 2012). Since institutional change is a process where actors, organizations, and the social environment interact in an intricate form and face a strong power of inertia, its study has captured the attention of the organizational institutional field's discussion. Particularly, the study of actors and institutionalists. Those actors who lead changes that contribute to transforming institutions have been termed institutional entrepreneurs by DiMaggio, who introduced the concept in 1988 (Battilana, Leca, & Boxenbaum, 2009). Since that year, institutionalists have introduced the institutional entrepreneur notion in a variety of empirical studies with a special focus on the enabling conditions — field characteristics and actor's social position — for institutional entrepreneurship, and the mechanism of the process of change implementation (Hardy & Maguire, 2008). Within those studies, the institutional changes driven by the state — a central organization in any country — have been assumed as relatively easy to accomplish because of the direct effect of policies on organization, markets, and society. Additionally, the role of government advisers or experts, acting as institutional entrepreneurs, has been ignored, despite their great influence on both governmental plans and institutions (Zald & Lounsbury, 2010). Nevertheless, recent empirical studies (e.g., Vermeulen, Büch, & Greenwood, 2007) illustrated that institutional change led by the governmental actors is a complex process, and in many way an unsuccessful one, contradicting the institutionalists' assumptions. To fulfill that research gap, I explore the dynamics of institutional change by exploring in-depth a historical case of a state-driven attempt to propose and adopt institutional changes, and created the enabling conditions to accelerating the development of an emerging country.

This research seeks to develop a better understanding of how government advisers affect radically the institutional arrangement of Colombia. Government advisers are experts that

occupy high government offices and have some jurisdiction over policy domains from which take advantage of command post. By “command posts”, Zald and Lounsbury (2010) refer to 'traditional centers of societal power (e.g., varied governmental agencies and the military) that regulate, oversee, and aim to maintain social order in society and economy, both at regional, nation-state and inter-state levels'. Attending the call to become more relevant to policy design, regulation and its implementation (Zald & Lounsbury, 2010), in this document I explore how experts function and effect economy and society while they occupy high offices within government (i.e., command post). Taking into account the command posts' definition, I propose to research the actions of government advisers that embed their domain within and amidst a wider organizational field, cultural beliefs, and critical interests that shape policy formulation and key decisions of the government. Particularly, I analyze the dynamics of this process by examining in-depth a case of institutional change that occurred in Colombia, in the course of the 1970s.

Due to the historical Colombian's low economic and social conditions, the development policy has been a recurring question in its political and academic arenas. Thus, the inclusion of that problem in the government's agenda has been a constant issue. In the early sixties, the poverty, and high birthrates were concentrated in the rural areas, while in the cities, a tremendous growth was presented because of the rural migration. Also in that date, Colombia had in common with the Great Depression of the United States the mass unemployment and gross underutilization of its capital and natural resources (Sandilands, 1990). These issues were particularly sensitive in view of the need of governmental reforms and institutional changes that faced them. These were themes that a mature economic advisor, Lauchlin Currie (1902-1993), a native of Canada but a Colombian citizen since 1958, undertook in an effort to change the Colombian institutions, with a great vigor, mainly in one moment that represents the struggle of an institutional entrepreneur.

The historical case of this study was presented from 1970 to 1974. Through the National Front government of Colombia led by the Conservative president Misael Pastrana (1970-1974), Currie, acting as an institutional entrepreneur, designed and introduced a new institutional arrangement which was part of a national plan — the Plan of the Four Strategies — proposed to boost both growth rate and urban employment opportunities by removing the bottlenecks due to lack of credit supply for housing construction, and led to the creation of ten private joint-stock savings corporations to make possible the operation of the system. This event gave him the institutional opportunity to put in practice his own endogenous theory of economic growth which has developed since his doctoral dissertation in Harvard, inspired by his adviser Allyn Abbot

Young, and matured over time. Currie's initiative had support of a small group of allies who in an earlier time had been his students in different universities, but in the seventies some of them were policy makers working for the government. Other allies came from a sector of the construction industry which was economically interested in the new housing finance system. Until 1972 the state had almost complete control both political and economic over the housing finance field through some state agencies, notably the Banco Central Hipotecario (BCH), specializing in middle-income housing, and the Instituto Colombiano Territorial (ICT), specializing in heavily subsidized low-cost housing (Sandilands, 1990). Therefore, the new institutional arrangement and the creation of private joint-stock savings corporations made the competition much greater in the field of mortgage finance. The initiative of an economic adviser and his allies, acting as experts, succeeded in this second historical case — Unlike Operation Colombia — despite that this event changed the relation of power that the government had over the housing finance field.

The absence of efforts to understand and theorize cases as described above is significant in organizational theory. For instances, as Martí and Mair (2009) pointed out, there is a need that organization scholars to consider the impact that organizations have on the broader social systems in which they are embedded; principally, issues that has received limited attention from organizational scholars such the alleviation of poverty in the developing world (Mair & Marti, 2009). Furthermore, since the 1980s, the study of organizations became increasingly disconnected from core questions stemming from politics, an issue strongly worked in the mid-twentieth century by organizational researches around the so-called old-institutionalism (Zald & Lounsbury, 2010). Institutionalists drifted away from addressing this topics in the same way as organizational theory (Zald & Lounsbury, 2010). Consistent with DiMaggio's (1988) insistence on the importance of agency (DiMaggio, 1988) (Lawrence & Suddaby, 2006; Oliver, 1991, 1992) research on institutional entrepreneurs has been instrumental in restoring agency as a central issue in institutional theory (Battilana et al., 2009), but the interplay between politics and government advisers phenomenon seems vague, even, within the institutional entrepreneurship literature. Only some empirical studies focus their attention on the manner in which interested actors work to influence their institutional contexts through such strategies as technical and market leadership or lobbying for regulatory change (N Fligstein, 1997; Lawrence & Suddaby, 2006). Notwithstanding, this literature have not been dedicated to the study of the actions performed by experts within the government on institutional changes.

The historical case presented in this study, regarding the process of Colombian's institutional change during 1970s, represent a suitable opportunity to fulfill the research gap that has been

shown above. On that line, government advisers are central actors in market behavior and institutional settings, and in most of the cases, they are not embedded within specific organizational fields where markets operate. Nonetheless, through the state they establish institutional structures that prescribe how actors within a market arrangement will function (Dobbin & Down, 1997; Vermeulen, Büch, & Greenwood, 2007); therefore, altering the institutional logics of market performance, and in general, the field where market are embedded. These processes are given within the interplay between the disappearances of a set of institutions and the arrival of new ones (Dacin, Goodstein, & Scott, 2002). This process disturbs the institutional arrangement which dominant elites, social and economics groups, and command posts are embedded, resulting in some cases in the confrontation between them and the state. Consequently, the resulting institutional changes often appear as hybrids form combining new and old elements constructed through a bricolage, developed over conflicting processes within the government (Dacin et al., 2002), and give the opportunity for emergence of new actors and organizations. That is the process in which government adviser or experts — acting as institutional entrepreneurs — are embedded in this process. On the one hand, they require acceptance by field constituents that their actions are legitimate; on the other, they also need to impulse the state policy. It is in these conflicting ways that experts operate and influence government policies.

An important approach to institutional change has followed the definition of institution as the apparatus and policies of the state (Royston Greenwood, Oliver, Suddaby, & Sahlin, 2008). For example, Dobbin (1992) showed how legislation encouraged development of the private insurance industry (Royston Greenwood et al., 2008). Nevertheless, most studies of institutional entrepreneurship in a given field have focused on projects initiated by actors inside the field with dominant positions or by less dominant, and social movements (Hardy & Maguire, 2008), but in no circumstances, as results of experts within government. Thus, little is known about the specific challenges that outsiders — government advisers — face in bringing about field wide change (Hardy & Maguirre, 2009). To begin to understand the contemporary fluidity of politics and expertise, Zald and Lounsbury (2010) have proposed that literature needs a more detailed and updated understanding of expertise as a foundation for power. Because of the lack of former studies in the literature of institutional entrepreneurship, it is important learn more about both the state-driven process of institutional change and the reconfiguration of an organizational field studied through the changes in the institutional logic of a field. Additionally, it would be helpful to know much more about who is involved, how they become involved, how

key decisions are made, and how the nature of command posts shifts over time (Zald & Lounsbury, 2010).

Taking into account the research gap described, this study will make five contributions. First, as in-depth case study of institutional entrepreneurship proposed from the state, it adds to understanding of an institutional phenomenon poorly addressed. Second, I would illustrate the mechanism whereby government advisers attempt to create institution arrangements in order to develop institutional changes. Third, whereas much prior research has examined the characteristics of and the conditions that produce, institutional entrepreneurs, much less prevalent are detailed descriptions of precisely what it is that institutional entrepreneurs do (David, Sine, & Haveman, 2013; Lawrence & Suddaby, 2006); therefore, this study provides an explanation of how individuals — government advisers or experts — and their allies through the state can trigger institutional changes. Fourth, Martí and Mair's (2009) 'call to arms' attracts attention that existing research has largely centered on the study of institutional work in the developed world, favoring well-known settings, so more contributions must emphasize attempts to create, transform, and maintain institutions in the developing world (Martí & Mair, 2009). Therefore, I would identify some of the ways in which outsider-driven institutionalization is likely to differ from institutionalization driven by organizational field insiders, particularly in a developing country. Finally, this study emphasize on institutional work, facilitated me move beyond heroic conceptions, or actor centric, of institutional entrepreneurship, an issue highly criticized in the main literature review of the field (Hardy & Maguire, 2008).

This study is organized in three sections. The next chapter elaborates the theoretical orientation, establishing the central proposition in the existing literature. Then, it is presented the case's research method. Finally, I explore and present the historical case.

2. Theoretical Orientation

The Role of the State in the Institutional change

The role of the state effecting institutional changes has been studied within the organizational institutionalism perspective (i.e., the so-called neo-institutionalism) since its beginnings at the end of the seventies. The underlying focus of institutionalism at the end of that decade and during the eighties was that change driven by the state is relatively easy to accomplish because of the direct effect of policies on firms (Vermeulen et al., 2007). For instances, the pioneering publications as Meyer and Rowan (1977), in short, focus on the role of shared meanings,

institutional processes and institutional conformity (Royston Greenwood et al., 2008), proposed that because organizations are expected to behave rationally, rationalized myths are accepted as prescriptions of appropriate conduct (Royston Greenwood et al., 2008), and more strongly, the prescriptions that come from the state (Meyer & Rowan, 1977). Furthermore, Meyer and Rowan proposed that myths have official legitimacy based on legal mandates. They explained that societies that, through nation building and state formation, have developed rational-legal orders are especially prone to give collective authority to institutions which legitimate particular organizational structures. Furthermore, the rise of centralized states and integrated nations means that organized agents of society assume jurisdiction over large numbers of activity domains. Legislative and judicial authorities create and interpret legal mandates; administrative agencies-such as state and federal governments, port authorities, and school districts establish rules of practice; and licenses and credentials become necessary in order to practice occupations (Meyer & Rowan, 1977). In conclusion, the view of Meyer and Rowan (1977) regarding the state is a strong organizational apparatus that configured the institutional context which social actors function, and create rational myths that guide their behavior. Proposals regarding understanding the role of the state effecting institutional changes would become in the subsequences institutional studies and theoretical publications.

In 1987, Richard Scott published the article: “The Adolescence of Institutional Theory” which revised critically the advances achieved during the eighties in the academic field of institutionalism. Scott highlighted a tension between two primary types of actors shaping institutional environments in modern societies: The state and professional bodies, and the way in which their interests and mode of action shape institutional patterns and mechanisms (Scott, 1987). The imposition of organizational structure was particularly central in Scott (1987). According to him, some institutional sectors or fields contain environmental agents that are sufficiently powerful to impose structural forms and practices on subordinate organizational units. Nation-states do this when mandating by law changes in existing organizational forms or when creating a new class of administrative agencies. Corporations routinely do this, for example, when structural changes are imposed on companies that have been acquired or when existing subsidiaries are reorganized. Scott (1987) cited DiMaggio and Powell (1983) referring to this type of influence as coercive, but proposing two different types of this concept: imposition by means of authority, and imposition by means of coercive power. Supported in Zucker (1983) Scott proposed that changes in structural forms imposed by authority to meet with less resistance, to occur more rapidly, and to be associated with higher levels of compliance and stability than those imposed by force. On the other hand, the structural changes should also be

less superficial and loosely coupled to participants' activities than those imposed by coercive power (Scott, 1987). This differentiation regarding the process of influences over organizational structures shows an advanced beyond the arguments of the earlier institutionalism where state is represented as a monolithic of coercive power that influences organizational fields (e.g., DiMaggio and Powel 1983).

Scott (1987) pointed out that DiMaggio and Powell (1983) correctly identified the state and the professions as the primary modern shapers of institutional forms, as, in their terms, "the great rationalizers of the second half of the twentieth century" (DiMaggio & Powell, 1983). According to Scott, both are forces for rationalization. Given the power, state officials are more likely to create bureaucratic arrangements that centralize discretion at the top of the structure and allow relatively little autonomy to local managers and providers (Simon, 1983). Professional bodies, by contrast, will generally prefer weaker and more decentralized administrative structures that locate maximum discretion in the hands of individual practitioners. Both forms embody rational assumptions and modes of consciousness but posit different foci of discretion, giving rise to quite different structural arrangements (Scott, 1985). The mechanisms employed to disseminate structures are also expected to vary between the two classes of actors. State actors are more likely to employ coercion in pursuing their ends, and they are more likely to attempt to create a formal organizational network to carry out their purposes (Scott, 1987). Whereas the professions are expected to rely primarily on normative and mimetic influences and to attempt to create cultural forms consistent with their own aims and beliefs. Of course, to the extent possible, they will enlist the backing of state authorities for their models. Scott proposed that the state power is employed to support or undercut professional patterns will vary over time and place. The examination of these struggles and alliances is an important analytic key to understanding the shaping of contemporary institutional environments (Scott, 1987). At the end of the eighties, institutional studies of politics had analyzed how institutional factors affect the capacities of different groups to prevail in political struggles; notwithstanding, they had largely ignored how institutional context shapes the goals groups pursue in the first place (Dobbin, 1992), a matter that in the nineties began to change.

One of the key features of capitalist society is the dynamic interplay of markets, whereby some markets are emerging, others are stable, and still others are in crisis and undergoing transformation (Neil Fligstein, 1996), and in all these processes politics plays a central role. Supporting along those lines, Fligstein (1996) proposed an exogenous perspective of market transformation that views the basic cause of changes in market structure as resulting from

forces outside the control of producers, due either to shifts in demand, invasion by other firms, or actions of the state. According to this proposition, incumbent firms will respond to these destabilizing forces by trying to reinforce the status quo. Markets are connected in a wide variety of ways. Firms rely on suppliers, capital markets, labor markets, and customers as well as on states for their stability. It follows that these market and state forces are always interacting and thereby producing potential problems for an existing conception of control in a given market. Crises in relations across markets can undermine existing agreements by threatening the well-being of all firms, either by withholding key resources or through the direct invasion of firms from nearby market.

Much of the perspective developed above is latent in institutional theories and the organizational theories they rely on. Fligstein (1996) approach focuses more than most institutional theories on political processes, both in the formal structuring of institutions by the state, and in the formation, stability, and transformation of markets. But the goal of action is to build stable markets, a view Fligstein has adopted from institutional and organizational theory.

At the end of the nineties, organization theorists studying how institutions shape competitive interactions had produced research substantive enough to be categorized into three broad themes that bear on the issues of policies' effect on markets and organizational fields (Russo, 2001). According to Russo (2001), the first theme pinpoints the most salient facilitating role for governmental actors, channeling resources directly to organizations through policy making. The second theme connecting institutions and organizational foundings spotlights the role of ties between organizations and key institutions. And finally, the broad theme in this literature focuses on how institutional actors influence the relationships between organizations in new and established fields. These set of empirical studies show, in short, that policy makers, as institutional actors, can promote the rise and growth of organizations in a new field through the conditioning of relations between exchange partners.

At the mid-2000s existed enough support with the institutional perspective that organizations are embedded in a legal environment made of rules. Because these rules influence and constrain their behavior, organizations have incentives to act as institutional entrepreneurs by attempting to modify them or participate in their construction to their advantage (Demil & Bensedrime, 2005). This strategy was of particular interest for scholars studying political strategies, and the power strategies that institutional entrepreneurs use to influence regulations. On that line, Demil and Bensedrime (2005) argued that these strategies encompass both legitimization and pressure strategies. On the one hand, legitimization consists of taking part in

the political arena by trying to convince the other stakeholders, whereas pressure strategies attempt to influence political debates by using the dependence of the other stakeholders. This study results in a detailed explanation of the political strategies of organizations to legitimize; nevertheless, the understanding of the opposite direction, that is, the process of the influence of state over organizational fields was scarcely addressed. An exception has been the study of the mechanism so-called vesting. This one refers to institutional work directed toward the creation of rule structures that confer property rights (Russo, 2001). Vesting occurs when government authority is used to reallocate property rights, such as occurred in the fledgling independent power-production industry (Lawrence & Suddaby, 2006; Russo, 2001). This industry was created by the US federal mandate that large established utilities had to purchase electricity from independent producers. According to Russo (2001), previously, large power producers held state enforced monopolies over the generation of electricity. Such monopolies were an historical artifact of the large risks and capital costs required to build and maintain massive hydroelectric projects. To counterbalance the monopolistic power of utilities, state governments conferred the right to set prices on public utility commissions. In this early example of vesting, thus, the government simultaneously divided two elements of exchange (production and pricing) between two distinct sets of actors (utilities and utility commissions). Although this division of vested rights and interests worked well for a time, the oil crisis of the 1970s focused attention on the need to develop alternative sources of electricity (Lawrence & Suddaby, 2006). A second round of vesting legislation, therefore, created a new set of actors and redefined the exchange relations between them. Vesting, as Russo (2001) illustrated in this case, refers to the micro-processes of creating new actors and new field dynamics by changing the rules of market relations.

A common element of vesting is the negotiation of a regulative bargain between the state or another coercive authority and some other interested actor (Lawrence & Suddaby, 2006). According to Lawrence and Suddaby (2006), this was particularly evident in the process that developed between large utilities and public utility commissions described by Russo (2001). This process joined these two sets of actors together in an implicit contract that required one to produce power and the other to set prices that would cover costs and generate a reasonable rate of return. The introduction of independent power producers in this relationship required the creation of a new implicit contract in which exchange relationship was based on the avoidance of risk, rather than assumptions of reasonable returns (Lawrence & Suddaby, 2006). Vesting and policing, for example, often require the involvement of the state or other elite agencies with

the capacity to rely on force or domination to affect institutional ends (Lawrence et al. 2001) as is shown in the next section.

3. The Reconfiguration of an Organizational Field: Hypothesis Draft

This section takes in account the calling of Zald and Lounsbury (2010) to become more relevant to policy design, regulation and its implementation, developing a better understanding of how expert worlds function and effect economy and society. In support of these call and research question, I explore a research context regarding the role of planning agencies in the least developed countries (LDCs), and particularly in Colombia.

The 1968 constitutional reform in Colombia had an innovative change that the executive branch of the government should present its plan to a large committee of both congressional houses in the form of a bill to be enacted into law. Nevertheless, because political confrontation its application in the subsequent governments has shown serious difficulties to institute this change. Therefore, the frames of the customs pre-reform policies regarding the authority of the state were the trend at least for the period analyzed in the research context of this study.

Colombia, as the majority of LDCs, is characterized by its multiplicity of urgent problems in all fields. The actor finally held responsible for results is the head of state. There is virtually no limit to the amount of decisions a president is expected to make, but there is a definite limit to the time and resources of the public sector and the number of decisions it must take, concentrating on the indispensable activities and policies. But partly for institutional reasons, in the LDCs the contrary has generally been the case. The pattern, at least in the case of Colombia, has been for a state to take on more and more activities, or activities of a nature that require a mass of detailed regulation.

In Colombia, the Planning Agency has been charged with various operating duties, and even in its primary function of advice-giving, its organization was spelled out in the Constitution to cover the sectorial fields of a wide range of ministries. Therefore, it ensures that technical attention will be given to all matters. A large part of the time of the head of state, various ministers, and the Planning Agency is taken with a number of things impossible to manage. As a consequence, less time is available for the consideration of much more important policies. But to relieve the Planning Agency and the top experts of the minor task may incur running the risk that macroeconomic decisions will be taken elsewhere, this agency will not consulted by the

president, and its legitimacy and status will fall. This process allows to the commands posts from outside the government to influence without both social and political control.

The organization for policy formulation is closely concerned with the question of the relation of experts to administrators and of both to the formulators of policy. Both experts and administrators may be inclined to the academic field or tend to enjoy action. Whatever the tendency, the formulators of policy take an active interest in politics, the feasibility of policy, the defense and support a policy can rally, and more importantly, the reaction facing the emergence of a social movement. Incidentally, these former processes have been within the noneconomic, but political arena. In addition to the institutional perspective, the evidence of this historical case could inspire a better understanding about the mechanism of the command situations that experts operate and use to influence government policies. The analysis of archival data and interviews in progress show, preliminarily, that certain discourse, actor's position and resource mobilization could explain how economic advisers affect radically the institutional arrangement of an organizational field while they work for the government, who is involved, how they become involved, how key decisions are made in the process of the reconfiguration of an organizational field made by experts.

4. Method

Following the guidelines of Greenwood and Suddaby (2006), this study method is a type of "naturalistic inquiry" in which inductive logic was adopted to obtain insights (Garud, Jain, & Kumaraswamy, 2002; R. Greenwood & Suddaby, 2006). This study appeared during an archival work developed by the author on the Lauchlin Currie archival data located in Bogotá, Colombia, which contains almost the complete Currie's work throughout his academic life. The main archive of Currie's papers is in the Rare Book, Manuscript, and Special Collections Library, Duke University, under the title 'Lauchlin Bernard Currie Papers, 1931-1994. Before the original papers were shipped from Bogotá to Duke, most were first photocopied under the direction of Elba Cánfora of the Universidad Nacional de Colombia, thanks to a major grant from the *Banco de la República*, for deposit in Colombia's *Luis Angel Arango* Library in Bogotá.

The institutional changes triggered and adopted by the institutional entrepreneurs involved in the case of this study constituted a complex historical setting in which causal dynamics were not immediately apparent and the motivations of government adviser were unclear in the early steps

of the study. Therefore, a qualitative procedure was appropriate in the situation of this ongoing case study (R. Greenwood & Suddaby, 2006).

Historical Case

To better understand the expert's effects on the radical changes of an institutional field, I explored a historical case regarding the reconfiguration occurred in the housing finance field of Colombia from mid-sixties to mid-seventies. The subsequent case sheds lights for a more complete account of the institutional change responding to the call for empirical studies regarding a more distributed notion of institutional entrepreneurship (Lounsbury & Crumley, 2007), and the calling for the study of the interaction of governments, professional associations and corporate actors in market innovations, since its imperfectly understanding (Vermeulen et al., 2007).

In the history of economic policy in Colombia, the promotion of housing construction has been a recurring theme. In 1923, the Central Bank and the Banking Supervision Agency were created following recommendations from the "Kemmerer Mission". In the 1930's and 1940's the main source of mortgage loans was the Central Mortgage Bank. In the 1950's and 1960's it was complemented by the National Loans Institute, but mortgage credit outside of Central Mortgage Bank was kept to a minimum at other financial institutions. It was not until the 1970's, with the advent of a reform of the housing finance system, when other banks, a type of private joint-stock savings corporations, started providing long-term mortgage loans as a result of a collective institutional work effort to change institutions (Urrutia & Namen, 2011).

From 1950 to 1970 three basic transformations in the development process were taking place in Colombia: the country was passing from a predominantly rural to a predominantly urban composition, the birth and population rates of growth in the cities and hence in the country as a whole were beginning to fall, and exports were changing from reliance on coffee to more diversification.

President Carlos Lleras from the liberal party, whose term had expired in 1970, took measures to continue the pattern of growth of his government. He had fostered the country's Planning Agency and gave it independent powers. In 1969, he had dominated as director Jorge Ruiz, and economist with doctor's degree which was unusual at that time in Colombia, and had taken part in preparing a plan known as the Plan for 1970-1973. President Lleras had invited Richard Musgrave of Harvard to make recommendations on tax reform, had invited the International

Labour Organization (ILO) to send a mission to study the employment problem, and had negotiated international loans and prepared the national budget for 1970-1971 (Currie, 1981).

The director of the Planning Agency presented the incoming conservative president, Misael Pastrana, with the Plan for 1970-1973. The plan stressed public investment (mostly the programs for the various ministries and centralized agencies), which, after a rather review, the president accepted (Currie, 1981). Pastrana could not count on a majority in the Congress (which earlier had rejected the Musgrave's tax recommendations), and he was under some obligation to the former president, who had supported him within the so-called agreement between the two traditional parties (conservative and liberal) "Frente Nacional" where Pastrana was the last president. It appeared, therefore, that except for minor changes, the period 1970-1974 would witness a continuation of the policies adopted or followed by the previous administration (Currie, 1981).

At this time, political confrontations changed the expected course of the events. Some discrepancies developed between the president and the director of the Planning Agency. The latter and most of the heads of the main divisions of the Planning Agency resigned. The president accepted the resignations and appointed Roberto Arenas as the new director. Arenas, who had been student of Currie and had been on cordial terms, promptly asked the president to invite Currie back to Colombia as adviser to the Planning Agency. In the second half of the sixties, Currie was teaching economics in Canada and Great Britain since 1967. The original request to Currie in 1971 was to advise on the implementation of the ILO recommendations, which Currie declined. Therefore, the invitation was modified to permit him to advise on a plan in general to collect his own ideas about economic development, and Currie accepted it (Sandilands, 1990).

At the beginning of 1970, the country had been exposed to the reports of three missions, in addition to a suggestion of the resident Harvard Mission and an overall plan prepared by the Planning Agency. These reports were supported on different economic and institutional logics regarding how to accelerate the economic development, representing the different positions of the experts who proposed them. By the middle of 1971, except for a few surviving experts of the Harvard Mission, Currie was the macro adviser in the Planning Agency (Currie, 1981) and was in a position to prepare a draft of a plan and attempt to have it adopted, with three years of a new president's term remaining. These events show how the positions of experts within the government shifts over time, and how the displacement of the logic about the operation of state's policies occurs.

In June and July of 1971, Currie wrote the guidelines of a new plan, the main elements of which were accepted by the director of the Planning Agency and the president, and was incorporated by the latter into his major speech opening the Congress on July of 1971. Although the plan was foreshadowed in "Operación Colombia" at the beginning of the 1960's, no mention was made of this, and in general the plan was proposed as being new (Currie, 1981). After many discussions within the Planning Agency and with the president and his ministers concerned with economic matters, a final draft was written under the title of the "Plan of the Four Strategies". In December 1971, the president presented the draft to congressional leaders as the government's Plan of National Development. In winning acceptance of the plan, the director of the Planning Agency played a leading role, and much of Currie's time was spent in supplying him with arguments and in studying what needed to be done to implement it. Nevertheless, the effort made by organizations outside the government is not clearly described in the literature.

While the plan itself was fairly well received by government and Currie's allies, and particularly by the Builders' Association (Vargas, 2009), opposition in the Congress to it was intense and vociferous both within and outside the government. Had it not been for a discovery in the Constitution (1886) of a hitherto unused presidential power (Dávila, 1997; Sandilands, 1990), the institutional changes could not have been effected. After many meetings, the president decided in favor of the measures and signed the requisites on May 1972, although the implementation did not actually start until September of that year. This situation is an example of the constant struggle between the executive branch of the government and Congress along the process of institutional change which is poorly studied, so far I think, in the field of neoinstitutionalism.

The goals of the plan were conventional: an accelerated rate of growth and a better distribution of the benefits thereof. The novel features were to be found both in the diagnosis and theorization of poverty and a too slow rate of growth, and the strategies proposed to achieve the objectives. According to the plan, widespread poverty accompanies low productivity, a rapid growth in population, and poor distribution. Techniques and specialization are not adopted more rapidly because of the slow growth of the market. Resources are badly allocated and underutilized. Poor public administration nullifies, to a large extent, efforts to secure better distribution by transfer payments. Many obstacles to mobility-economic, cultural, and political - have to be overcome (Currie, 1981). The general idea of the plan was to identify potentially large sectors where unsatisfied latent demand was high and there existed high and continuing income elasticity of demand, or where an addition to supply would not affect prices or price elasticity of demand noticeably (Sandilands, 1990). Government intervention to stimulate such

"leading" sectors could thus be selective and strategic. The resulting impact would then affect some sectors, varying with varying income elasticity of demand for their products, and the mobility mechanism be aided.

In 1971, Currie selected two main sectors that could qualify as "leading" - exports and building: exports, because a base had been established in industry and a modern sector in agricultures; and building, because there was reason to believe that a large latent and unsatisfied demand for housing existed in the fast-growing cities (Sandilands, 1990).

The diversification of exports by the use of a subsidy and by monetary correction in the exchange rate was the major policy of the previous government (Currie, 1981). Conventional programs to stimulate agricultural production were being followed. According to Currie, the weakness of the administration in Congress and the state of finances prevented further large transfer payments to improve distribution. Hoping to secure the benefits of concentration, the plan focused on building. The single government mortgage institutions (the Central Mortgage Bank) was paying and receiving negative rates of interest when account was taken of inflation. The demand was believed to be large, and the supply of funds, small. The institution was rationing credit, and in such rationing it was the most credit-worthy, the well-to-do, who naturally received preference. To provide the requisite stimulus in an inflationary situation, new financial institutions were created to pay savers and to charge borrowers modest rates of interest, but with monetary adjustment (indexation) of the principal deposits, construction loans, and mortgages.

Initially, the plan was assisted by an informal advisory discussion group of businessmen, lawyers, and urban planner, mostly old friends of Currie, with whom tried out ideas and discussed alternatives and who worked in details of the implementation and in creating an informal group to support it (Dávila, 1997). Time was short, and the system, to survive a change of governments, had to be established quickly and had to create its own vested interest. For this the plan was advised the creation of a system of joint stock savings corporations, permitting the big commercial banks to participate (up to 30% of the capital) and even provide staff and space for the first year but with separate boards of directors. These banks had their own savings departments, and Currie and his allies appeared to be putting their project into the commercial's banks power. When one financial group formed a corporation, others felt compelled to form their own or be left out. After some rather agitated maneuvering, the new corporations began to receive deposits at the end of 1972. Within a year, corporations were functioning with branches

throughout the country, with applications for loans far in excess of the fast-growing deposits. Although its growth was later deliberately restrained by the succeeding government, the system was able to survive the political campaign and change of government in 1974, the legal challenge, carried to the Supreme Court, of its constitutionality, and the unsympathetic treatment meted out to it in 1974-1977 (Sandilands, 1990).

While the original presidential decrees were simple, the change they envisaged was radical. A system was put into operation designed to correct a discrimination against building caused by inflation, in order to provide the investment stimulus needed to secure greater mobility and hence higher productivity labor. It was designed to release pent-up demand; it was not itself a low-cost, popular housing system (Vargas, 2009).

Curiously, the role taken by the Builders' Association and other organizations has been poorly addressed by the literature. Therefore, so far this seems to be a classical example of institutional entrepreneurship conducted by a small group of individuals. Notwithstanding, archival work and interviews in progress could reveal a more distributed explanation of institutional entrepreneurship in this history which will help to develop a better understanding of how economic advisers or experts affect radically the institutional arrangement of an organizational field while they work for the government.

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**Can we find signals of inclusive entrepreneurship in small
businesses? Exploring the motives of small businesses for establish
linkages with non-profit organizations**

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Abstract

This study explores the motives and interests of small businesses (SBs) to establish partnerships with non-profit organizations (NPOs) in a developing country. Social issues in SMEs is a topic of research, and thus in this paper is studied how those interactions link the entrepreneurship nature of the SB with the actions that it can generate in social-economic issues. Those partnerships enable to the SB to connect its economic purpose with its social function. In some sense, the SB acts as a social entrepreneur through those interactions.

By using an exploratory inductive methodological approach based on case studies, a set of small businesses which have established interactions with NPOs all belonging to the food sector are studied.

Furthermore, the findings reveal that the establishment of those kinds of partnerships depends on a combination of SBs surrounding conditions, stage of development of the SME, and Owner ñManager (OM) motives. Those combinations are associated with a variety of logics and interests that give some signs of social and inclusive entrepreneurial behaviour in the SBs.

Keywords: small-business, non-profits, inclusive entrepreneurs

1. Introduction

Small businesses (SBs) have the potential to act as social entrepreneurs. In the literature has been studied the relationship between the entrepreneursí actuations and the economic growing of the countries (D-vila, 2010), that means that their actuations are sources of economic value, however an important dimension in the conduct of some entrepreneurs is what concern with behaviours whose purpose is not economic but social.

Among the ways that SBs address social concerns, the cross sector interactions (CSIs) have been one of the promising ones. And, in the hearth of what prompts to the SBs to establish CSIs, in particular with NPOs can be a set of motives and surrounding conditions that affect their establishment.

The SBs are now considered as central actors of economic development and as drivers of the forces of the creation of employment and welfare (Spence & Rutterford, 2003; Spence & Perrini, 2009). In the case of SBs their social actions are integrated in the business process; their

operations are highly tied to their nearby communities (Spence & Painter Morland, 2010) and also there exists small distance between agency and action.

In contrast to large size companies, SBs tend to manage those issues directly without to establish independent organizations and under a strong influence of the rationale and values of the owner-manager (Madden et al, 2006; Vives et al., 2005). In that context the SB and its OM act, in some sense, as agents of social entrepreneurship.

In the literature have been studied the factors that prompt to the business to collaborate with non-profits and civil society organizations (den Hond, de Bakker & Doh, 2012; SEKN, 2004; Bekkers & Wiepking, 2011). However, a few number of studies have addressed the topic of social issues specifically in SBs (Spence & Painter-Morland, 2010; Madden et al., 2006) and fewer have studied the topic of partnerships of SBs with NPOs as social entrepreneurship instruments. It would seem, therefore, that can be of interest to learn about the motives of SBs to get involved with NPOs, and about the environmental conditions that favor that involvement. Thus, this exploratory study is undertaken to better understand the motives of small business to engage or not in partnerships with NPOs.

The study addresses the formation stage of partnerships between SBs and NPOs, with focus in SB's organizational level. Given that the most of these businesses have only one owner-manager (O-M) who has a strong influence in the SB's decision making, in this research is assumed that SB is equal to the individual managerial level in the bottom line.

To address the presented topic is important because SBs are a factor of great importance in the economy of most of countries due to their influence in economic growth and as a mechanism to overcome poverty (Rodríguez, 2003; Coutinho de Arruda, 2010; Vives et al, 2005; Spence & Perrini, 2009). Additionally, the interactions between SB's and non-profit sector have shown an important impact in the social situations (Burtch, 2013), for that reason the establishment of partnerships between SBs and NPOs can be an engine for the social contributing also to the economic growth. In those partnerships the SBs develop social entrepreneurial actions.

Additionally, the development of this enquiry linked with food sector has a direct relation with initiatives to alleviate hungry and poverty situations.

2. Objectives

This inquiry attempts to contribute to the research in cross-sector interactions involving a social entrepreneurial approach. In this paper are given preliminary results for the motives and conditions that favor or not the establishment of partnerships between SBs and NPOs as instruments of social and inclusive entrepreneurship. To better understand those elements this exploratory study is grounded within the literature on social entrepreneurship, inter-organizational relationships and cross sector interactions.

This research starts from a general theoretical model composed by three elements: the motives of the owner-manager (OM), the characteristics of the SBs, and the environmental conditions. The model acts a framework to study the favoring or not of the establishment of partnerships of SBs with NPOs, thus this enquiry sought to address tow research questions: 1) What are the motives for small business engaging or not engaging in cross-sector collaborations with NPOs? 2) Can be found some signals of social entrepreneurship in small businesses in the context of their partnerships with NPOs?

The findings are reported in a matrix of stages and conditions which give place to a set of propositions that can contribute to explain the establishment of partnerships of SBs with NPOs and the social entrepreneurial nature of those interactions.

3. Literature review

The increasing interest on the study of inter-organizational relationships (IORs) between business and society has been generated in part by the positive economic and social effects of these interactions (Turcotte & Pasquero, 2001). They also reflect a trend in the way in that enterprises are addressing their social impact issues (Sargeant & Crissman, 2006), social entrepreneurs work consists in to create organizations that cross public-private-governmental boundaries (Waddock, 1988). Understanding the dynamics of SE has implications for the generation of economic and social value (Austin, Stevenson and Wei-Skillern, 2006; Brandenburger and Stuart, 1996).

Some seeds of Social entrepreneurship in productive entrepreneurship

The creation of economic value is not against the creation of social value (Carroll, 1999; Mair & Marti, 2006; Porter & Cramer, 2011). The idea of productive entrepreneurship and the micro-theory associated (Baumol, 2010; Torres, 2003) usually has been dissociated from the idea of social good, however Schumpeter (1909) goes far and proposes that is the law of social value or conjoint decision of a social group what regulates the market. The preponderance of the entrepreneur as an engine of the entrepreneurship is highlighted for Schumpeter (1912) in his early works which the entrepreneurs are drawn as leaders, that characteristic give them the potential to be social entrepreneurs. According to Lipset (1967) and Lipman (1966) the entrepreneurs are social deviants which means that they are reforming the society contravening the social rules, and that is just what social entrepreneurs do.

The social entrepreneur share with the productive entrepreneur characteristics as those proposed by Valdaliso and LÚpez (2000): is a conqueror, who overcome obstacles and combine factors to generate innovation, give place to a new social order and exists while the innovation enter in to the economic flow. In particular the SE generate transformation producing a new balance between problems and solutions (SEKN, 2006; Peredo and McClean, 2006; additionally Martin and Osberg (2007) and Dees (1998) propose that SEs take advantage of opportunities to create and to distribute social value developing entrepreneurial initiatives that have a central and explicit social mission.

Partnerships between For-profits (Businesses) and Non-Profits

SE answers to necessities of persons and communities and provides ways to overcome inequity building social capital and cohesion (Haugh, 2005). Additionally, they must be managed as business developing business plans, measuring their incomes and earnings and developing governance mechanisms. The organizational form is one of the eight topics proposed by Haugh (2005) in a research agenda for SE.

The field of inter-organizational relationships (IORs) study the relationships between organizations, as Oliver (1990, p. 241) states IORs are relatively enduring transactions, flows and linkages that occur among an organization and one or more organizations in its environment, in the case of cross-sector interactions (CSI) those transactions, flows and linkages happen between two or more organizations coming from different sectors (for profit, public or non-profit). The confluence of actors (organizations and individuals) coming from

diverse sectors is part of natural environment of social interactions (SEKN, 2006; Parmigiani & Rivera-Santos, 2011), that confluence allows to different actors to contribute from their perspective without being forced to change their identity.

This research is concentrated in a particular type of OIR between for-profits and non-profits, the interactions between small businesses and non-profits. A chronological sequence of stages has been used in the literature to study partnerships between business and social sector organizations (Berger et al., 2004; Selsky & Parker, 2005), in the approach purposed by Seitanidi and Crane (2009) exist three stages in the life of these partnerships: formation, implementation and outcomes. The formation stage considers the process previous to the establishment of the collaboration; the implementation phase is related with the processes associated to the constitution and starting of the partnership; finally, the outcomes phase refers to the process of stabilization and quotidian functioning of the partnership. Seitanidi and Crane (2009) also include a punctual event of finalization which also might be considered as a stage because it can involve a process.

The formation stage is particularly important for this research given the focus on the motives of the SBs to establish partnerships with NPOs, in the literature of inter organizational relationships has been shown that the formation stage of interactions can inform about the reasons of the private partner to collaborate (Cropper, Ebers, Huxham, & Smith-Ring, 2008. Some authors consider that partner selection is part of the formation stage (Holmberg & Cummings, 2009) in this study that approach is followed because the decision to enter in the partnerships can depend also on the characteristic and conditions of the possible partner.

Although stages models have been criticized in the literature because do not meet the complexity of those interactions (Kamm & Nurick, 1993; Storey, 1994; Bhave, 1994), the employed model is useful for this research, because provide a framework for a particular moment in the partnership's life and offer the possibility to deepen on it.

The cross sector interactions between actors coming from business and non-profit sectors have been grouped as corporate community involvements (CCI) (Seitanidi & Ryan, 2007) which include a spectrum of more or less loose forms of interaction between the two sectors. Among these forms are: philanthropy, corporate philanthropy, charitable donations, benefaction, patronage, corporate foundation, licensing agreements, commercial sponsorship, social sponsorship, transaction-based promotions, cause related marketing, partnership approach, cross sector social partnerships, joint issue promotion and joint ventures (Wymer & Samu, 2003; Seitanidi & Ryan, 2007; Seitanidi & Crane, 2009).

The literature that examines the interactions between for-profits and non-profits is focused in at least three elements: the purposes, the process and the outcomes. As this enquiry is framed in the formation stage it is related with the purposes element of the interaction, the purpose of those interactions like to satisfy a necessity of winning knowledge about local communities in environments where institutions are poorly defined (Waddock, 2001; Seitanidi & Crane, 2009; De Clercq, Danis, & Dakhli, 2010).

Beyond of possible conflictive situations between the partners, is the assumption that the establishing of a partnership is beneficial for those involved. However, the establishment of those interactions does not incorporate necessarily intentional purposes of social change (Seitanidi, 2010).

In order to develop a definitional basis for this research, which will support the empirical results, the terms proposed to be employed are presented next. *Non-profit organization (NPO)*. Following Salamon & Anheier (1992) a non-profit organization is that which fulfill five conditions: to have a formal organization, be private, to have capacity of auto-governance, does not distribute revenues and relies on voluntary participation. Nowadays, the most of NPOs have a professional character and for that reason is assumed in this research that the NPOs are professional.

For the Colombian context, those non-profit organizations are constituted under several legal entities: associations, foundations and non-governmental organizations (Confederación Colombiana de Organizaciones no Gubernamentales -CCONG, 2010) *Small Businesses (SB)*: The acronym SB refers to small businesses, according with Bridge, O'Neill and Martin (2009), SBs are not smaller versions of large enterprises, and although there is not a simple and widely accepted definition of what is an small business, they consider that in order to define those enterprises additional to the quantitative measurements most commonly considered, some qualitative characteristics might be included.

The quantitative measurements are the number of employees and assets which might be within specified ranks, the enterprises that exceed these values are considered medium or large. The ranges for classifying enterprises are set by each national government, in Colombia according with the Ministry of commerce and industry: "small businesses are those that have between 11 and 50 workers, and assets between 501 and 5,000 minimum monthly wages".

The qualitative characteristics are: that those businesses usually serve to local customers, having a limited share on their market, are owned by one person or by a small group of people,

are managed by their owners who deal with the most of managerial issues, are independent businesses no belonging to larger companies (Bridge et al., 2009). Additionally, in reason to its size and entrepreneurial origin, the SBs can be characterized because are usually local organizations with a trend to be closer to their communities (Spence & Painter-Morland, 2010), some of them are family owned (Cennamo, Berrone, Cruz, & Gomez-Mejia, 2012) or owned by a small group of entrepreneurs and exhibit ethical behaviors (Spence & Perrini, 2009). Considering that the social actions of the SBs are focused mainly in local communities, this study does not consider the international nature of SBs. *SB-NPO partnership*: is defined in this research as an open relation between one SB and one NPO, working under a partnership approach with complementary inputs and to reach a common purpose which also includes basic interactions between the partners. The above presented definition of partnership takes as starting point the next definitions. A partnership is a manifestation of inter-organizational relations characterized by “being an open relation between active partners whose strength relies in the different and complementary inputs of each party destined to reach a common goal previously agreed” (Fundación Corona- Programa Nacional de Alianzas- Colombia), in the same line Bryson, J. M., Crosby, B. C., & Stone, 2006, p.44) define cross-sector collaborations as the linking or sharing of information, resources, activities, and capabilities by organizations in two or more sectors to achieve jointly an outcome that could not be achieved by organizations in one sector separately.

A general model of motives and conditions that favor or not SB-NPO partnerships.

Although there is no consensus in the literature regarding the reasons of businesses and NPOs to establish interactions between them (Jamali & Keshishian, 2009; Austin, 2000), a revision of the characteristics of the interactions between business and non-profits shows that the IORs developed can obey to different motivations. It has been found that small companies involve in social issues for reasons of visibility, access to resources, scale of operations and seeking consolidation (Udayasankar, 2008).

In terms of the motives or reasons that the organizations have to establish IORs, Oliver in her seminal work of 1990 proposes that the organizations establish interactions between them according with a set of motives or contingencies, and given some environmental and inter-organizational conditions. In a complementary way Foster and Meinhard (2002) found that the motivation to collaborate is related with organizational and leader characteristics and intensified by perceptions of environmental conditions. The mechanisms that the business use to cope with

these requirements vary depending on some characteristics of the enterprises like their sensitivity to social issues (den Hond et al, 2012; Spence & Painter-Morland, 2010) and stage of development (Hanks, Watson, Jansen & Chandler, 1993; Rodríguez, 2003; Udayasankar, 2008). Based on the previous ideas, is proposed a basic descriptive model which includes the elements that can help to explain the formation of partnerships between SBs and NPOs, this model is illustrated in the Figure 1. The elements of this model are explained next:

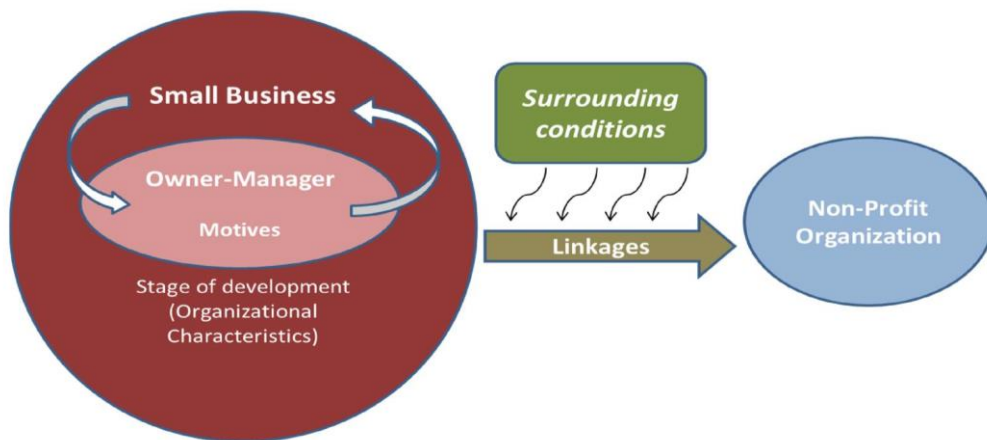


Figure 1 - A descriptive proposed model of the motives and conditions for the establishment of SBs' partnerships with NPOs

With its focus on explaining how interactions between organizational sectors work, IOR and CSI studies are a seemingly pertinent theoretical foundation for exploring research questions related to the sense behind the establishment of those interactions and its relationship with social initiatives. However, some of the assumptions that apply to large and multinational enterprises differ when applied to the small business. Thus, is undertaken and exploratory study to contribute to the understanding how the motives of SB for the establishment of partnerships with NPOs can exhibit signals of social entrepreneurial and inclusive entrepreneurial behavior on SBs.

4. Methods

Context of the Study

Due to the increasing institutionalization of the subject and additionally because they are a mechanism to manage social impact issues beyond enforcement actions arising from public policy, during the first decade of the century and so far the second , companies have

increasingly invested in issues of corporate social responsibility (CSR). This trend has led to an increase in the frequency of relations between private companies and non-profit organizations (Berger et al., 2004), evidence of this is that of the 500 top-earning American companies included in the Fortune magazine's list of the year 2005, 70 % reported on their websites have between 1 and 5 partnerships with nonprofit organizations (Shumate & O'Connor , 2010).

In the context of a developing country like Colombia relationships of this type also show increasing importance, in the 2010 annual report of the Confederación Colombiana de Organizaciones No Gubernamentales is informed that for the 50% of its 60 members with national incidence, one of the main strengths for operation are interactions with organizations coming from other sectors; moreover, in 175 projects reported, participants say that they made 140 of them through collaborations and that the private sector partner is the second most important for the organizations included in the report.

On the other hand, in a report on successful experiences in innovation, international integration and social inclusion of 2011, the Economic Commission for Latin America and the Caribbean (ECLAC), said that micro and SBs represent over 90% of Latin American companies, generating positive impacts on employment indicators production and exports lesser extent. Colombia represents the case of a mid-size economy in the region, where SMEs are concentrated in food and chemical industries. Therefore, SBs are important actors in the economy of the developing countries producing a positive impact in employment and production levels in Latin America (CEPAL, 2011). In the Colombian context, according to 2011 information from the Colombian Small Industries Association (ACOPI), 96% of all businesses were microenterprises and SBs. Previous shows that SBs are an important economic actor in the countries of Latin America, and Colombia is not an exception.

As Coutinho de Arruda (2010) states, the interactions with them stakeholders for social issues of SBs in Latin America, have moved of be seen as a matter of financial investment to be understood as a philosophy that marks that kind of relationships. The involvement of Latin American SBs in social initiatives usually is addressed towards local needs (Vives et al, 2005) and the managerial issues related with social issues tend to be informal, because in the SBs owners-managers assume that the close work with the employees is enough to communicate and to instil them with their values (Couthino de Arruda, 2010). In Colombia, as Latin American country, SBs cross sector interactions with NPOs are imprinted by these characteristics.

Research Strategy

Given that the focus of this research is to contribute to the study of cross sector interactions to better explain the motives and conditions that favor or not the establishment of partnerships of SBs with NPOs, an inductive approach permits to explore in a flexible way to cope with a wide scope of potential motives and conditions that can help to answer the research question.

Drawing upon existing publications, contacts with NPOs and websites exploration, a set of small and medium businesses which have interactions with NPOS were identified and a contact was made. After that, a total of 11 interviews, 10 of them in organizations related with the food sector, some of the related with food banks, were conducted. Although the purpose of the study is to understand SB point of view to link with NPOs, interviews also were conducted with management staff of NPOs, and also with an association of NPOs to garner a wider perspective. The interviews were open-ended semi-restricted, developed in Spanish and 1 hour in length on average, though they ranged from 45 minutes to 2 hours. The instrument included in the Annex 1.

A set of interview questions were initially developed based upon key concepts of IOR, social entrepreneurship and cross-sector interactions literatures. Such questions focused upon understanding the motives and conditions why a Small business and its owner-manager had either established a partnership with an NPO or not established that kind of collaboration. Additionally, for the purpose of triangulation the study also included study of documents of the organizations observed and observation of transactions between some of the participant organizations.

The data collection process involved a time of 4 months between May and August of 2013, the data collected (documents and records) were analyzed using partially as support Nvivo 10. After an initial analysis of the data, additional academic literature was sought that focused the key topics identified from the data, specifically research from the stages in the lifecycle of SBs. Through this process the pervasive themes across the cases studied are illustrated in the Table 1 and will be explained within the findings section.

The methodology elected depends strongly on the research question proposed (Gutiérrez, 2004). The research question proposed in this research about why the SBs collaborate or not with NPOs and which conditions favor those linkages is framed in a new research area which implies to select a more qualitative methodological approach (Eisenhardt & Graebner, 2007). An exploratory qualitative approach (Saunders, Lewis & Thornhill, 2011) based in a multiple case

study comparison design is developed. Using an inductive grounded theory approach (Glaser & Strauss, 1967) a set of propositions is presented emerging from the data analysis.

The criteria proposed for the SBs case selection were three: first, the organizations selected must fulfill the conditions to be considered SBs according with the established in the national Colombian legislation and also the qualitative characteristics presented in the theoretical framework; second, the SB should had at least an interaction, as was defined previously, with NPOs during its life, this interaction can be successful or not; and third, the access to data and interviews in the selected SBs might be reasonable (Yin, 2003), in relation with this last aspect the feasibility of access is given, in this case, by the geographical proximity (Valencia, 2010).

The case study strategy has no intention of generalization to a population or sampling logic, but generalization to theory that means replication logic (Pettigrew, 1985; Yin, 2003). Use of data for triangulation and clarity in the protocols for collection were developed to assure the reliability and validity of this research (Gibbert, Ruigrok & Wicki, 2008; Eisenhardt 1989; Eisenhardt, 1991).

5. Findings

The findings presented next are part of an ongoing research process and, in that sense, represent a preliminary elaboration of the understanding developed around the proposed research questions.

Influences between Motives, Organizational characteristics and Conditions

As was presented in the initial model three elements can favor the partnering of SB with NPOs: the OM motives, the organizational characteristics of the SB and environmental conditions. In order to give a framework to the findings each of three elements are explained next.

Owner-Manager motives

Integrating the proposals of Oliver (1990) and of Bekkers and Wiepking (2011) about motives or reasons to establish IORs and to collaborate, is proposed for the case of interactions of SBs

with NPOs a set of five motives or contingencies that favor the interaction going from utilitarian to altruists: efficiency, stability, legitimacy/reputation, reciprocity, altruism.

Organizational characteristics

The quantitative and qualitative elements that describe an SB can be framed in a stages description of SB growth grounded in those presented by Churchill & Lewis (1983), Hanks et al (1993) and McMahon (1998). The proposed stages can be summarized in three: start up, growing and maturity. The start-up is an SB that is young, with a simple organizational structure, centralized and informal; when the enterprise goes older grows and start to adopt functional specialization is named growing; with an increased age and size the SBs in maturity stage have a low centralization.

Although those models can be criticized in reason to they propose a sequential and automatic evolution between stages, those are useful for frame some finding of this research. because is compatible with the findings of the study developed Rodriguez (2003) which analyzes a sample of Colombian SBs and characterize those in three groups: small in emergence, small with stability and in growing process closer to be medium.

Environmental conditions

According with previous studies two generalizable conditions can be of particular interest in the formation of interactions between SBs and NPOs given the O-M motives and the organizational characteristics of the SBs mentioned above. Those conditions are: environmental munificence and the potential consensus of goals (Oliver, 1990) between the SB and NPOs. The environmental munificence can be seen as the opposite to resource scarcity, and the consensus of goals has incidence in the future alignment between partners.

The Table 1 represents a summary of the findings related with the establishment of partnerships of SBs with NPOs, and how those are favored or not by the characteristics of the SB, represented by its stage of development, and in presence of the motives of the O-M driving the election of partnering. The figure represents a spectrum going from the pure utilitarian motives to completely altruistic motives driving the SB involvement with NPOs, this axis represents

mixes of the five motives presented in the previous section: efficiency, stability, legitimacy/reputation, reciprocity, altruism.

Stages of growth of small business

| | | | |
|-----------------------------------|---|--|--|
| Altruistic | ↑ | → | |
| Mix of Motives for partnering | | | |
| | | Start up | Growing |
| | | Maturity | |
| Predominantly Altruistic Motives | | Munificence and Consensus of goals <i>Conditionally favored</i> | Munificence and Consensus of goals <i>Favored</i> |
| Mixed Motives | | Munificence and Consensus of goals <i>Conditionally favored</i> | Munificence and Consensus of goals <i>Favored</i> |
| Predominantly Utilitarian Motives | | Munificence and Consensus of goals <i>Not favored</i> | Munificence and Consensus of goals <i>Conditionally favored</i> |
| Utilitarian | | | |

Table 1 –Proposed Matrix of Relations between motives of SBs and conditions to favor the establishment of partnerships. (Stages Based on McMahon 1988, Churchill and Lewis 1983; Mixed Motives based on SEKN 2006)

What favor the partnerships between SB and NPOs

According with found by Gorgievsky, Ascalon and Stephan (2011) in their research about owners of SBs, struggling for the usual aims of business goals shown be conflicting with more transcendental values like benevolence and universalism iwhich are important guiding principles in life for most people and also most business ownersî Gorgievsky et al. (2011, p. 225).

The correspondence between owner-manager social values and SBs social actions has an important influence in the social causes that the SB assumes. Campbell et al. (1999) explored why some large enterprises have a higher propensity to collaborate with social causes, and found that personal attitudes have an essential role in the actions of organizations regarding social issues. Their results showed that *upper echelon* decision makers had a strong influence in the participation of an enterprise in social issues, but the organizational response did not necessarily match that of the owners of the company.

According to previous findings a mix of altruistic and instrumental motives is behind the decision of partners to form collaborations between business and non-profits (SEKN, 2004; Vurro, Dacin & Perrini, 2010) mixing reasons of legitimacy and social good.

The data coincided with the findings on the literature which the alignment between the dominance of altruistic motives of the OM and the trend of its enterprise to assume social causes; moreover, however this behavior is more notorious in mature business which are close to be or be medium enterprise, as the representative of one of the businesses interviewed described:

“Since we created the enterprise the social initiatives were present, but now that we are in expansion we can make them a continuous process”

Thus, explaining the motives behind the decision to enter into a partnership appears to be related with a balance between the perception of stability and the propensity of the OM to enter in work related with social causes. As the business reach the maturity that means that is working well and reaching some stability that enable to drive resources to alternative projects. Therefore the following is proposed:

Proposition 1a: The establishment of partnerships with NPOs is favored in the stage of maturity of SBs, when the motives are mixed or predominantly altruistic.

A small business growing has surpassed some initial economic and organizational crises but conserves yet a close supervision and intervention in the decision making of OM, which means that the predominant altruistic motives of the OM have yet incidence in the establishment of partnerships with NPOs;

“Before to start with this restaurant, I was working in a foundation oriented to the environmental

sustainability, now that the restaurant is growing we are strengthening our actions with communities and producers”

While increasing organizational stability within the growing process did remain a key consideration of interactions with NPOs as a means to develop the altruistic intentions of the OM, who has infused those interest to his/her SB. Therefore, the following is proposed.

Proposition 1b: The establishment of partnerships with NPOs is favored in the stage of growing of SBs, when the altruistic motives are preponderant.

Conditioned establishment of partnerships between SB and NPOs

Some environmental and inter-organizational circumstances increase the possibilities of that the motives or reasons of the O-M lead to the formation of interactions. Those conditions can be generalizable or specific to certain type of interactions (Oliver, 1990). This research includes two generalizable, which can facilitate the existence of several types of interactions in particular the partnerships. More specific conditions that can help to predict particular types of interactions are not in the scope of this study because the purpose is not predictability of specific organizational forms of those interactions.

The mentioned interactions interact with the characteristics of the OM and the stage of development of the SB. Due to their entrepreneurial origin and size, in SBs the roles of owner-founder and manager are assumed by the same person and tend to overlap, this overlapping has implications for the operation of the SBs because the owner-manager has a leading role in decisions that affect the use of organizational resources and capabilities (Barney, 1991; Easterby-Smith, Lyles & Peteraf, 2009). Referring to commitment with social causes Baumann-Pauly, Wickert, Spence & Scherer (2013, p. 696) stay: “for SBs this dimension captures how a commitment to CSR is informally reflected in the attitudes of the owner-manager to be socially connected and thus responsible for addressing the set of issues reflected”.

The way in that SBs address their social issues is influenced by visible and tangible characteristics some of them can be considered quantitative and others qualitative. Some quantitative characteristics are amount of assets, size represented as number of employees, structural complexity and age. And, between the qualitative characteristics are found the scope

of its initiatives towards its nearby communities, a limited share, ownership and management concentrated in one person, independence of other organizations and entrepreneurial origin.

Within these organizational characteristics Whetten (2006), emphasizes how central distinct and enduring attributes constitute an organization's "essential" character (Gzarniawska-Joerges & Joerges, 1996) or identity. In the case of the SBs, for the reasons explained previously the O-M exerts a high influence in this "essential" organizational character.

In particular coincidence on goals between the parties and to be in a munificent environment has been studied as conditions that favor or not the establishment of interactions (Oliver, 1990). However, the data in this research suggest that also changes in the market can favor or not those.

As the OM of an SB which cultivate and distribute vegetables stated:

"I was broken when my bigger client cut the relationship, in that moment I established *the link with the foundation and was a god decision*"

While the existence of mixed or altruistic motives of the OM in a start-up SB could be a combination that can menace the establishment of partnership with NPOs, the existence of a munificent environment and an alignment of objectives between the parties gives more opportunities to interact and increase the building of agreements between a SB and a NPO.

On the other hand, when the initial stage in the SB is overcome, the motives of the OM are predominantly altruistic, are the environmental propitious conditions which favor the establishment of the partnerships, in particular adverse conditions of market as the loss of an important client can lead the SB to find alternative arrangements to maintain its growing trend.

Finally, although an OM with predominantly utilitarian motives leading a mature SB would be a sparse terrain for the building of partnerships with NPOs, the environmental conditions in particular those related with munificence can give place to cross-sector linkages because it can represent opportunities of new markets for the SB which is in conditions of stability. Therefore, the next is proposed:

Proposition 3a: The establishment of partnerships with NPOs when motives are mixed, and the SB is a start-up or in growing stage, is conditioned by environmental and relational characteristics. Proposition 3b: The establishment of partnerships with NPOs when motives

are predominantly altruistic and the SB is a start-up is conditioned by environmental and relational characteristics. Proposition 3c: The establishment of partnerships with NPOs when motives are predominantly utilitarian and the SB is mature is conditioned by environmental and relational characteristics.

What not favor the partnerships between SB and NPOs

Although have been shown that the business that have a tendency to donate maintain it and do so for altruistic reasons (Campbell et al., 1999) in the case of SBs the prevalence given by the organization to social causes is particularly important. As SBs are usually the outcome of the work of an entrepreneur who has started it for reasons of subsistence or pursuing a business opportunity, that entrepreneurial origin made SB more aware and closer to the social effects of its operation acting as social entrepreneurs.

The entrepreneurs that create an SB are away from the myth of the hero alone, better they depend on a set of relationships, so for they is important to interact with multiple actors (Dodd & Anderson, 2007). Usually the owners-managers create their business as a personal endeavor and then "inherit" the capital content in their network of historical relationships to the SB.

The overlapping of relationships between the O-M and the SB frames the interactions of the SB. As there is an overlap between the O-M and SB relationships, the intensity, trust and reciprocity that the O-M has built in his relationships may be useful for SBs' social purpose activities (Kenis & Oerlemans, 2008). Additionally, there exists an intersecting between the commercial and social relations of the O-M and his/her SB; consequently, the SB can integrate in a more genuine way the social issues in its operation including those and the partners in its agenda. It can be interpreted as inclusive entrepreneurial efforts.

Using a top-management organizational point of view, underlying contingencies that motivate or induce the formation of relations between organizations are in the origin of the motives which are subjacent to organizational actions lead to begin cross sector interactions (Oliver, 1990; Seitanidi, Koufopoulos & Palmer, 2010). According with the findings of Street and Cameron (2007), the top management behaviors and motivations have shown be determinant in the building of external relationships of the SMEs.

As the person in charge of making social decisions, even if he/she is not the owner, influences the social conduct of the company; all the more reason, it will happen in SBs where the

decisions of the owner-manager are more likely to permeate the enterprise and affect the resources assigned to social issues (Murillo & Lozano, 2006). In most of SBs the ownership and management of the enterprise are concentrated in the founder; consequently, the personal philanthropic interests of the O-M guide actions in social issues and have a direct incidence in them (Vives et al, 2005; Madden et al., 2006).

“If that potential partnership with that NPO doesn't represent to me some economic or market improvement I will not maintain my proposal of association”

What happens when the motives of the OM are more utilitarian is that the economic rationality is predominant and in the presence of natural crises in the stages of starting up and growth make that the prevalence will be given to the survival of the enterprise. Therefore, the next is proposed:

Proposition 4: The establishment of partnerships with NPOs is not favored in the stages of start-up and growing of SBs, when the motives are predominantly utilitarian.

Signals of social entrepreneurship

For strategic reasons of efficiency and recognition, it is positive that the social actions of the business are aligned with its core business (Arena, Ciceri, Terzi, Bengo, Azzone & Garetti, 2009) or with specific issues connected to its own operation rather than general social issues (Pérez-Alemán & Sandilands, 2008); thus, this tendency is reinforced in SBs because these are faced with the perennial problem of resource balance and this alignment contributes to act socially without to affect their own survival.

In this research it is argued that the reasons that lead SBs to establish interactions with NPOs are related to their nature. SBs not necessarily aspire to be large or multinational (MNE) business; therefore, for them could be most important to preserve its own values, besides of the initial

necessity of have and preserve a capital obtaining a stunning economic performance (Vives et al., 2005) That rationality has an inclusive perspective because gives place to other types of associations where other interest different to SBís interest are included. As an OM of a small restaurant explained;

“All the providers of this restaurant are small producers, and we work also supporting some of their initiatives of sustainability and social impact”

The establishment of a business, involves the creation of an implicit social contract, which refers to the relationship that the company provides to society and that implies some rights and duties between the parties (Donaldson, 2001), in that sense the reasons behind the SB’s O-M decision to establish interactions with NPOs also can be reciprocity in their actions with the community and aspirations in social issues. Therefore, the next is proposed:

Proposition 5: The extent to which a SB establishes partnerships with NPOs, it represents a measure of its social entrepreneurial behavior

6. Discussion

The professional character means that paid staff and professionals develop substantive and managerial roles in the NPO (Hwang & Powell, 2009), in this research this professional character is important because given that communities of professionals share ideas and practices prevalent in their milieu (Galaskiewicz, 1985; Hwang & Powell, 2009), to hire professionals have made that the practices of the NPOs become similar to those of SBs which favor the interactions between them (Campbell, Gulas & Gruca, 1999).

On the other hand, the OMs of SB that have altruistic behaviors can inspire their enterprises with those and establish the basis to build inclusive projects with NPOs, in that process is the social entrepreneurial character which permits develop that feature in the SB.

Unlike large enterprises where the power to make decisions is distributed, in SBs it is concentrated in the O-M, and the managerial affinity with social causes generates a stronger propensity to collaborate because it encourages closer and more direct relations between the owner-manager of SBs and the managers of the NPOs.

Also is remarkable the previous history of interactions (Seitanidi et al., 2010) originated in the strong personal and professional relations that the owner-managers of the SBs as entrepreneurs have, the multiplicity of relationships and the intensity of them in cross sector interactions influences the SBs to interact with NPO. This historical dimension (Seitanidi et al, 2010) influences in the posterior decision to establish this kind of arrangements again repeating an organizational arrangement usual in their environment and experimented in its previous associative experiences (Villalonga and McGahan, 2005).

From a practical perspective, this study provides a number of beneficial insights to policy makers as they attempt to understand better the complex world of small businesses, which is characterized by a large variety of enterprises which represent the higher part of enterprises in the most of countries. The identification of motives and conditions that favour or not the establishment of partnerships of SB with NPOs, can contribute to define incentive systems and institutional settings that favour that kind of linkages; those systems and settings support the stability of SBs at the same time that give place to the creation of social impact and inclusive initiatives through the SBí social entrepreneurial actions.

The results of this enquiry suggest that OM with a more altruistic nature instils this spirit to his/her business and that effect conducts to a partnership formation depending on the organizational diversification, stability, coincidence between the owner and manager roles in a same person, all characteristics associated to the stage of growing of the SB. However, the influence of environmental conditions related with changes in the market, munificence of the environment and potentiality of association turn into important aspects that favour or not the interaction between SBs and NPOs. In that sense the

7. Implications and Concluding Observations

In a pilot empirical enquiry about the topic I found that social partnerships between SBs and NPOs are not a phenomenon of common occurrence emerging the next question: which are the reasons why some SB overcome a variety of obstacles of different nature and their own preventions and limitations to establish cross sector interactions, whereas others do not do that? And that starting point is also which can help to close the circle the answer could be because they can, they want and they do not feel afraid of establish those partnership. They can, means that have the organizational conditions to do that; the want means that the OM is genuinely interested in build those; and they are not afraid of explore other institutional

environments and other rationalities because they lead their entrepreneurial spirit to the social sphere opening opportunities for inclusive arrangements.

The management that the SBs do about their social issues has a particular set of characteristics as Spence & Perrini state 'the ethics/social responsibility practices and strategies of small and medium enterprises (SMEs) tend to be greater than expected, but are informal and local community-based rather than replicators of large firm approaches' (2009, p 20). When a business organization elects to enter into an interaction with an NPO, its interest additional to meet new markets is on the social (Anderasen, 1969 at Wymer & Samu, 2003), this is valid in SBs as long as the O-M has social interests. This choice implies that an impact-driven social SB wants to plan and implement interactions with the NPO but without necessarily resorting to the creation of a new organization.

This study was focused exclusively on interactions between NPOs and SBs in the food industry. Such boundary specification allows go in deep in the understanding of the motives and conditions under those interactions emerge in this sector. While an ideal research would include a sample of SB belonging to several industries.

A second limitation was related with the similarity of the cases used which not permits the possibility of theoretical contrasting replica. This research is limited in terms of generalizable findings. There exist variations and gradations among the involved organizations, in the intensity of motives and conditions under the interactions can emerge, this has not been studied in this research and can be object of future research.

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9. Appendices

Appendix 1 Guide of questions for the semi-structured interviews developed in the exploratory stage

For the owner-manager of a SB

1. What does your company do?
2. Which types of allies has your organization?
3. Within these allies are some civil society organizations?
4. Which type of transactions performed with them?
5. How do these transactions work?
6. Why seek partnerships with NPOs?
7. Is there a difference with collaborations with other allies?
8. What are those differences?
9. Could you tell me the names of one or more of these allies? (request help in contact with them)

Depending on the answers above are explored and delves into whether the following factors influence the decision to enter social partnerships: Professional Adjustment, Attitude of social awareness, pragmatic legitimacy, Cognitive Legitimacy, frequent contacts, previous experience, cost-benefit evaluation. Alignment, relationships, and shared value: Additionally the influence of the drivers of these collaborations is explored. And also explores whether there are elements of the determinants of IOR relations: necessity, asymmetry, reciprocity, efficiency, stability, legitimacy.

For the NPO

1. What is the purpose of the work of your organization?
2. Which types of allies has your organization?
3. Within these allies some are SBs?
4. Which type of transactions performed with them?

5. How do these transactions work?
6. Why seek collaborations with SBs?
7. Is there a difference with collaborations with large companies?
8. Is there a difference with other allies?
9. Could you tell me the names of some of these allies? (Optional: help me contact them)

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A Study of Design Engineering in the Context of Industrial Innovation

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Abstract

The design process is a critical component in competitive product development and in the industrial innovation process. The work reported in the paper tries to map the different patterns of design engineering practices in firms located within the National Capital Region (NCR) of India representing New Delhi and its surrounding regions in the context of industrial innovation and highlights the role of developing suitable indicators to tap specific design engineering practices and the network linkages. The results indicate that majority of firms possessing a separate design department exhibit a better appreciation of what constitutes a successful innovation and follow it up by formulating design engineering agreements with a networked partner simultaneous to marketing, service or R&D arrangements, and also that firms with more open cooperation with the outside research environments almost always have been more technically successful in designing new products.

Keywords: design engineering; national capital region; India; indicators; industrial innovation.

1. Introduction

The significance of the term design, its definition, its conceptual construct, and also the critical role it plays in innovation policy framework, are increasingly being recognized (Roy and Potter, 1993; Li and Boyle, 2009; Freeman, 1992; Utterback, 1994; Peters, 1995). A very concise definition of design describes it as a creative process by which product innovations and ideas are reduced to an economically viable arrangement, this arrangement being set down on paper as a proper schedule. The concept of economic viability can be expanded to include (i) the economic objective; (ii) a product to meet that objective; (iii) how effectively the product meets the economic objective; (iv) how well the product work; (v) how the product can be made; (vi) hence, how much the product will cost to make; and (vii) what the product will cost to maintain. To these factors one can add the consideration of styling. It follows that design management involves the imitation, organization and control of all these matters to enable effective results to be obtained.

The design process is linked closely with elements of the innovation chain like skill development, organizational development, vendor development, organizational strategy, and information management, and thus establishes its criticality in ensuring success of an innovative effort. Information about user needs helps to clarify the firm's activities. Studies have highlighted that engineering design has a strong relationship with the management practices being adopted

for successful innovation, and plays a significant part in improving the competitiveness of products or firms (Roy and Potter, 1993; Roy, 1994; Roy and Riedel, 1997; Nystrom, 1985). Li and Boyle (2009) presents review of papers published in the Journal of Engineering Design from 2007-2008 probing the perspectives, challenges and recent advances in engineering design. Ellie (2014) has referred to the developments and innovations in virtual reality designing. Considering complex engineering design concepts such as in an aircraft or an aircraft engine, Murat Hakki et al. (2014) talk about the significance of mapping customer needs to engineering characteristics. Gallagher (2014) has stressed upon the importance of integrating design with engineering for effective design and for creating business impact. National governments in many countries launch specific schemes in order to promote innovative activities in the manufacturing sectors like providing fiscal incentives for research and development (R&D) and quality control (Biegelbauer and Borrás, 2003; Borrás, 2003; Malerba and Brusoni, 2007). This is especially true for developing countries like India. Such schemes are often monitored through indicators devised for this purpose. Perhaps this is time that design is also recognised similarly.

The aforementioned discussion clearly brings into focus the imperative and the need to bring design, consciously, within the framework of an innovation policy. A manufacturing firm that seeks to compete effectively in the market needs to formulate and implement innovation-based strategies where design forms an integral part, for instance, in developing new products and in meeting customer satisfaction, but empirical or theoretical research on design engineering practices as indicators of industrial innovation have been few. The work reported in the present paper aims to fill this gap. The study attempts to map the different patterns of design engineering as are being practiced in the firms located within the National Capital Region (NCR) of India, meaning New Delhi and its surrounding areas. After a thorough review of the literature in the next section, methods employed and the data sources have been explained in the following section. The last two sections deal with the results of the analysis and the broad conclusions of the study, respectively.

2. Design in the context of industrial innovation

When a firm moves into new product areas and technologies, and as the firm's competitive context becomes less predictable and more complex, communication between the firm and the world outside will increase. Kalogerakis, Luthje, and Herstatt (2010) report a work in which in-depth interviews were carried out with project leaders of 18 design and engineering consulting

firms located in Germany and Scandinavia in order to probe the links between design innovations and analogies. Other studies have highlighted that engineering design has a strong relationship with the management practices being adopted for successful innovation, and plays a significant part in improving the competitiveness of products, firms or even national economies (Freeman, 1992; Utterback, 1994; Peters, 1995; Feng and Kusiak, 2006). Among one of the most innovative companies, Apple, has been a subject of Hong's (2011) work who has discussed how Apple creates well-designed products. Peter, Nicholas H.M. and John (2014) have probed into the core information categories for engineering design. The issue of outsourcing the engineering design processes by a firm also assumes importance in this context. The limits of design and engineering outsourcing in product development, and the sources of these limits have been a subject of debate (Zirpoli and Becker, 2011). In another piece of work, about 100 research papers and 30 commercial systems/international standards launched have been reviewed in terms of underlying algorithms, mechanisms and system architectures with a view to focus on research being carried out to develop methodologies and technologies to support geographically dispersed teams to organise collaborative design based on the quickly evolving information technologies (Li and Qiu, 2006).

The role of design engineering becomes very critical in cases where the project requires too advanced a technology and/or the transition to manufacturing is complex and requires very large scale-up. This is typically true for technology transfer agreements from the national R&D laboratories to the industries. The products and the processes are found to be most satisfactory in the bench-scale on lab-scale work but in the commercial scale operations, these often fail to live up to the expectations and the innovative efforts might lead to a failure (Roy, 2004, 2006, 2009; Roy and Banerjee, 2007; Roy and Mohapatra, 2002). The issues raised, therefore, focus on identifying appropriate customers and working closely with them (von Hippel, 1986).

Other studies have highlighted the significance of design in the innovation process and the criticality of recognizing the same. By focusing on the environmental impacts of the electronics industry, the perspectives for design for environment have been debated (Boks and Stevels, 2007). In a separate study of 203 new products - both winners and losers that were launched into the market place - three hypothesized factors, all of them directly or indirectly related to design were found to be most significantly related to design new product success (Cooper and Kleinschmidt, 1991). The factors were (i) product advantage (ii) proficiency of predevelopment activities, and (iii) protocol, including product concept, specifications and requirements. Among recent works in the Indian context, a case study was carried out in an Indian manufacturing organization for probing the role of computer aided design and engineering as enablers of agile

manufacturing (Vinodh and Kuttalingam, 2011). In the same vein, engineering firms in Thailand have been probed to propose a decision support methodology for the development and application of product eco-design, with special reference to their use in these firms (Boonkanit and Kengpol, 2010). Gagnon, Leduc and Savard (2012) refer to the concept of a sustainable design process.

Information about the users' needs helps to clarify the firm's activity. A firm that has achieved a thorough understanding of the needs of the buyer can use the knowledge to guide innovative effort. A firm that faces a technology adoption decision engage in an extension effort reduce uncertainty associated with that decision (McCardle, 1985), and information about the buyer is an important part of this exercise. In situations where the clarity of innovation objectives is higher, the firm is expected to be more willing to engage in innovation. The information-seeking networks of marketing managers are closely tied to sources that clarify the customer's needs. When a firm moves into new product areas and technologies, and as the firm's competitive context becomes less predictable and more complex, communications between the firm and the world outside will increase (Brown and Utterback, 1985).

In one of the earlier studies, it was observed that one of the most important factors affecting the competitiveness of American manufacturing sectors was the long-standing neglect of engineering design (Dixon and Duffey, 1990). The authors asserted the following: (i) in terms of long-range strategy, the factors of cost, quality and time-to-market are design problems more than manufacturing problems; (ii) market loss by US companies was due to design deficiencies more than manufacturing deficiencies; (iii) manufacturing processes themselves are designed processes; (iv) many technical problems commonly associated with manufacturing process were traceable to design problems; and (v) opportunities to surpass foreign competitors were best found in engineering design. Spitas (2011) has reported a work carried out through a questionnaire-based survey of design engineers to evaluate the industry's perception and use of systematic design paradigms.

As already mentioned, a particular new product failure might act as the seed for the germination of successful redesigned product. The design process is an important stage in new product development. Based on graph theory and the weighting concept, a quantified design structure matrix (a systematic planning method of optimizing design priorities and product architecture for managing product variety from an informational structure perspective) have been presented by Luh, Ko and Ma (2011). In another study, the relationships between different retail channel

structures and channel strategies (for instance, an exclusive channel strategy) and the engineering design of a new product, conditional on consumer preference distributions and competitor product attributes, have been examined (Williams, Kannan and Azarm, 2011). Even other researchers have emphasized that, by and large, designs are modifications from previous products and lessons learned from earlier designs can be beneficial when developing new products (Keller, Eckert and Clarkson, 2009). Based on the example of a new generation of diesel engine design, the authors have shown how the ability to predict change propagation can guide designers through conceptual design allowing them to analyse design alternatives and foresee potential problems arising from the product architecture.

3. Method/Data

For the study, a stratified sample out of a population of industrial concerns operating within the National Capital Region (NCR) of India has been considered. Data were collected from 53 firms operating within the NCR of varying annual turnover, size and belonging to automobiles, engineering, chemicals/pharmaceuticals/textiles, and electrical/electronics sectors. A questionnaire, formulated on our preliminary understanding of the innovation process, was later modified with inputs from a pilot survey to be used in the field investigations reported in the paper. The responses were subjected to detailed analysis in terms of dimensions like design objectives, sources of information, network partners in the design processes, etc.

The analysis has been carried out in various stages to bring out the critical importance of design engineering in industrial innovation, and the factors related to the success of innovative efforts. Category 1 (numbering 23) firms refer to those firms that have a separate design department while Category 2 (numbering 30) firms have no separate design department.

4. Results

Table 1 presents the total value of machinery as a percentage of gross turnover of the firms. Set against the importance of establishing and running a separate design engineering department in a firm, it is observed from the Table that this percentage value is 15.58% for firms with a separate design department that is substantially lower as compared to 33.59% for firms without a separate design department. On a closer examination, it is found that this difference is

most conspicuous for small (up to INR 20 million turnover) and very large firms (a turnover of higher than INR 200 million) where 60 INR=1 USD.

Further analysis has been carried out separately for Category 1 and Category 2 firms.

Table 2 presents the extent of database maintenance by different industrial sectors. It is observed from this Table that except for the chemicals and pharmaceutical sector industries, all others maintain engineering databases to a reasonable extent.

TABLE 1. TOTAL VALUE OF MACHINERY AS PERCENTAGE OF GROSS TURNOVER

| Turnover (in million INR) | Category 1 | Category 2 |
|---------------------------|------------|------------|
| Up to 20 | 14.05 | 34.81 |
| 20-99 | 19.26 | 22.16 |
| 100-200 | 16.12 | 37.42 |
| More than 200 | 12.88 | 39.97 |
| Average | 15.58 | 33.59 |

* 60 INR = 1USD

On the contrary, formulation databases are not maintained to any significant extent by any industrial sector. Although all the sectors maintain manufacturing databases, the percentage of firms maintaining such a database is indeed very high for the automobile sector (77.36%).

This sector exhibits a similar response regarding maintenance of inventory databases that otherwise are also maintained by engineering sector industries to a fair extent but not by chemicals/pharmaceuticals and electrical/electronics sector industries. Significantly, marketing databases are not maintained by automobiles and engineering sectors and these are maintained only to a limited extent by the other sectors.

Table 3 presents the design objectives of the firms (first choice objectives). It is found that for firms possessing a design department (category 1 firms), meeting unique demands of the customer is the predominant design objective (79.2%) whereas reliability (13.9%) is also important. For firms without a separate design department (category 2 firms), the predominant first choice design objective is meeting unique customer demands whereas minimum consumption of materials and resources, surpassing the features of competitors' products, ergonomics and ease of operation, optimality, and reliability are also relevant.

Table 4 presents the second choice design objectives. For the first category of firms, ensuring minimum consumption of materials and resources is the most important design objective. Other prominent design objectives for this category include ergonomics and ease of operation (21.0%), optimality (14.2%), and surpassing the features of competitors' products (14.2%). For category 2 firms, the prominent ones include ease of manufacturing, surpassing the features of competitors' products (that is, in fact common to both categories of firms), and minimum consumption of materials and resources but the most significant one is reliability (45%) of the designed product.

Design and industrial innovation: Significance of networks

Table 5 through Table 8 help illustrate the significance of networks in technological innovation. Aspects of design engineering as industrial innovation indicators do not act in isolation but linked with other relevant actors.

Table 5 presents the first choice sources of information for the design function. For firms under category 1, the marketing team is the most important source of information (60.7%) followed by dealers (32.2%). There are the only two prominent sources for this category of firms. For category 2 firms, this distribution is more widespread with marketing team (37.7%), dealers (13.2%), vendors/suppliers (18.8%), service team (13.2%), and joint venture/network partner (13.2%) as important sources of information. Table 6 presents the second choice sources of information for the design function. Regarding this second choice, the important ones both for category 1 and 2 firms include the marketing team, the dealers, market surveys and the service team. The only additional sources of information of category 2 firms are the joint venture/network partners. Focusing on the integration of marketing and engineering, Luo (2011, p. 129) writes, 'When designing a line of consumer durable products, firms need to account for not only the interrelationships between consumer preferences and engineering feasibility/restrictions in the design of each product but also the revenue and cost interactions across the products in the product line. Furthermore, to forecast the revenue from a product line accurately, it is critical for firms to account for the strategic reactions from competing manufacturers and the retailer when the new product line enters the market'.

Table 7 displays what other agreements are simultaneous to a designing agreement or arrangement among firms and their network partners. The findings re-emphasize of a network approach for successful industrial innovation. For firms with a separate design department (category 1), the design agreements are often simultaneous to a marketing arrangement (36.4%), servicing/training arrangement (36.4%), R&D arrangement (42.2%), and design

engineering arrangement (42.2%). For category 2 firms, all these arrangements (except marketing arrangement) are at times entered into but much less frequently (15%).

Illustrating this network approach further, Table 8 points out that among all the network partners of a firm, except for joint venture partner/technical collaborators, all others take part in the design of the prototypes for category 1 firms. For such firms, the in-house design departments are most of the time doing this job (75.0%), though there are other categories too like the business associates/partners (25.0%), the engineering consultants (25.0%), R&D or software consultants (16.6%), and even outsiders (32.3%). For category 2 firms as well, the prototypes are mostly designed in-house (38.1%) but this percentage is much lower than that for firms which do possess a separate design department. Others who design the prototypes include the joint venture partners/technological collaborators (19.0%), and outsiders (19.0%).

TABLE 2. DATABASE MAINTENANCE

| Firm type | Percentage of firms (Engineering) | Percentage of firms (Formulation) | Percentage of firms (Manufacturing) | Percentage of firms (Inventory) | Percentage of firms (marketing) |
|-------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| Automobiles | 66.03 | 22.64 | 77.36 | 77.36 | 33.96 |
| Engineering | 54.71 | 27.36 | 54.71 | 45.28 | 27.36 |
| Chemicals/pharmaceuticals /textiles | 28.30 | 14.16 | 42.54 | 28.30 | 42.54 |
| Electrical/electronics | 66.03 | 0.0 | 55.56 | 22.64 | 44.54 |

TABLE 3. DESIGN OBJECTIVES (FIRST CHOICE)

| Firm Category | Meeting unique customer demands | Minimum consumption of materials/ Resources | Surpass the features of competitors' products | Ease of manufacture | Ergonomics and ease of operation. | Optimality | Reliability |
|---------------|---------------------------------|---|---|---------------------|-----------------------------------|------------|-------------|
| Cat.1 | 79.2 | 0 | 0 | 0 | 6.9 | 0 | 13.9 |
| Cat. 2 | 47 | 13 | 13 | 0 | 13 | 6.5 | 6.5 |

TABLE 4. DESIGN OBJECTIVES (SECOND CHOICE)

| Firm Category | Meeting unique customer demands | Minimum consumption of materials/ Resources | Surpass the features of competitors' products | Ease of manufacture | Ergonomics and ease of operation. | Optimality | Reliability |
|---------------|---------------------------------|---|---|---------------------|-----------------------------------|------------|-------------|
| Cat.1 | 7.4 | 28.5 | 14.2 | 7.4 | 21.0 | 14.2 | 7.4 |
| Cat. 2 | 0 | 11 | 22 | 22 | 0 | 0 | 45 |

TABLE 5. SOURCES OF INFORMATION (FIRST CHOICE)

| Firm Category | Mkt. Team | Dealers | Mkt. survey | Vendors | Service team | Joint venture/network partner |
|---------------|-----------|---------|-------------|---------|--------------|-------------------------------|
| Category 1 | 60.7 | 32.2 | 7.1 | 0 | 0 | 0 |
| Category 2 | 37.7 | 13.2 | 5.*7 | 18. 8 | 13.2 | 13.2 |

TABLE 6. SOURCES OF INFORMATION (SECOND CHOICE)

| Firm Category | Mkt. Team | Dealers | Mkt. survey | Vendors | Service team | Joint venture/network partner |
|---------------|-----------|---------|-------------|---------|--------------|-------------------------------|
| Category 1 | 30.6 | 23.8 | 14.3 | 9.5 | 14.3 | 9.5 |
| Category 2 | 13.6 | 27.3 | 13.6 | 9. 1 | 22.7 | 13.6 |

TABLE 7. WHETHER DESIGNING AGREEMENT/ARRANGEMENT WITH A NETWORKED PARTNER IS SIMULTANEOUS TO OTHER PARALLEL AGREEMENTS

| Firm Category | Marketing arrangement | Service/training arrangement | R&D arrangement | Design engineering arrangement |
|---------------|-----------------------|------------------------------|-----------------|--------------------------------|
| Category 1 | 36.4 | 36.4 | 42.2 | 42.2 |
| Category 2 | 5. 0 | 15. 0 | 15. 0 | 15. 0 |

TABLE 8. WHO GENERALLY PROVIDES THE SPECIFICATIONS AND ENGINEERS THE PROTOTYPES

| Firm Category | Joint venture partner/ technical collaborators | Own design team/ other in-house team | Business associate/ Partner | Engineering consultant | R&D consultant | Software consultant | Outsider |
|---------------|--|--------------------------------------|-----------------------------|------------------------|----------------|---------------------|----------|
| Cat.1 | 8.3 | 75 | 25 | 25 | 16.6 | 16.6 | 32.3 |
| Cat. 2 | 19 | 38.1 | 0.0 | 4.8 | 4.8 | 0.0 | 19 |

5. Discussion and conclusions

The study thus highlights the critical aspects of the design process as indicators of industrial innovation. These results can be related to some other studies on different aspects of the design process. Reference could be made to the results of a study conducted in a medium-sized aerospace company according to which the percentage of time spent by engineers in different activities had a high component of documentation (28.5%), solving thinking (28.0%), support and consulting (17.1%), and information gathering (13.7%) (Luh, Ko and Ma, 2011). In yet another study, it was shown that competitiveness of a manufactured product can be improved by (i) good product design; (ii) product innovation, and (iii) production process improvements (Williams, Kannan and Azarm, 2011). Their study results have also shown that product design could affect both price competition through design for economic manufacture and low life-cycle costs, and non-price competition, either through the technical design of the product itself to improve performance, appearance, quality, etc., or by taking into account associated service-related non-price factors.

The results of our study, similarly, are in line with the findings of another empirical study carried out that has shown that two main strategic dimensions are related to success in technically designing new products (Keller, Eckert and Clarkson, 2009). The first is the R&D orientation of the firm and the second is the technology use. The data shows that regardless of industry, firms with more open cooperation with the outside research environment, that is more external R&D strategies, almost always have been more technically successful in designing new products. Network positioning, gaining access to external information and assistance by having wide and flexible contacts with the external environment was, therefore, one of the most strategic variables in their analysis. The results of our study corroborate the above and establish the

significance of the network approach in formulating a design engineering policy for a firm that promotes industrial innovation.

The results of the study indicate that design engineering plays a critical role in fostering innovations in industrial firms. It highlights the role of developing suitable indicators to tap specific design engineering practices, the network linkages, and what all factors need to be looked into while initiating policy measures to promote industrial innovation in the manufacturing sectors. It has been observed, for instance, that majority of firms possessing a separate design department (DD) exhibit a better appreciation of what constitutes a successful innovation and follow it up by formulating design engineering agreements with a networked partner simultaneous to marketing, service or R&D arrangements. The results have implications for formulating policies that seek to promote industrial innovation and the incentive schemes that go along with it. Emphasizing this network approach to design, Phiiainen, Kolfshoten and Lukosch (2012) have focused on an improved understanding of collaborative design (also the focus of attention of Crabtree, Fox and Baid, 1997) and the specific management problems associated with it. Emphasizing the need for creating collaborative platforms for sharing knowledge in engineering design, Gendron *et al.* (2012) have probed the issue of defining adequate indicators of such activities. Industrial innovation strategies in force at the national or local levels have largely overlooked the importance of design engineering in fostering industrial innovation and the process intricacies inherent in it. The present study aims to do just that. There is, therefore, a need for a more extensive empirical research on a larger sample size and spread over a larger geographical spread to further consolidate the insights gained from the present study.

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Entrepreneurship profile in Business Administration Students from Universidad Pontificia Bolivariana Bucaramanga. Results

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Abstract

The Research Network in Administration from Colombian East - RIACO, jointly developed the project "Entrepreneur Profiles of Business Administration students assigned to the Colombian Association of Faculties of Management - ASCOLFA East Chapter, involving 10 universities. This article describes the results of the entrepreneurial profile obtained from a sample of 178 cases that belong to a population of 223 active students of the Faculty of Business Administration from Universidad Pontificia Bolivariana in Bucaramanga; a standard instrument with 78 questions designed to all Faculties of Directors who participated in this research, the thirteen variables studied are related to individual, social, and economic factors. In the conclusions, highlighting that students are oriented to face challenges and take risks profile, but are afraid of failure; can easily adapt to new situations and are considered able to convince others about the viability of their ideas; over 40% have close relatives who created his own company, however, 71 % of students states that have not participating in developing a business idea, and of these 48 % said that opportunities have been presented but not have done anything. Finally, what is intended with the results obtained from all the research developed by RIACO exercise, is to contribute to the development of policies and strategies to strengthen the entrepreneurial spirit of the new generations and enable the economic development of the region, projecting the business impact of future graduates of the faculties under study.

1. Introduction

Promote entrepreneurship throughout the educational system has become a national policy, which aims to promote growth and economic development of Colombia, country in which there is a high rate of extreme poverty. Hence the importance of the 1014 Act of 2006, which seeks to promote youth entrepreneurial culture through education programs, in which to acquire the skills needed for the creation of new enterprises, that generate jobs and improve the quality of life of Colombians.

Worldwide, the Global Entrepreneurship Monitor (GEM) project, academic consortium dedicated to research in entrepreneurship was created in 1997, involving 59 countries, including Colombia which joined in 2006. This process makes part of the universities, which have been developing their apostolate through the faculties of management and entrepreneurship units, who have



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made an important advance to academic and scientific level to strengthen the training and the entrepreneurial profile of the young university students.

Among the goals set by the GEM, is specified to identify the determining factors in the creation of new enterprises, policies to encourage the creation of enterprises and the role of entrepreneurial activity in the national economy. In line with the objectives of the GEM and the law 1014 of 2006 of fostering a culture of entrepreneurship, this research aims at identifying the entrepreneurial profile of young University's programs of management of the universities of East chapter of ASCOLFA and the role that universities in entrepreneurial skills training.

In this regard, the Bolivarian Pontifical University of Bucaramanga has been working since 2005 through the unit of entrepreneurship in the continuous promotion of entrepreneurial competencies in all the actors that are part of your community, this unit is a support unit of the school of Sciences strategic, formed by the College of business administration and the College of international business administration whose fundamental purpose is to promote, through academic processes and with the permanent participation of the University and business community, creativity, entrepreneurship, and entrepreneurship, based on excellence with human consciousness, being transversal to all faculties belonging to the University.

The program of management of companies within its curriculum has business creation seminar course, through which it seeks to link the knowledge acquired during the upper formation, with an entrepreneurial spirit that allows them, based on the latest techniques and trends, inherent in entrepreneurship skills develop, and transform an idea into an effective opportunity of enterprise.

Also, and transverse to all programs of the Universidad Pontificia Bolivariana of Bucaramanga, it teaches entrepreneurship, which highlights the importance of creating company, discover and/or strengthen the entrepreneurial vocation, and find opportunities to gain access to seed capital through existing calls, among other options.

It is as well as research on the entrepreneurial profile of students of the faculties of administration of the University Pontificia Bolivariana Bucaramanga, seeks to contribute to the generation of policies and strategies to strengthen the entrepreneurial spirit and the generation of projects that positively impact at the Academy and in the different sectors production of the region and the country.

For achieving compliance with the proposed objective, the development of this research is to support the network of researchers of the East chapter of RIACO and the network of units of

entrepreneurship from the East, all of them under the guarantee of the Association Colombian of powers of Administration ASCOLFA.

The population subject of study, are students belonging to the academic program of management of the Universidad Pontificia Bolivariana, and the results will lead to spaces for academic discussion for the generation of strategies that allow you to continue with the strengthening of entrepreneurial skills in young people.

2. Literature review

Although the theme of entrepreneurship has been widely debated, and worked by authors ranging from Schumpeter to Varela, in recent years has created the popular imagination that defines the entrepreneurial person as that which is capable of identifying the opportunity and organizing resources to work. It is also dynamic, capable of risk-taking, creative and directed growth, highlighting its ability to make specific decisions to create company. According to the pure definition, is that the word entrepreneur comes from the French "entrepreneur", meaning by pioneer. That is why it has been useful to specify the activity of the people who risk, as the conquistadors of remote lands like Carlo Magno to revolutionaries such as Steve Jobs.

It can be said that these people have a differentiating feature, that makes them the benchmark for generations.

The concept of entrepreneur is not then something unknown, Schumpeter (1935) Harvard professor, was the first to use the term to refer to those individuals whose activities generate instability in the markets. It explains that the entrepreneur is a person who has the "ability to create opportunities where others see chaos, confusion and contradiction." Similarly, he explained that:

"The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an investment, or more commonly, a technical possibility unproven. Take over these new things is difficult and constitutes a distinct first economic function, because they are outside of the routine activities that everyone understands, and secondly, because the environment resists in many ways from a simple refusal to finance or buy a new idea, to physical attack man trying to produce. "

From this derives the constant search for the profile of the entrepreneur. McClelland (1961) notes that the entrepreneur is the one subject that "has attributes such as: originality and

innovation; moderate risk aversion; accept its responsibilities; knowledge of the results of their actions; planning based on the long term. "For the author, the entrepreneur has a high achievement motivation, a key factor in their entrepreneurship. From his investigation determined that the 10 elements for success are:

- Identifying opportunities and initiative
- Persistence
- Implementation of commitments
- Demand for quality and efficiency.
- Taking calculated risks.
- Setting targets.
- Information search.
- Planning and monitoring production.
- Persuasion and support networks.
- Independence and self-confidence.

He said that as these factors existed, "people could learn new behaviors, especially those related to personal motivation, and overcoming their own standards.

Drucker (1986) states that "the entrepreneur searches for change, responds to it and exploits it as an opportunity. Innovation is a specific tool for the entrepreneur because they exploit change as an opportunity for a different business or different services. "

With the passage of the 1014 law in 2006, the subject of Entrepreneurship has become very important in the academic and business world, so that according to this text, the Entrepreneurship is defined: "One way to think and act oriented towards the creation of wealth. It is a way of thinking, reasoning and acting focused on the opportunities, posed with a global vision and carried out by a balanced leadership and management of a calculated risk, the result is the creation of value that benefits the company, the economy and society (Ley 1014 2006).

2.1 DIMENSIONS AND ATTRIBUTES OF THE ENTREPRENEUR

In the study of the dimensions of entrepreneurs Lillo & Lajara (1999) and cited by Fuentes & Sánchez (2010) point between the determinants for entrepreneurship, the entrepreneur who has studied based on three dimensions: their demographic profile, their psychological profile and sociological profile. Therefore, the entrepreneur has been approached from various social sciences and with different approaches.

Davidsson (1989) & Boydston (2000) also agree "entrepreneurs associate attributes such as need for achievement, self-confidence and optimism, creativity and autonomy." Lazear (2003) & Fayolle (2000) (cited by Fuentes & Sánchez, 2010) consider also, that demographic traits are important for strategic decision making, as well as training and experience.

2.1.1 Profile Of Gender In The Creation Of Companies

Gender factors play a major role in the creation of enterprises and the profile of the entrepreneur, this is how Fuentes & Sánchez (2010) argue that there is empirical evidence that confirms the fact that women are less entrepreneurs than men. Moreover, they assert that the enthusiasm for the project and encouragement to face new challenges have a direct influence on the greater intention of the male students in setting up businesses in the future. Continuing this argument, Aponte (2002) said that "the reasons may be that women seem to be more pessimistic perception of opportunities, and show a greater fear of failure. Moreover, women seem less willing to take risks and their perception of greater responsibility in the home care leads them to be less willing to devote time to his own business. Given this thesis Brenner (1982) believes that "men are more likely to entrepreneurship because their main motivation is achievement-oriented and valued differently the job".

2.1.2 Training for Entrepreneurship

Entrepreneurship programs in educational institutions have shown different trends in Colombia, according to the 1014 law, states in Article 2:

Linking the education system and national productive system through training in basic skills, work skills, citizenship skills and entrepreneurial skills through a cross-Chair of Entrepreneurship; understood as such, the training developed in all programs of an educational institution in pre-school education, basic education, basic primary education, lower secondary education, and secondary education in order to develop a culture of entrepreneurship.

In this sense, Bechard & Toulouse (1998) and Gorman, Hanlon & King (1997) cited by Moriano León, Palací Descals & Morales Dominguez (2006) inferred that "the entrepreneurial behavior can be stimulated through formal programs education"

2.1.3 Profile of Students of Directors

Since the main objective of the research is to determine the entrepreneurial profile of students in Business Administration and International Business Administration so that you can find fundamental characteristics, finding relevant literature, taking into account the branch of knowledge, becomes of utmost importance.

Thus it is that the research conducted by the authors Román, Franco & Gordillo (2013), makes an analysis of the labor market participation of the directors and accountants. As The authors were then able to determine the recruitment of these professionals, that "Employers agree that the ideal hire directors and / or Accountants age is between 25 and 30 years, followed by a quarter between pointing 22 and 25; a revealing fact is that after 35 years it is difficult to enter the labor market"

Besides skills, the Directors and Accountants must possess characteristics that allow them to be recruited, among them the study shows that: "The important characteristics required Administrators and Accountants, both are similar requirements, where stand: personal image, counting references and address age-related limitations".

2.2 FACTORS AFFECTING THE DECISION TO BE ENTREPRENEUR

When determining, in the profile of entrepreneurs, what are the factors to create company Varela & Jiménez (2002) define the factors that strongly influence the decision to become an entrepreneur, into three groups: individual factors, social factors and economic factors.

The individual factors are related to career selection and dependent personality traits (need for control, need for achievement, ability to take risks, among others), and dreams or visions that each individual has about his future.

Social factors are closely related to the environment from which the individual. And finally, economic factors influence when undertaking since the lack of employment opportunities or growing economies generate significant impacts in this regard.

The European Commission states that: "The main difficulty for entrepreneurs to start their own business is achieving the necessary financial resources for implementation." (Comisión Europea, 2002).

Moreover Pihkala & Vesalainen (2000) cited by Moriano León, Palací Descals & Morales Dominguez (2006) describe the results of a Finnish study, the main inhibitory barriers that must be overcome entrepreneurs are the following:

- Change in lifestyle of working on their own,
- Financial risks that refers to the fear of losing private property, incur debts and economic uncertainty,
- Lack of skills and abilities to undertake
- Social risk, fear of ridicule if the business idea is bad and being stigmatized as a loser or failure.
- Lack of commitment to career development through self-employment "

We conclude in this first review that entrepreneurs are a combination of personal, family and environmental attributes that develop a range of skills to display an entrepreneurial profile.

However, it is also the discussion of educational issues. It is necessary to make a further review of the factors in this respect that developed over time, can be decisive at the time of making the decision to be an entrepreneur. It is also important to note that many factors associated with training are not only in the classroom but are also particularly acquired in the family and social environment.

3. Methodology

The study has a quantitative approach regarding the treatment of the data is statistical and tested using SPSS v22 software. The total population of the study are 242 students in first through eighth semester of the Business Administration program of the Universidad Pontificia Bolivariana, Bucaramanga, and a survey of 177 students was achieved with the general characteristics shown in Table 1.

Table 1. Study Datasheet

| | |
|--|---|
| Population | 242 undergraduate students of Faculty of Business Administration - UPB Bucaramanga. |
| Sample | 177 students |
| Instruments | 13 blocks - 78 questions with 3 response options 1 Never 2 Often 3 Always. |
| Collection of information | Questionnaire applied physicist during the second half of 2013. |
| Variables identified | Initiative, ability to take risks, ability to make decisions, learning ability, confidence in myself and vision of company. |
| Data processing | SPSS v 22 - Descriptive analysis |
| General characteristics of the sample | |
| Gender | 62.7% Male 37.3% Female |
| Semester | 8.5% (1) – 9% (2) – 9% (3) - 14.1% (4) – 11.9% (5) – 15.8% (6) – 11.9% (7) – 19.2% (8) |
| Working | 28.81% working - el 71.19% Not working |

4. Results

Descriptive analysis consider the variables Initiative, ability to take risks, ability to make decisions, learning ability, confidence in myself and vision of company; taking the mean (\bar{x}); then the results are presented:

- Initiative: Students feel they have clear goals and purposes (2.78), and consider themselves responsible for the success or failure of their actions. (2.46).
- Strengths given the weakness: Students see failures as opportunities to improve your life (2.54) and show that the barriers encourage them to move on (2.51); however, is not consistent low valuation assigned to handle difficult tasks (1.72).

- Ability to take risks: There is evidence that the variable performance of risky projects (1.80) and the variable projects only run when there is a high probability of success of the (1.98) had a very low valuation, and risk identification variable to start got an activity highly valued (2.46).
- Ability to make decisions: Students believe they are aware of the pros and cons when making decisions (2.68) and take decisions (2.67). It also asserts that seek solutions to problems immediately (2.29), are practical and fast (2.48), and entrepreneurs (2.49),
- Learning ability: Students generally consider new ideas attract (2.70) and relate what they learn with the background (2.71). They are restless people (2.56) and take advantage of opportunities to learn (2.86).
- Confidence in myself: Students believe they are capable of taking on challenges (2.68), have confidence for any activity (2.59) and are considered able to convince about the viability of their projects (2.30).
- Vision of company: Please note that students have not created company (1.43), want to be employers (2.79) and express their intention to create business in the next three years (2.48).

5. Implications and considerations

The entrepreneurial profile of students of the Faculty of Business Administration highlights some important features are its high rating as the initiative variable indicating that people are proactive, initiate activity is self-employed and are able to take their new ideas. Likewise, they are able to identify opportunities, learn from mistakes. However, state that the difficult tasks that require special care and attention discourage them.

On skills to take risks, it is notable that like a challenge but when they believe they have a high probability of success, otherwise not interested. Consider having the ability to make decisions and assume being aware of the advantages and disadvantages. Are willing to learn new things, but consider that not organize and plan your time well. They think it has a high level of self-confidence and so convincing before others. Finally, they want to be entrepreneurs and do not

get dependent employees. It is recommended to work on the ability to take tasks especially when they have a high degree of difficulty and therefore require commitment, effort and discipline. It is also recommended to take risks when working with a high degree of uncertainty and frustration tolerance.

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**Strategies for Entrepreneurship and Market Innovation by KIBS in
Developing Economies: Inclusive agenda for opportunity creation**

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Objectives: This paper aims to investigate the strategies for entrepreneurship and market innovation by Knowledge-Intensive Business Services (KIBS) in developing economies as an inclusive agenda for opportunity creation.

Theoretical Background: KIBS are specialized services that involve economic activities which are intended to result in the creation, accumulation or dissemination of knowledge. KIBS emergence has turned into a powerful sector with rising importance in many economies since the 1980s. It currently represents over 60% of the Gross National Income (GNI) in most developed countries, though lesser percentage in developing economies but a dynamic factor in manufacturing and human resources industries performance in many countries. This study is based on Schumpeter's entrepreneurship theory of innovation which considers the entrepreneurial innovation as new combinations. Although, Schumpeter referred to opening of new market as a type of innovation and its importance but limited attention and emphasis was given to it in comparison to product and process innovations. A great percentage of innovation in developing countries is attributable to imitation of innovation from developed economies which make market pioneering the main strategy employed for market innovation in most developing economies. This study is necessary to provide empirical findings and literature to support activities going on and as inclusive agenda for opportunity creation in the developing economies

Approach/Methods: A framework is built in which KIBS small and medium sized enterprises (SMEs) employed different strategies like radical innovation or new market pioneering. Knowledge for market innovation can be strategically obtained from two discrete knowledge institutional sources. These sources are the formal institutions such as Universities, research institute, Research and Development, collaborations with firms and so on and the informal institutional sources like the suppliers, clients, network of friends, families and others. The quantitative approach was employed for data collection from 510 SMEs in KIBS sector of Lagos, Nigeria at firm level.

Results/Insights: The results suggest that the informal sources seem more strategic in supporting the needs of KIBS SMEs for market innovation. They serve as the major source of acquiring knowledge for opening of new market. Thus, the informal system should be given recognition as a significant part of the institutional system that has impact on innovation in developing economies.

Implications: The findings of this study could assist in formulating policy agendas for promoting market innovation, based on the use of knowledge acquired from the formal and informal sources by KIBS SMEs in developing economies. Moreover, practitioners should explore the valuable insight to identify and exploit the strategies of the formal and informal knowledge institutions for new market innovation inside and outside the developing economies. The scope of the study is specifically designed for KIBS sectors; therefore the results may not be completely viable for all service sectors. Further research may examine if the results can be generalised to other service sectors. This paper contributes to the growing body of literature generally in entrepreneurship (new market innovation perspective) and entrepreneurship in developing economies (institutional perspective), by providing a better understanding on the strategies of the formal and informal institutional sources of knowledge that are related with opening of new markets by KIBS SMEs in developing economies.

Keywords: Institutions, new market innovation, developing economies, SMEs, Knowledge intensive business services (KIBS).

1. Introduction

Scholars have referred to opening of new market as a type of innovation and its importance but limited attention and emphasis is being given to it in comparison to product and process innovations (Liebermann and Montgomery, 1988). Moreover, the few available studies are mainly on USA, UK and Europe until recently when some researchers began to give attention to developing economies (Egbetokun, 2011; Fatoki and Smit, 2012). Firms attract resources for innovations as entrepreneurial activity and growth strategy but it was discovered that the existing research on new market innovation (NMI) (Lieberman and Montgomery, 1988; Feeser and Willard, 1990; Mitchell and Skrzypacz, 2011) are on large firms with few on SMEs which are conducted in developed economies context. There is none on knowledge-based industries and strategies employed for NMI in developing economies (Adebusuyi, 1997; Lingelbach, 2007) including Nigeria. However, the present global economic crisis has diverted more researchers' interest to developing economies especially with the prospects and dynamism arising in countries like China, India (Smith, 2002) Nigeria and so on.

Researchers (Schumpeter, 1996; Acs, 2002) argue that entrepreneurship and innovation is the primary reason for the existence of knowledge-based firms. The idea of Knowledge-Intensive Based Service (KIBS) firms originated from Miles et al. (1995) to describe private firms that generate, collect, analyse and distribute knowledge with the purpose of providing customised

proficient service solutions to issues that client firms are unable and unwilling to develop (Bettencourt et al., 2002). KIBS emerged has a powerful sector whose importance is rising in many economies since the 1980s (EFILWC, 2006). It currently represents over 60% of the Gross National Income (GNI) in most developed countries with lesser percentage in developing economies but a dynamic factor in manufacturing and human resources industries performance in many countries (Hazdra, 2010). However, the recent report about knowledge economy stated that more than 20% of UK GDP is KIBS and comfortably the largest singularly growing sector of UK economy (Sissons, 2011). This development still continues (Kuratko, 2009) and is not restricted to developed economies as it is also seen in developing economies. For instance KIBS contributes 40% to GDP in Uganda; 50% in Zambia; over 60% in Korea and Brazil. In Nigeria, it contributes about 30% to GDP (ILEAP, 2009). Its entrepreneurial nature attracts researchers' attention.

Therefore, the starting point of this study is Schumpeter's theory of entrepreneurship with a focus on the 'innovation' concept (Schumpeter, 1996) in KIBS firms. Schumpeter, nevertheless, considers the entrepreneurial innovation as new combinations that includes introduction of a new product, a new process, opening of new market, development of new sources of supply of raw materials, and a new form of organization as the propeller of the capitalist system (Schumpeter, 1934).

Entrepreneurship and innovation are inseparable concepts, though Shane and Venkataraman (2000) attempted describing entrepreneurship basically as the conversion of opportunity that is discovered and exploited to a commercial process while the exploitation of new ideas for business purpose is innovation (Shane and Venkataraman, 2000). Schumpeter (1996) perceived a healthy economy as one that 'experiences continual disruption by technological innovation, producing 50 year cycles of economic activity'(Burns, 2001). He further argued that each of the cycles was distinctive and the upswing in a cycle began at new innovations arrival that resulted into clusters of industries. Thus the recent crave for a knowledge-based economy in developing economies becomes an opportunity being exploited by the KIBS industries in Nigeria.

The 'entrepreneur' is the main actor in the innovation process, who, as Schumpeter disputed, initiates changes and generates new opportunities for commercial exploitation(Shane and Venkataraman, 2000). Even if markets are in equilibrium, the human condition of enterprise, the enticement for profit making combined with the quest for more knowledge and advance

technology, will ultimately destroy the equilibrium. This claim is the most referred to as Schumpeter's "Creative Destruction" (Acs, 2002 p.12) which becomes the origin of entrepreneurship and innovation. Life is injected through the creative destruction of the circular flow, consequently creating a state of disequilibrium in the economy. This state of disequilibrium will create opportunity for entrepreneurs to exploit in the marketplace thereby restoring equilibrium for a time, and another creative destruction will occur and round and round the cycle goes.

However, all innovation generally depends on the possibility of a market where it can be converted to economic rent whether in an existing market or by creating a market where none existed (Mitra, 2012). Schumpeter did not also explore the strategies for market innovation and the source of knowledge for market innovation (Akoni, 2011). This made knowledge and theories about market innovation to be lacking in the literature (Tidd and Bessant, 2009).

We appeal in this paper to the institutional theory as it emerged in the literature of entrepreneurship (e.g. Hoskisson et al., 2000; Ahlstrom and Bruton, 2002; Peng et al., 2008) to provide a single theoretically consistent framework that answers our questions. It can be assumed that for any entrepreneurial activity, the institutions within the context have a great role to play in the act of 'creative destruction' especially in terms of strategies to implement innovation. Despite the setting of the formal and informal institution of the developing economies (Acs and Virgill, 2009) we know little about the institution that promotes innovative strategies since the two institutions run in tandem. However, Nakamura (2000) emphasises the importance of enabling institutions in making innovative activities thrive especially in the marketplace.

The main strategies for innovation by opening of new market within or outside the country are either a radical innovation (RI) (Christenson, 1997) or a new market pioneering (NMP) (Liebermann, 1998). They are predictor of survival in new market innovation (NMI) which is basically driven by geographical expansion into market (Klepper and Thompson (2006); Sutton (1998). This is crucial in explaining different empirical facts about firm growth strategy. KIBS firms' usually employ any of these two strategies to open a new market.

The market is the bridge that connects the societal needs and economic pattern of response to innovation (Christensen, 1997). Whilst Wong et al., (2005) considered market innovation as the introduction of any new economic activities to the market place by an established firm entering into a new or existing market or industry imitatively or innovatively. Innovation is not just about

servicing mature and established markets but essentially an opening of new market opportunities (Tidd and Bessant, 2009). Thus, Shane and Venkataraman (2000) claimed that entrepreneurship's attention to wealth creation centres on discovering new and emerging opportunities in the marketplace while Kuratko and Hodgetts (2008) supported the notion that innovation comes from a conscious and purposeful search for new opportunities in different ways to penetrate into new markets. An emphasis therefore is placed on the need of the market for opportunity creation for the KIBS entrepreneurs as well as the clients. The market thus poses to be the end-result for both the buyer and the seller.

Drawing on this argument, the Oslo manual (2005) differentiated new market innovations from other forms by its primary aim to increase the market share or volumes of sales which consequently affects the firm's size and profitability. Firms are motivated by a regular course of finding new profit opportunities. New market innovation is regarded as the main innovative activity that increases sales and profit (Halpern, 2010). The profit opportunities may entail overtaking an existing firm's position on an activity while a times the opportunity might mean pioneering new activities. All these explain Schumpeter's view on innovation by opening of new market. Hence, a main element of innovation in Schumpeterian sense is about 'the gap left in a market by those who currently serve it' (Wickham, 2006; Schumpeter, 1996).

Therefore the main objective of this paper is to investigate the strategies for entrepreneurship and market innovation by Knowledge-Intensive Business Services (KIBS) in developing economies as an inclusive agenda for opportunity creation. A framework is developed to show the strategies for new market innovation. The study is considered at the local dimension of Lagos, Nigeria. The rationale for choosing Lagos is because it has the highest concentration of financial and educational institutions in Nigeria, thereby making it more suitable for addressing the research problem of this study. The prior argument has established that the time is ripe for such a study to investigate the strategies for entrepreneurship and market innovation by KIBS SMEs as an inclusive agenda for opportunity creation in developing economies so that the findings can be generalised to similar cities like Lagos in developing countries. We adopt the quantitative approach for data collection from 510 SMEs in KIBS sector of Lagos, Nigeria at firm level. The result suggests that most KIBS SMEs employed the NMP strategy rather than radical innovation (RI). Furthermore, the informal sources seem more strategic in supporting the needs of KIBS SMEs for market innovation. They serve as the major source of acquiring knowledge for opening of new market. Thus, the informal system should be given recognition as a significant part of the institutional system that has impact on innovation in developing economies. The findings of this study could assist in formulating policy agendas for promoting market innovation,

based on the use of knowledge acquired from the formal and informal sources by KIBS SMEs in developing economies. This paper contributes to the literature on new market innovation (Schumpeter, 1934; Lieberman and Montgomery, 1988; Feeser and Willard, 1990) and institutional perspective of entrepreneurship in developing countries (Baumol, 1993 ; Sautet, 2005; Aidis et al., 2010) by providing a better understanding of the strategies of the formal (FI) and informal institutional (InFI) sources of knowledge that are related to market innovation by KIBS SMEs in developing economies. The paper is organised as follows. In section 2 and 3, we state the research objectives and methodology. Section 4 discusses the research method and findings. In section 5, the discussion and in section 6, implications and conclusions are provided.

2. Research Objectives

The main objective of this paper is to investigate the strategies employed for entrepreneurship and market innovation by KIBS in developing economies as an inclusive agenda for opportunity creation. This objective will be achieved by answering this research question:

- What strategies are employed for KIBS market innovation in developing economies? and
- What strategic sources are mainly used in acquiring knowledge for market innovation in developing economies?

3. Literature Review

New market innovation (NMI)

Market is important in developing economies (Acs and Virgill, 2009) as most of their innovations are mere transfer of innovation from developed countries into another market (Eurostat/OECD, 2005). For instance, in Kenya and Nigeria, “re-pats” (returning emigrants) are discovering new opportunities (entrepreneurial) in their home countries and returning in considerable numbers as social entrepreneurs and entrepreneurs to contribute to telecommunications, financial services and other sectors (Uzowanne, 2011). Thus, the relevance of the strategies for entrepreneurship and NMI in developing economies context.

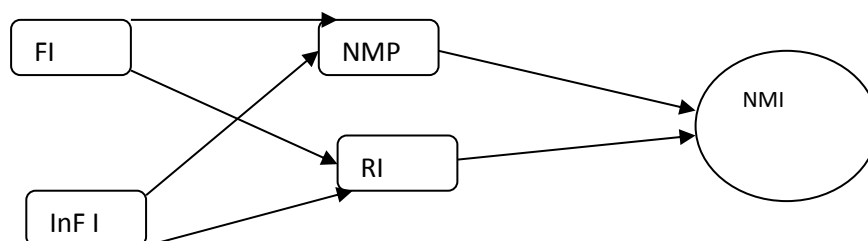
New market innovation is described as an innovation (Klepper and Thompson, 2006) that fosters market creation because it creates opportunities for entrepreneurs to operate (Acs and Virgill, 2009). The Oslo manual (2005) differentiated it from other types of innovation by its main

objective to increase the volumes of sales or market share which consequently affects the firm's size and profitability. It is a unique innovation in its capacity to facilitate expansion into other geographic areas. According to some authors (e.g. Feeser and Willard, 1990; Klepper and Thompson, 2006), it enables SMEs to capture new market share, increase the firm's size and boost profitability (Feeser and Willard, 1990; Klepper and Thompson, 2006). NMI is a significant form of innovation because the commercialization of application takes place in the market for profitability (Mitra, 2012). The actions necessary for such outcomes include strategies like NMP, disruptive innovation and a range of other views which are all directed at understanding and undertaking the process of market innovation.

Market innovation is critical to firm growth, and therefore, firms' should seek for expansion from one place to another by introducing their services to any existing market or new group of users or creates a new market where none existed for growth and profitability thereby satisfying unfulfilled needs of the community to become a knowledge society. KIBS sector has become very notable in this millennium and they use the Small and Medium sized Enterprises (SMEs) as main actors for since SMEs are often perceived as an 'engine of innovation'(Acs, 2006).

A frame work is developed to explain the strategies employed for NMI in developing economies and that KIBS SMEs derived knowledge for NMI from two strategic sources Formal Institution (FI) or Informal Institution (InFi) to use either NMP or Radical Innovation (RI) for the NMI (see figure 1 below).

Figure 1: Framework for Strategies for New Market Innovation



Source: Authors (2014)

New market Pioneering (NMP)

New market pioneering is a strategy for NMI whereby firms enter a market as the first to exploit opportunities in an existing or non-existing market, in a way that thwarts other

firms' attempts to compete in that market (Lieberman and Montgomery, 1988). It is the exploration of the early-entry strategy by a firm as the first to exploit opportunities in an existing or non-existing market to gain the first-mover advantages in order to meet customers' need, increase market share and make positive economic profit (Mitchel and Skrzpacz, 2011). Previous research showed that the first product/service to be introduced in a market receives an unequal amount of attention in the customer's mind (Lieberman and Montgomery, 1988), has the most impact in customers' preference decision (Carpenter and Nakamoto, 1986), and establishes long-term loyalty with early users (Schmalensee, 1982). Moreover, Song et al. (1999) posited that pioneering firms stand to gain many advantages. They are able to capitalize on economies of scale and scope, establish leadership status among customers, capture the best perceptual points or distribution outlets and gain a giant market share. Basically, SMEs may choose to be pioneers because such a strategy can bring profitability by creating a monopoly (barricaded entry) or a clever implementation to make imitation unprofitable for subsequent entries (Caves, 1984). Pioneering firm does not necessarily mean that all about innovation and business practice is rosy. There is the dark side of pioneering; first, it is really costly (Robinson et al. 1994) to engage as a pioneer, late-movers free ride on first-movers investment because imitation costs can be less than innovation (Songs et al., 1999). Innovative and entrepreneurial firms like KIBS SMEs have the capability for NMP with sustainable first-mover advantages.

Radical Innovation

Radical innovation is another strategy for new market innovation but disruptive in nature. It is the commercialization of products/technologies/service/method (OECD, 2005) in such a way that the impact renders existing ones obsolete and non-competitive in the market (Mitra, 2011). It is also a strategic approach on a product/service to fit a market niche in a new or existing un-served market by existing firms in the industry (Holcombe, 1998; Tidd et al., 2005; Drucker, 2009; Scarborough and Heriot, 2004; Christensen, 1997a).

This implies that as consumers use the new product/service they abandon the former and shift over to the new probably because of equal or better value and cheaper price thereby causing disruption in the market and economic system. For example, the market for mini-computers and main frames was disrupted when consumers shifted to personal computers market Christensen,

1997a). However, Baiyere et al. (2011) in their study argued that disruptive innovation strategies should be context-dependent however, KIBS involvement in specialised services in developing economies as against the general service firms makes its impact to be the same as in the developed economies. Radical innovation is often a product of R&D and is often protected by Intellectual property rights (trademarks, plant patent, design patent, copyright law and others) (Maurer et al., 2001). A new product or service gains a foothold in the market only when there is a diffusion of similar products and the gradual evolution of dominant designs or technologies (Rogers, 1995). Market and technological uncertainties may arise due to shifts in technology and changes in customers perceptions or wants leading to 'creative destruction' (Schumpeter, 1934). Beyond any consideration of the advantages and disadvantages of innovativeness is the need to achieve and sustain a competitive position arising out of (Song et. al., 1999) radical innovation.

Formal and Informal Sources of Knowledge for NMI

KIBS SMEs require knowledge in order to employ either the new market pioneering or radical innovation strategy to enter (Svetna and Prodan, 2008) a new market. They need to search for appropriate knowledge strategically irrespective of where it is located (Zacks, 2003) as long as it is for the purpose of NMI. Firms can interact in various ways to access knowledge and mechanisms outside their boundaries in the institutions to enable acquisition, dissemination and production of knowledge (Olavarrieta and Friedmann, 2008; Muller and Doloreux, 2009) for NMI. Institutions are governance mechanisms that regulate the way things are done in an economy. They can foster and also constrain the exploitation of opportunities in such environment. Institutions in the developing economies are often formal and informal in nature (Zenger et al., 2002). This polarisation of institutions in developing economies is strategic in nature as it gives recognition to every positive player in the society. Formal institutions are officially regulated with legal backing while informal institutions are privately operated in accordance to the norm of the people. It is acknowledged (Romijn and Albaladejo, 2002; Svetina and Prodan, 2008) that the more KIBS SMEs access external sources of knowledge the more resources are available for expertise disposal to enter a new market. Consequently, the more they will be able to meet the increased development and speed especially in ICT as it affects KIBS. Moreover, it will afford opportunity to meet the increased need of professionals for the dynamic change in the global KIBS industry and also complement firms' internal resources (Romijn and Albaladejo, 2002) for NMI.

The formal institutions sources include Universities, research institutes, external Research and Development, conferences, workshops and seminars; networking (inter-firm collaborations and alliances); partnership with institutions, business associations (den Hertog, 2000; Muller and Doloreux, 2007) and so on. The informal institutional sources include the information from lead clients, suppliers of equipments and materials, network of friends, families and others, personal contact by questioning and administering questionnaires, interactions at parks, markets, clubs, bus stops and other public places, the Internet and literature (Burt, 1992; Pedersen et al, 2002; Svetina and Prodan, 2008). These players are willing to invest necessary information in the entrepreneur for NMI. These are basically forms of knowledge acquired by trust. All these avenues are available for the KIBS firms to acquire adequate knowledge required for efficient and effective NMP for NMI in developing economies. Hence, I formulate the following hypothesis:

H1: There is a significant relationship between the strategic use of formal and informal sources of knowledge acquisition and RI in KIBS SMEs in developing economies.

Ho: There is no significant relationship between the strategic use of formal and informal sources of knowledge acquisition and RI in KIBS SMEs in developing economies.

H2: There is a significant relationship between the strategic use of formal and informal sources of knowledge acquisition and NMP in KIBS SMEs in developing economies.

Ho: There is no significant relationship between the strategic use of formal and informal sources of knowledge acquisition and NMP in KIBS SMEs in developing economies.

4. Methodology

This study seeks to find the relationship between formal and informal institutions and new market innovation by KIBS SMEs in a developing country. It therefore employed the quantitative research design which is mainly the product of statistical summary and analysis. Lagos was the study area. It has the highest concentration of businesses, industries and higher educational institutions in Nigeria which made it most relevant in addressing the research problem of this study (Uzowanne, 2011). For instance, there is the 'computer village' at Ikeja that is a cluster of all forms of ICT related products, general services and KIBS SMEs (Uzonwanne, 2011). It is a renowned market patronized nationally and internationally (Uzonwanne, 2011) by Europeans,

Asians and Africans. A survey was carried out with a self-administered questionnaire. A ten-point likert-scale with close-ended questions was used except for the demographic section. Each item has ten responses in which respondents have to indicate: (0) Not Applicable, (1-10) 'Not Important at all' to 'Very Important'. The highest is ten while the lowest is zero points respectively. Data collection was done in 2012.

Sampling

The population frame for the study is all registered KIBS SMEs in Lagos constructed from Nigerian Yellow Pages (2011) and Nigeria Search Engine (2011) which are the commonly used business directories in Nigeria. The population frame consisted of 1742 KIBS SMEs with criteria that 1) The firms must be KIBS SMEs (Miles et al., 1995; SIC, 2007) with number of employees less than 250 (European Commission, 2002) to ensure they are not corporate organizations. They must be registered and located in Lagos (Bryman and Teevan, 2005; Creswell, 2009), and be young firms of 20 years and below (Lindholm, 1999; Rickne and Jacobsson, 1999; Sæmundsson, 2003) to guarantee being KIBS SMEs with reasonably high innovative behaviours (Audretsch, 1998; Novalis Research, 2004).

A random sampling method was adopted because it accords each element in the population an equal and independent chance of being selected as a sample (Kumar, 2005) thus 871 were randomly selected with 510 respondents that accounts 57% of the sample at the end of the analysis. The empirical research was carried out in two ways: a pilot study and the main survey on external strategies for market innovation by KIBS SMEs. There were three questions with 22 items to collect data on strategies for NMI during the period 2006-2011. Attention was particularly given to information relating to formal and informal sources of knowledge that enabled NMI. Respondents were to rate the sources in order of importance for NMI. The samples were mainly for SMEs thus making the measures relevant for this study. The result is based on maximum level of risk that is usually taken in social science research as the $p < 0.5$ level (Bryman and Cramer, 2003; Bryman and Bell, 2011). The descriptive analysis, factor analysis, correlation table and regression analysis is carried out to test the hypotheses.

The Dependent Variable: New market innovation

To measure new market innovation, respondents were asked to indicate the numbers of new markets they opened (See Appendix 1). This was considered a useful measure of new market innovation. Variable taking the value of '1' was used, if it applied and '0', if not applicable. Firms

with not applicable (N/A) in any year are rated '0' while those with number(s) of new markets scored '1'.

Independent Variables

New market Pioneering (NMP)

Liebermann and Montgomery (1998) argued that newness of a product/ service is a significant variable to gain acceptance in marketplace. Hence for the purpose of elaborations and enhancement, 7 items were employed to describe 'newness' in terms of opening of new market at the pioneering status as commonly used in a number of innovation studies (Lieberman and Montgomery, 1988; Johannessen et al., 2001; Pedersen et al., 2002; Mueller et al., 2009) as a measure of innovative activities (Johannesson et al., 2001; Abubakar, 2009). Factor analysis was carried out to eliminate possible multicollinearity and reliability test was done (see appendix 2 for details). KIBS SMEs can score '0' or a maximum score of '7'. Thus, no matter the level of 'newness' as long as it is first to the market it takes the value (1). An item that takes the value of (1) was used, if the items applied and (0), if not applicable.

Radical Innovation

Thus, we identified radical innovation by six items commonly used to measure the Intellectual Property Rights (IPRs). Factor analysis was carried out to eliminate possible multicollinearity and reliability test was done (See appendix 3 for details). KIBS SMEs can score '0' or a maximum score of '6'. Radical innovation can be disruptive as they offer something new to the world and replaces existing methods (Christenson, 1997). Thus, it takes the value (1) if a firm has trademarks, plant patents or design patents or copyright that protect databases under copyright law (Maurer et al., (2001), or Trade Related Aspects of Intellectual Property Rights (TRIPS) or Secrecy as enforced by labour or contract laws (Levin et al., 1987), and (0), if not applicable.

Formal and Informal Sources of Knowledge for NMI

A construct "external sources of knowledge" was designed with 19 measures in the questionnaire taken directly from Svetina and Prodan (2008) but classified into formal and informal institutions (see appendix 4 for details). There were nine items for formal sources of resources with minimum score as '0' and maximum '9'. There were 10 items for informal sources of resources with minimum score as '0' and maximum '10'. 3 factors emerged under the informal sources of knowledge resources: The first factor is 'learning from personal contacts' (Den Hertog, 2000) which explains 47.11% as it represents personal interactions with known

people, informants, suppliers, clients, enquiry or survey. The reliability score is .88. The second factor could be interpreted as 'learning from local linkages' (Svetina and Prodan, 2008) which explained 13.14% with Chronbac alpha .76. This factor mainly related to KIBS SMEs' learning through networking, collaborations and collective reflections of families, local friends, town mates and imitations of other local competitors which are necessarily not explicit and cost involving. The last factor represents 'learning through public places and literature' (Den Hertog, 2000) 9.31% with .88 reliability coefficients which provided KIBS SMEs knowledge from interactions at parks, markets, clubs, bus stops and others, the Internet and literature.

The Control Variables

NMI depends on various factors. In this study firm age and size as commonly used in previous authoritative studies (example, Muller et al, 2009) are to be kept constant in order to reduce probable distortion of the estimated outcomes.

5. Findings

The findings reveal that 54 of KIBS SMEs (10.6%) respondents use the radical innovation strategy for NMI while 458 (89.4%) used NMP strategy for NMI. The gender distribution shows that majority are males accounting for 75% of the respondents while 25% are females which depicts that in Nigeria, this sector is male dominant. This supports Ndukwe's (2005) claim that women entrepreneurs in Africa are more into starting trade, school or hospital related firms rather than technological sectors, probably because of the risk and stress involved in technological NMI especially in terms of getting resources to employ experts, establish and regularly innovate in order to maintain a competitive advantage.

The regression analysis showed that Radical innovation explained 29.6% of the model and significant at $P < .01$. The 54 respondents that use radical innovation strategy for the NMI basically employed the internal R&D with collaborations with other firms from the formal institution. The informal model is insignificant. Thus, the null hypothesis is partly rejected and the alternate hypothesis is partly accepted. Therefore, there is a significant relationship between the strategic use of only the formal sources of knowledge acquisition and RI in KIBS SMEs in Nigeria.

Moreover, the regression analysis revealed that the NMP explained 28.6% of the model and both formal and informal institutions are significant at $P < .01$. Thus, the null hypothesis is rejected and the alternate hypothesis is accepted. The use of the formal and informal sources of

knowledge acquisition was found to have a positive association with NMP strategy. For the sample, the results show that an increase in the formal and informal sources of NMI knowledge acquisition explain NMP in terms of learning from the formal and informal sources (personal contact, local linkages and public places and literature).

All the sources of formal and informal knowledge resources are significant at $P < .01$ except local linkages at $P < .05$ level. This indicates that formal and informal sources of NMI knowledge acquisition have very high influence on NMP. While controlling for firms' age and size, the firm's age is insignificant while size is significant at $P < .05$. This indicates that firm's age has no effect on use of external sources of knowledge resources for NMP while the size of KIBS SMEs are significant to the use of external sources of knowledge resources (like learning from formal sources of knowledge) and informal sources (such as networking through personal contact, local linkages and public places and literature) (significant at .01, .05 and .01) for NMP. This implies that the informal sources of knowledge acquisition are more significant sources of resources for NMP by KIBS SMEs in Lagos irrespective of the firm's age.

Similar to previous studies (Cohen and Levinthal, 1989; Pedersen et al, 2002; Svetina and Prodan, 2008), this research found that the use of external knowledge resources is associated with innovation. It supports the need for external sources of resources to enhance firm performance and innovative activities but do not examine which of the external knowledge institutions, whether it is the formal or informal could possibly be the main source of these resources. However, the original contribution of this study is the strong evidence on the association between ability for NMP and informal sources of knowledge resources. This indicates that use of personal contact as a sort of network to access knowledge as well as information from public places and literatures are very important for NMP in Lagos. These may be as a result of some complex non-market factor in developing economies (Ayeetey, 1996) where the informal network becomes vital due to some socio-cultural and environmental interaction.

6. Discussion

Formal sources of knowledge is significant ($P < .01$ and $P < .05$ respectively) for both radical innovation and NMP. This stresses that irrespective of the size of the firm, the formal institutions are strategic to radical innovation and NMP in knowledge acquisition for NMI. That is, knowledge acquired from universities, research institutes and other knowledge institutions that are dynamically engaged in research, acquisition and dissemination of knowledge for

innovation in the business environment are very essential for NMI strategies. Knowledge staff in KIBS SMEs are resourceful, independent and highly skilled enough to influence and design necessary instruments (Kefela, 2010) needed to obtain knowledge resources for NMI. Also, it suggests the need for the country to strengthen the educational base from the basic level to the higher end along the lines of innovation (Scramm, 2004) to meet the rising manpower needs of KIBS SMEs' in this contemporary knowledge economy. However, this study found that informal sources is highly significant ($P < .01$) with or without controlling for size and age of firms for NMP.

Our unique contribution is that both formal and informal sources of knowledge are strategic sources of knowledge acquisition for KIBS SMEs though the informal seems to be more strategic for NMP. For instance, Scarso and Bolisani, (2012) state that KIBS SMEs offer valuable elements of technical and application knowledge to clients while clients also supply knowledge exchange ingredients for designing a successful KIBS solution for NMI. Thus, in Lagos, the use of networks through personal contact (with clients, suppliers etc) and information gathering from public places like parks, mosques, churches, tribal meetings, literature and the Internet are highly strategic and significant for NMP.

Furthermore, Lagos infrastructural development formally and informally has an impact on firms' in the city especially KIBS SMEs to take advantage of while pioneering new markets. The reason for this might possibly be because networks are important in overcoming some information failures associated with NMP in Lagos (Scramm, 2004). Also, the peculiarity of Lagos as an upshot of the complicated non-market social, cultural communal background and environmental interface facilitates the usefulness (Aryeetey, 1996; EflnA, 2011) of informal sources. Thus, in answering the research question, it could be stated that there is a positive association between the strategic use of formal and informal sources of knowledge acquisition and NMP, especially the informal sources by KIBS SMEs in Lagos. The more knowledge acquired from the informal sources of knowledge, the more the ability to pioneer new markets and the more of NMI. They use less of the formal knowledge institutions for NMP may be because of its seemingly availability to every firm that can collaborate and are able to pay the financial costs of knowledge available for NMP. Aside, the formal knowledge institutions lack regular funding hence the firm in question need to sponsor the R&D upfront more often in order to acquire the required knowledge. Contrastingly, the informal knowledge institution sources are available only to those who are connected to the source and have the capacity for exploitation. On the other hand, the radical innovation strategy for NMI sticks to the strategic

use of the formal sources of knowledge acquisition because of the prospect involved in possessing the intellectual asset in the new market.

7. Implications

The findings of this study could assist in formulating policy agendas for promoting market innovation, based on the use of knowledge acquired from the formal and informal sources by KIBS SMEs in developing economies. It also suggests that both formal and informal sources are important but informal sources are more crucial sources of knowledge acquisition for NMP in Lagos during the research period. The informal institutions emerged as primary sources of resources for KIBS SMEs in while using NMP strategy while formal institutions emerged as the only source for radical innovation strategy. This study has contributed to the few literatures in entrepreneurship in the developing economy by investigating the strategies for entrepreneurship and new market innovation by KIBS SMEs in developing economies. It has introduced a distinctive institutional perspective of formal and informal institutional strategy that is different from the developed economies context for NMI. The study has shown that the KIBS SMEs are more disposed to the use of the informal institutions thereby serving them as the primary source of knowledge acquisition for NMP. Thus, the informal system should not be perceived as an agent of necessity but should be promoted as an important part of the economic system in the developing economies. Necessary structure should be given to support the informal institutions as they are becoming a focal point in the developing economies. Governments in developing countries should give recognition and support to informal structures in the economy. Moreover, practitioners should explore the valuable insight to identify and exploit the strategies of the formal and informal knowledge institutions for new market innovation inside and outside the developing economies. Women empowerment towards entrepreneurship should be tailored towards KIBS SMEs. Incentives like technical supports, grants, loans and such likes should be made available to all but preference should be given to women. Finance should be made available to universities and research institutes and other formal knowledge institutions to enable them perform their function of R&D. This will foster KIBS firms in acquiring necessary information to execute their strategy of choice, whether the radical innovation strategy or new market pioneering strategy for NMI for an inclusive opportunity creation for employment, make more profit and improve the standard of living of prospective clients in the new market environment.

8. Concluding Observations

In answering the research questions, we say that both RI and NMP strategies are employed for NMI but NMP is the main strategy. Also that both formal and informal institutions are strategic sources of knowledge for NMI in Nigeria. In this study, we contributed to knowledge in new market innovation and institutional theory of entrepreneurship in developing economies that NMP is more strategic to NMI in Nigeria than RI. Thus the informal knowledge is more significantly strategic to KIBS SMEs in acquiring knowledge for NMP. The results of this survey are based on a fairly large sample thus it will contribute to the body of empirical studies on entrepreneurship in developing economies (Lingelbach, 2007; Obamuyi, 2007; Fatoki and Smith, 2010; Otto and Ukpere, 2011). This paper contributes to the growing body of literature generally in entrepreneurship (new market innovation perspective) and entrepreneurship in developing economies (institutional perspective), by providing a better understanding on the strategies for entrepreneurship and market innovation through the formal and informal institutional sources of knowledge by KIBS SMEs in developing economies.

The scope of the study is specifically designed for KIBS sectors; therefore the results may not be completely viable for all service sectors. Further research may examine if the results can be generalised to other service sectors. Furthermore, the study has opened up relatively unexplored segments and would serve as a basis for future research which could be beneficial to potential researchers, policy makers and prospective innovative firms/ practitioners by exploring this study in other developing countries to see whether similar findings will emerge.

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10. Appendices

Appendix 1: New Market *Innovation*

Please indicate the numbers where applicable or “NA’ where not applicable.

| Year | 2006/7 | 2007/8 | 2008/9 | 2009/10 | 2010/11 |
|--|--------|--------|--------|---------|---------|
| Number of new places in Nigeria has your company expanded to carry out project/ have branches? | | | | | |
| Number of new places in outside Nigeria has your company expanded to carry out project/ have branches? | | | | | |
| Number of new customers who have not been using your services/product in Nigeria has your company introduced and they accepted. | | | | | |
| Number of new customers who have not been using your services/product outside Nigeria has your company introduced and they accepted. | | | | | |

Source: Feeser and Willard, 1991; Song et al. 1999

Appendix 2: New Market Pioneering

| Factor 1: Newness as Market Pioneers | |
|--|------|
| Newly introduced to the country | 0.80 |
| Newly introduced to the firm | 0.81 |
| Newly introduced to the market | 0.77 |
| New to a group of people as customers /client firm | 0.83 |
| Newly introduced to the environment | 0.60 |
| Improved version of a previous product/service | 0.71 |
| Presented in a different ways from other firms | 0.72 |
| <i>Explained variance by the factor: 56.9% KMO.83 Chronbac alpha .86</i> | |

Appendix 3: Radical Innovation

| Factor 1: Radical Innovation | |
|---|------|
| Plant Patent | 0.78 |
| Design Patent | 0.94 |
| Copyright | 0.92 |
| Trademark | 0.94 |
| TRIP (Trade Related Aspects of Intellectual Property) | 0.94 |
| Secrecy | 0.36 |
| <i>Explained variance by the factor: 95% KMO .61 Chronbac alpha .74</i> | |

Appendix 4: External sources of knowledge resources: Formal and informal

| <u>Factor 1. 1: Formal Sources of Knowledge</u> | |
|--|-----|
| R&D outside the firm | .77 |
| Partnership /collaboration with other firms (National) | .84 |
| Partnership /collaboration with other firms (International) | .79 |
| Interaction with public institutions - Universities and research institute | .74 |

| | |
|---|-----|
| Conferences, workshops and seminars in Nigeria | .71 |
| Conferences, workshop and seminars outside Nigeria | .77 |
| From industry association and trade unions | .72 |
| <i>Explained 58.3% of the variance (KMO.85; Chronbac alpha .88)</i> | |
| <u>Factor 2. 1: Learning through Personal Contacts</u> | |
| Personal connections to known people | .82 |
| Personal contact by asking questions, investigations or survey | .81 |
| Knowledge from informants | .84 |
| Personal invitation to come over | .78 |
| Interactions with suppliers | .64 |
| <i>Explained 47.11% of the variance (KMO.87; Chronbac alpha .88)</i> | |
| <u>Factor 2 .2: Learning from local linkages</u> | |
| Information from friends and family members | .62 |
| Imitation of other competitors | .85 |
| Connections from towns meeting | .87 |
| <i>Explained 13.14% of the variance (KMO.87; Chronbac alpha .76)</i> | |
| <u>Factor 2. 3: Learning through Public places and Literature</u> | |
| Literature | .86 |
| Webs & Internet | .86 |
| Interactions at public places like bus stops, market, church, mosques, parks, clubs etc | .50 |
| Interactions with customers/client firms | .56 |
| <i>Explained 9.31% of the variance (KMO.87; Chronbac alpha .83)</i> | |

Appendix 5: Regression results of external knowledge sources of resources for RI and NMP

| | Model RI | Model NMP |
|---------------------------------------|---------------------|---------------------|
| Constant | -6.020E17 | -.104 -(1.290) |
| Formal sources of knowledge resources | .276 (4.566) *** | .274 (4.508)* |
| Informal –Personal Contact | .156 (3.450) | .159 (3.525) *** |
| – local linkages | .093 (1.951)* | .101 (2.135)** |
| --Public places and literatures | .229 (1.863) | .235 (4.900) *** |
| Controls | | |
| Age | .047 (1.233) | .015 (.368) |
| Size | .104 (1.624) * | .104 (2.624) ** |
| R ² | .282 | .294 |
| Adjusted R ² | .296 | .286 |
| F | 29.589*** | 34.884*** |

Note: ***, **, * denotes significance at 1%, 5% and 10% respectively. Values of the t-statistics are indicated in parentheses. The sample size used for calculations is 510 KIBS SMEs. Reference categories for control variables are age 1-20yrs and size (average numbers of employees in 2006-2011).



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ENTREPRENEURS AND INVESTORS IN RECOVERING BUSINESS CRISIS

Abstract

This paper presents a model for calculating the capacity of an ailing company to rebuild value. Methodology combining Participatory Action Research (PAR) with Delphy method to give the "model corporate reorganization" applicable to correct and plan the development of each target company, composed of twelve variables, four financial approach was used, among they referred to the "estimate of the total investment needed to reorganize the company," the epicenter of this document, which leads to define the ability of the company to create value, a requirement fulfilled, makes valid subject to investment one back gray in crisis.

The literature review was focused on the theory of business valuation, following the seminal work of (Williams, 1938), and authors who followed him as a resource to diagrammatic structure of the proposed model by integrating quantitative variables and qualitative, which were selected as essential for a business to reorganize and allow productive operations and generating wealth.

The main conclusion is that you got to propose, entrepreneurs and investors, a model for the potential of distressed companies to rebuild wealth, ie available to entrepreneurs, from this work, the technical tools to intervene in firms in difficulty, allowing recommend applying the model by entrepreneurs in order to improve and validate empirically.

Keywords: Entrepreneurs, Companies, Investors, Difficulties, Recovery, Model

RESUMEN

Este trabajo presenta un modelo para calcular la capacidad de una empresa en dificultades para volver a generar valor. Se empleó la metodología de combinar la Investigación Acción Participativa (IAP) con el método Delphy, obteniéndose el “Modelo de reorganización empresarial”, aplicable para corregir y planear el desarrollo de cada empresa objetivo, integrado por doce variables, cuatro de enfoque financiero, entre ellas la referida a la “estimación del valor de la inversión total necesaria para reorganizar la empresa”, epicentro de este documento, la cual lleva a definir la capacidad de la empresa de generar valor, requisito que de cumplirse, hace sujeto valido de inversión a una empresa en crisis.

La revisión de literatura se centró en la teoría sobre valoración de empresas, siguiendo los trabajos seminales de (Williams, 1938), y los autores que lo sucedieron, como recurso para poder estructurar el modelo diagramático propuesto, integrando por variables cuantitativas y cualitativas, las cuales fueron seleccionadas como las esenciales para conseguir reorganizar una empresa y permitir su operación productiva y generadora de riqueza.

La conclusión principal es que se consiguió proponer, a emprendedores e inversores, un modelo para establecer el potencial de las empresas en dificultades para volver a generar riqueza, es decir, disponen los emprendedores, a partir de este trabajo, de las herramientas técnicas para intervenir en empresas en crisis, lo que permite recomendar aplicar el modelo por parte de emprendedores a efecto de mejorarlo y validarlo empíricamente.

Palabras claves: Empresarios, Empresas, Inversores, Dificultades, Recuperación, Modelo

JEL: G33

¹ Producto de investigación, del proyecto titulado “MODELO PARA REINICIAR EMPRESAS CERRADAS O EN RIESGO DE CIERRE, MEDIANTE LA PARTICIPACIÓN DE EMPRENDEDORES E INVERSORES COMO NUEVOS SOCIOS”. Financiado por las Universidades: Nacional de Colombia, se Palmira y Autónoma de Occidente, 2008-2011.

1. INTRODUCCIÓN

El presente documento entrega los resultados de la investigación “modelo para reiniciar empresas cerradas o en riesgo de cierre, mediante la participación de emprendedores e inversores como nuevos socios”, centrándose en la premisa que de poderse estructurar una metodología fundada en la ciencia administrativa, capaz de permitir reorganizar y valorar empresas cerradas u operando con dificultades, se estaría aportando a quienes trabajan en el área del emprendimiento empresarial, pero por sobre todo a los propios emprendedores e inversores, la herramienta esencial para que se pueda asumir el rescate de empresas como una opción cierta, válida y continua dentro del emprendimiento empresarial.

En consecuencia, este trabajo tuvo como destino primario proponer un modelo conceptual, diagramático, capaz de servir de guía para rescatar empresas en crisis, esto es, operando con dificultades o aún en situación de cierre, siendo la base para hacer viable su rescate y reorganización, mediante la participación de propietarios actuales, acreedores y potenciales inversores, coordinados por emprendedores empresariales, quienes gracias a la metodología aquí dispuesta, aprenden a reconocer y medir el potencial generador de riqueza de tales empresas.

Finalmente se logró obtener el modelo y se presenta aquí en un esquema de doce variables, denominado “modelo de reorganización empresarial” el cual cubre los aspectos vitales de la empresa en lo financiero, de mercadeo, producción, recursos humanos y gestión directiva, las cuales al verificarse su cumplimiento presente o hacia futuro por parte de la empresa, una vez aplicadas las acciones de corrección y mejora implicadas en esas mismas variables por parte de un equipo emprendedor-inversor, permitirán definir el valor de la firma a rescatar en función a la riqueza que quedaría en capacidad de generar, entendido ese valor como un precio aproximado de la unidad de negocio en análisis, para a partir de allí hacer los acuerdos monetarios y de gestión entre las partes involucradas en el proceso de salvamento.

Los resultados de la investigación se presentan en nueve apartados, siendo esta introducción la primera. En segunda instancia se plantea los objetivos del trabajo; en tercer lugar se da la revisión de literatura; en el cuarto apartado se plantea la metodología de investigación seguida, mostrándose el proceso para hacer la construcción del modelo; lo que permitió llegar a la quinta sección, centrada en los resultados del estudio, donde se describe el diagrama del modelo para valorar empresas en crisis, una de cuyas variables, “la dirigida a la estimación del valor de la inversión total necesaria para reorganizar la empresa en dificultades” es la desarrollada en este escrito; insumo esto para plantear en sexto lugar la discusión sobre los

hallazgos del trabajo, en función a la visión de otros autores; lo que dio pie para avanzar al séptimo apartado, dedicado a considerar las implicaciones de la investigación y sus resultados; base todo lo anterior para llegar en octavo lugar a las respectivas conclusiones, la principal de las cuales precisa que se logró proponer un modelo técnico, cualitativo, dotado con una fórmula y unos fundamentos propios de la ciencia administrativa, que señalan como una empresa en crisis se puede reorganizar observando que cumpla doce criterios, sobre los cuales es dable hacerla funcionar generando valor, para demostrar así que las empresas en crisis pueden reestructurarse para que vuelvan a generar riqueza, siendo ellas por tanto sujeto válido de inversión. Finalmente, el apartado noveno presenta las referencias bibliográficas.

2. OBJETIVOS

El propósito del estudio fue encontrar o estructurar un modelo para establecer la viabilidad de reorganizar empresas en dificultades, para fortalecerlas, a partir de su reestructuración y valoración, base ello para concertar los intereses de propietarios actuales, acreedores y potenciales nuevos emprendedores e inversores a integrar como socios.

Este objetivo revela el cometido de evitar la desaparición definitiva de empresas en dificultades operacionales y financieras, por lo que el modelo a encontrar o crear no es una simple fórmula matemática para determinar el precio de una empresa en dificultades, es algo más amplio y profundo, pues expresa la necesidad de hallar un modelo integrado, capaz de contribuir a superar las debilidades⁷ de las empresas. Para alcanzar más fácilmente ese objetivo general, en el estudio fue desagregado en cuatro objetivos específicos: consignar un método alternativo, predictor de quiebras empresariales; definir un modelo para establecer la viabilidad de rescatar empresas en crisis; establecer los principios sobre los cuales un grupo de inversores potenciales, reunidos en rededor de una empresa susceptible de ser fortalecida, pueden tener confianza mutua y conseguir la convergencia de criterios, para hacerla operar con posibilidades de éxito integral, dentro de un plan de desarrollo; y por último, revisar la base conceptual erigida para sustentar al forjador de empresas denominado “emprendedor” a quien se vincula tradicionalmente como el creador de nuevas empresas, para reformular su caracterización y

⁷ De Geus (1999, p 107-126) estudiando sobre el promedio de vida de las empresas actuales en el mundo, señala como las empresas tienen una vida “efímera” ocasionando “un enorme desperdicio de potencialidad” y que “tanto las personas como la sociedad y la economía se ven seriamente afectadas, e incluso devastadas por la muerte prematura de las empresas”, muerte ocasionada por que sus directivos se centran en los bienes y servicios producidos, en lo financiero y comercial, olvidando que la empresa es una comunidad de personas, que puede y debe cambiar con los cambios del mundo, adaptándose a nuevas realidades, cambiando incluso si es necesario el portafolio de producto)

misión a partir de ampliar su accionar hacia empresas en dificultades, sobre las cuales podrá intervenir con su creatividad emprendedora, gracias a contar con las herramientas teóricas y técnicas que se lo permitan.

Teniendo claro el puerto de llegada, se procedió a conseguir los fundamentos conceptuales que dieran validez teórica al trabajo, haciendo la pertinente revisión de literatura.

3. REVISIÓN DE LITERATURA

En razón a que se encontró que proponer un modelo para establecer la viabilidad de reestructurar empresas en crisis demandaba establecer unas variables básicas que permitieran esto, se decidió que la literatura a revisar debería conducir a ello, por lo se revisó investigaciones centradas en el costo de capital, el flujo de caja libre descontado, los rendimientos accionarios y demás aspectos de la valoración de empresas, asentados desde los trabajos originales de (Williams, 1938); (Gordon y Shapiro, 1956), quienes redescubren el trabajo de Williams, y escriben “Capital Equipment Analysis: The Requirid Rate Of Profito” ; “Growth Stocks and the Petersburg Paradox” (Durand, 1957); (Miller y Modigliani, 1961, 1963) “corporate incomex, taxes and the cost of capital: A correction”, así como el trabajo de (Hamada, 1969) “Portafolio analysis, market equilibrium corporate finance”.

Partiendo de esas fuentes, con distintos enfoques sobre la valoración de acciones, se presentaron trabajos como el de (Leibowitz y Kogelman, 1990) “Inside the P/E Ratio: The Franchise Factor”. También se estudió, entre tantos otros trabajos vitales, “Estimating Shareholder Risk Premia Using Analysts Growth Forecasts” de (Harris y Marston, 1992). Otra investigación fue la de (Myers y Borucki, 1994) ocupados de observar los problemas prácticos para establecer el costo de capital (CK) en empresas a quienes se aplique el modelo del flujo de caja descontado (FCD), buscando estimar tasas de rentabilidad accionaria para todo el mercado. Otro artículo fue el de (Breedem, 2008).

Se consultó también autores como (Brilman y Maire, 1990) enfocados en métodos y prácticas de valoración; (Caballer y Moya, 1997), orientados a métodos analógicos bursátiles; (Caballer, 1998) dirigido a métodos contables de rendimientos y bursátil; (Santandreu, 1990) definido en conocimiento sobre proceso de valoración, negociación y financiamiento; (Mascareñas, 2005) basado en visión estratégica financiera de fusiones y adquisiciones de empresas y su valoración; (Anzizu, 1991) quien presenta análisis de casos; (Quemada, 2009) centrado en asesoría empresarial; (García, 2003) quien integra valoración de empresas, con EVA y

gerencia del valor; (Fernández, 2008) con su reconocido texto enfocado en comprensión y utilización de distintos métodos de valoración de empresas, incluidas las de Internet; (Salinas, 2007) centrada en valoración de los intangibles; y entre otros, (Rosenbloom, 2007) fincado en el Due Diligence o diligencia debida, como esencia de la valoración de empresas.

De esos autores, solo Jean Brillman y Claude Maire, junto a Juan Mascareñas, dedican reducido espacio en sus libros a empresas en riesgo de cierre, reconociendo que es factible salvarlas, evitando “un enorme desperdicio de potencialidad” a los conglomerados sociales, pues “tanto las personas como la sociedad y la economía se ven seriamente afectadas, e incluso devastadas por la muerte prematura de las empresas”, (De Geus, 1999)

El profesor Pablo Fernández, (2002 y 2008), gracias al rigor de sus publicaciones en materia de valoración de empresas, por ser tan amplias como profundas y con distintos enfoques, fue el referente central para estudiar los métodos conocidos en la materia, reseñados en la tabla siguiente:

Figura 1 Los métodos de valoración se pueden clasificar en seis grupos

| PRINCIPALES MÉTODOS DE VALORACIÓN | | | | | |
|--|-----------------------------|-------------------------|----------------------------|--------------------------|----------------------|
| BALANCE | CUENTA DE RESULTADOS | MIXTO (GOODWILL) | DESCUENTO DE FLUJOS | CREACIÓN DE VALOR | OPCIONES |
| Valor contable | Múltiplos de: | Clásico | Free cash flow | EVA | Black y Scholes |
| Valor contable ajustado | Beneficio: PER | Unión de expertos | Cash flow acciones | Beneficio económico | Opción de invertir |
| Valor de liquidación | Ventas | Contables europeos | Dividendos | Cash value added | Ampliar el proyecto |
| Valor | EBITDA | Renta abreviada | Capital Cash | CFROI | Aplazar la inversión |

| | | | | | |
|------------|-----------------|-------|-----------------|--|----------------------|
| sustancial | Otros múltiples | Otros | flow APV | | Usos alternativos |
|------------|-----------------|-------|-----------------|--|----------------------|

Fuente: (Fernandez Pablo, 2008, p. 27)

Una vez analizados esos modelos y desaprobados los métodos mixtos y por múltiples⁸, Fernández dice “el método más apropiado para valorar una empresa es descontar los flujos de fondos futuros esperados, ya que el valor de las acciones de una empresa –suponiendo su continuidad- proviene de la capacidad de la misma para generar dinero” (Fernandez, 2002), en lo que coincide con Irvin Fisher y otros autores y analistas, por lo que tales métodos deberían privilegiarse sobre los mixtos o contables, pues no son arbitrarios y definen el tipo de flujo cuidadosamente en relación a una tasa de descuento o costo apropiada, calculando ingresos y egresos futuros periódicos de la empresa apoyándose en técnicas del presupuesto de tesorería.

La teoría sobre emprendimiento empresarial se aborda a partir de (Schumpeter, 1996), los investigadores de la escuela estadounidense, autores europeos y latinoamericanos básicamente, perfilando sustentar la idea de que el emprendimiento empresarial debe ser atendido y desarrollado desde la doble concepción y acción de la empresa nueva y la empresa a fortalecer.

En materia de emprendimiento hacia nuevas empresas, se halla un formidable lote de investigadores y autores con y desde todas las perspectivas de análisis, pudiéndose citar la investigación de la historia empresarial, con (Ladrón de Guevara, 2003); la de motivación y conocimiento del emprendimiento con (Varela, 2001); y la de aprendizaje del emprendimiento mediante metodología de casos, liderada por la escuela de negocios de la Universidad de Harvard; la de inversores de capital de riesgo del IESE de España, entre otras, ninguna de las

⁸ El estudio “múltiplos para la valoración de empresas en Colombia. Análisis de Resultados del Período 1998 – 2002” de Sarmiento y Cayon, arrojó que las estadísticas de ese período, extractadas “del mercado accionario colombiano no reflejan correctamente el valor de las empresas” de las que se tomaron y “por lo tanto, no es recomendable este tipo de valoración en Colombia”)

cuales sin embargo le ha puesto énfasis al emprendimiento abierto a considerar intervenir empresas en riesgo de quiebra.

Paralelo con autores e investigadores sobre emprendimiento empresarial, que se podría decir, formulan la teoría o la construyen de lo que aprecian en la materia en los distintos agentes, están las personas e instituciones que procuran poner en práctica tales teorías, empleando programas para generar empresas. Así, mediante la praxis, tras el objetivo de disminuir la pobreza, en cada área del mundo, se encuentran instituciones y personas trabajando con programas de menor o mayor elaboración en este horizonte. (Echecopa, et al, 2014).

Contando con estos antecedentes investigativos en valoración de empresas y emprendimiento empresarial, se consiguió construir la propuesta tras el objetivo planteado, siguiendo el método a continuación reseñado.

4. METODO PARA CONSTRUIR EL MODELO

Se consiguió construir el modelo a través de un proceso investigativo social, consultando a la gente afectada positiva o negativamente con las crisis de las empresas, pues la investigación planteada es sociológica, y como tal, según indica (Cegarra, 2004), su “objetivo es detectar la opinión, las formas de comportamiento de las personas ante determinados acontecimientos que se producen en nuestro entorno”, lo que sustento hacer esta propuesta metodológicamente sobre la Investigación Acción Participativa (IAP), la cual “... es un enfoque investigativo y una metodología de investigación, aplicada a estudios sobre realidades humanas” (Rojas, 2010). La IAP fue acompañada con una adaptación del método Delphy, entendido como una técnica para obtener información cualitativa, pero precisa, de un grupo pequeño de expertos en la teoría o práctica empresarial entrevistados de manera separada y anónima. (El Método del DELPHI (s.f)).

La literatura revisada, unida a los fundamentos de los responsables del estudio permitió diseñar el cuestionario con cuatro secciones, la primera, enfocada a definir los determinantes técnicos para invertir en una empresa en dificultades a activar o a fortalecer, con 30 variables a calificar, de las cuales 22 fueron aprobadas por el grupo. La segunda se dirigió específicamente a conocer los factores con los cuales identificar el posible valor que pudiesen guardar las empresas cerradas, mediante 22 variables, siendo aceptadas 14; mientras el tercer bloque de preguntas, a través de 17 factores, buscó establecer los criterios con los cuales se podría conocer el potencial para generar riqueza que pudiese existir en empresas operando pero con

riesgo de cierre, certificándose 13. El cuarto grupo de interrogantes buscó establecer los principios humanos o de buen gobierno que una empresa a reorganizar debe ofrecer a potenciales inversores y emprendedores para sustentar su decisión de invertir en ella, empleando 20 variables a ponderar, las cuales quedan como variables dirigidas a generar confianza entre los inversores y emprendedores participantes del proceso de rescate de cada empresa y gravitan en rededor de los tres conjuntos de variables técnicas anteriores, las cuales son el eje del modelo.

Sobre ese presupuesto se entrevistó mediante un cuestionario a veinte y seis expertos en materia empresarial, bien por la práctica, la teoría o ambos aspectos, quienes respondieron calificando de cero (0) o nada significativo, a diez (10) lo más relevante, frente a cada variable de las que les fueron expuestas, como medio para establecer aquellas que, por obtener una calificación igual o superior al 60 por cien deberían considerarse aptas o válidas para ser aplicadas a manera cada una de un principio a seguir para invertir en una empresa cerrada o una en riesgo de cierre.

El ejercicio cumplido de contrastar un total de 89 variables por parte del panel de expertos y el equipo investigador para definir el modelo, condujo a la aprobación de 69 de ellas, de las cuales 49, por ser las atinentes a la operación empresarial, hicieron parte de aquellas en las cuales se buscó convergencia, al ponerlas en la figura siguiente, en la cual se relaciona las variables y se vincula aquellas que comunican una idea o sentido similar mediante letras iguales para identificar su convergencia en atención a lo que su enunciado significa en la teoría y práctica administrativa. Ésta convergencia puede ser total, si se haya presente en las tres columnas, o parcial, si esta solo en dos de ellas.

Figura 2 Convergencia de Variables Calificadas

| | Cuestionario 1: | Cuestionario 2: | Cuestionario 3: |
|---|---|--|---|
| | Principios o Determinantes Técnicos Para Invertir En Una Empresa a Activar o a Fortalecer | Variables Para Definir el Valor de la Empresa Cerrada e Invitan a Invertir en Ella | Variables Para Definir El Valor De La Empresa En Riesgo De Cierre E Invitan A Invertir En Ella. |
| 1 | Margen de contribución alto o competitivo (A) | Activos fijos poseídos son productivos (H) | Activos fijos poseídos son productivos (H) |

| | | | |
|----|--|---|--|
| 2 | Tamaño del mercado potencial | Activos fijos permiten igual eficiencia de competidores (F)(G) | Activos fijos permiten igualar eficiencia de competidores (F)(G) |
| 3 | Tamaño del mercado objetivo (B) | Productos apropiados a activos fijos y con demanda interna y externa (E) | Los activos fijos permiten producir bienes con alta demanda |
| 4 | Tamaño de la participación en el Mercado | Empresas sin procesos jurídicos (I) | Empresas sin procesos jurídicos (I) |
| 5 | Valor de la inversión total requerida (C) | Si se está en proceso concursal ello es conveniente | Anticiparse al cierre y pérdida de valor consiguiendo inversores |
| 6 | Acceso del sector a crédito | Aunque no esté en proceso concursal se puede invertir | El valor de la empresa equivale al de sus activos aplicables a producción |
| 7 | Cantidad y fortaleza de competidores (D) | Se puede comprar barato por ser empresa cerrada | El valor de fallos depende de si la causa es estructural o coyuntural |
| 8 | Acceso a mercados extranjeros (E) | El valor de la empresa son activos productivos menos sus pasivos totales | Los activos son aptos para producción innovadora con aceptación en mercados nacional y extranjero (E) |
| 9 | Capacidad de cambiar estructura del sector | Margen de contribución alto del portafolio (A) | Margen de contribución alto (A) |
| 10 | Crecimiento anual de la demanda y competidores | Pocos competidores directos e indirectos (D) | Pocos competidores directos e indirectos (D) |
| 11 | Capacidad de innovar o actualizar portafolio | El sector presenta alta demanda (B) | Alta demanda (B) |
| 12 | Posibilidad de crecer | Montar empresa nueva vale entre un 50% al 100% más | Montar empresa nueva vale entre un 50% al 100% más |

| | | | |
|----|--|---|---|
| | participación en el Mercado | que la cerrada (C) | que sanear la que tiene riesgo (C) |
| 13 | Disponibilidad de capacidad instalada similar a rivales | El costo de generar marca de empresa nueva es igual o superior a pleitos +pasivos +activos de empresas cerradas | Si una empresa saludable equivalente a la que presenta dificultades vale una o más veces que esta se debe adquirir la enferma |
| 14 | Capacidad de producción a iguales costos que la competencia (F) | Si se puede igualar en breve tiempo el FEL y EBIT y el EBITAD de la empresa en marcha equivalente es mejor comprar la empresa cerrada | |
| 15 | Posibilidad de cubrir costos fijos usando del 5 al 15% de la capacidad instalada (G) | | |
| 16 | Capacidad de contar unas estrategias competitivas definidas | | |
| 17 | Capacidad de negociar con proveedores igual a competidores | | |
| 18 | Capacidad de generar mercados sustitutos | | |
| 19 | Disponibilidad de recursos económicos de infraestructura | | |
| 20 | Tasa de retorno superior al costo de capital | | |

| | | | |
|----|---|--|--|
| 21 | Capacidad de generar valor | | |
| 22 | Capacidad de gestión de los responsables del Proyecto | | |

Fuente los autores. Esta figura recoge las 49 variables que obtuvieron un 60% o más de calificación por parte del panel de expertos consultados y entre ellas se señaló con letras iguales las que presentan convergencia por indicar su enunciado una idea o sentido similar en la teoría y práctica administrativa.

Partiendo de la figura “*convergencia de variables calificadas*” se efectuó la comprobación estadística mediante el análisis de Varianza (ANOVA), el cual consiste en un procedimiento aplicado para “analizar datos obtenidos con un estudio tanto observacional como experimental” (Anderson, Sweeney. & Thomas, 2004) siendo empleado para muestras pequeñas y consiste “en la comparación simultánea de varias medias poblacionales” (Lind & Mason, 2004) y “nos permitirá probar la significancia de las diferencias entre más de dos medias de muestra” (Levin, Rubin, 1996) como vía para precisar si los datos observados son o no similares o iguales considerados tres grupos de muestras y asumiendo supuestos, como que para cada población la variable de respuesta esta normalmente distribuida, esto es, las calificaciones de los expertos (variable de respuesta) deben estar normalmente distribuidas; que la varianza de la variable de respuesta, representada por σ^2 , es la misma para todas las poblaciones; y que las observaciones deben ser independientes, significando esto que las calificaciones de un experto son independientes de las dadas por los otros.

Gracias a la técnica del análisis conceptual, observando el significado contenido en cada variable, reforzado ello con la técnica estadística referida, se pudo llegar a diagramar el modelo para valorar empresas en dificultades mostradas en el epígrafe siguiente donde se plantea los resultados del trabajo.

5. LOS RESULTADOS: EL DIAGRAMA DEL MODELO PARA VALORAR EMPRESAS EN DIFICULTADES

Hallar la convergencia de las variables en los tres cuestionarios calificados mediante análisis conceptual y estadístico, condujo a encontrar doce variables que bien podrían ser caracterizables o aceptables como las que mínimamente debería reorganizarse en una empresa para hacerla integralmente viable como objeto de inversión por parte de emprendedores e inversores.

Disponer de esas variables permitió diagramar de manera resumida, sencilla y comprensible el modelo buscado, de cara a facilitar intervenir por parte de emprendedores e inversores en empresas en crisis, es decir, cerradas o en riesgo de cierre. El diagrama organiza las doce variables técnicas finalmente obtenidas mediante ese método en cuatro bloques de intervención, considerando las áreas funcionales de la empresa. La idea es que se valora el grado de cumplimiento de la empresa en crisis de cada variable, para buscar conocer hasta donde ella es objeto válido de una intervención que consiga reorganizarla, refinanciarla y ponerla a funcionar en condiciones de poder tener éxito.

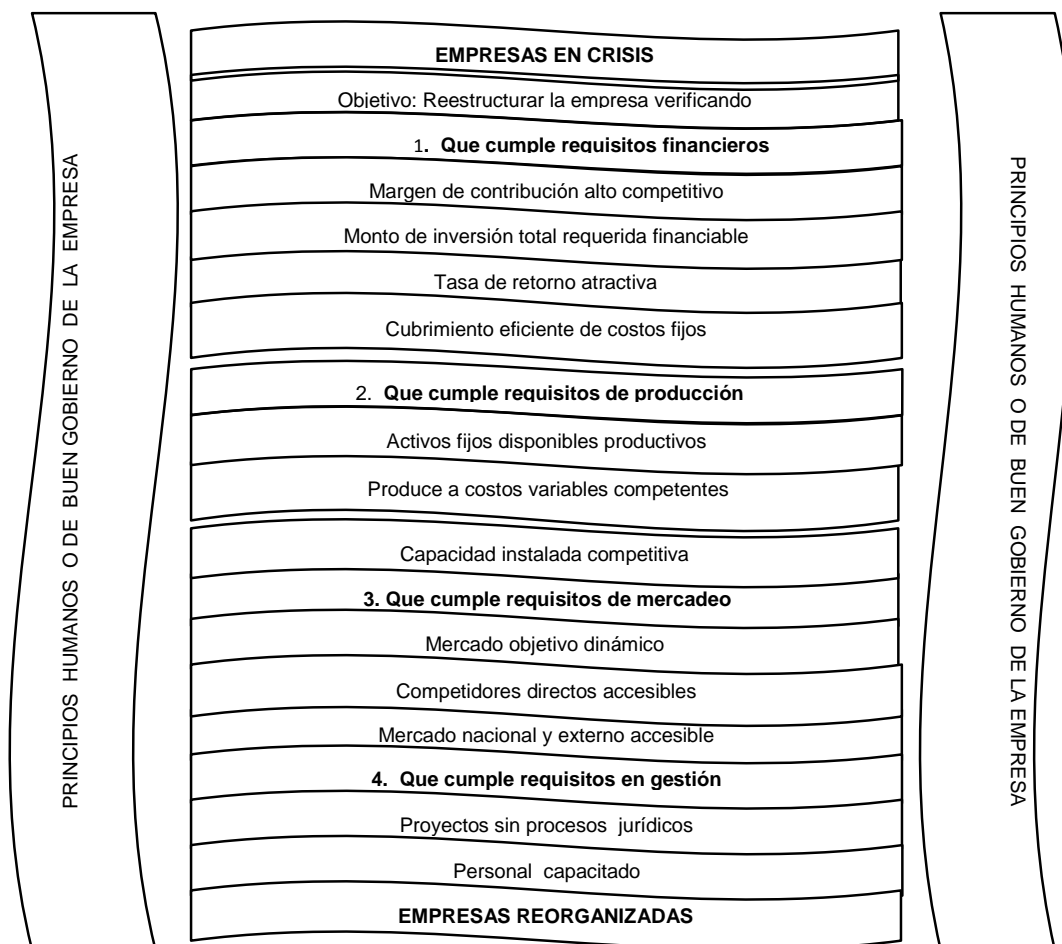
Así, para el área financiera se encontró cuatro variables: medición del margen de contribución de los bienes a ofertar por la empresa; estimación del valor de la inversión total necesaria para reorganizar la empresa; posibilidad de cubrir los costos fijos empleando igual porcentaje de capacidad instalada que los competidores; y verificación de la tasa de retorno que puede generar la empresa y con la que se define el costo de capital. Para el área de producción se dedujo tres variables: evaluación de la cantidad y calidad de los activos fijos disponibles, su disponibilidad de uso y productividad posible; estimación de la capacidad de producir con los activos fijos disponibles a costos variables unitarios similares a competidores; y evaluación y determinación de la capacidad instalada de producción, para establecer el nivel de riqueza que es posible obtener de ella.

En el área de mercadeo y ventas se derivó tres aspectos: medición del tamaño y dinámica del mercado objetivo; posibilidad de competir con los oferentes actuales del portafolio de producto; y posibilidad cierta de penetrar y mantener una participación en el mercado nacional y/o extranjero con la cual generar riqueza. En lo pertinente al área de gestión y dirección, se encontró central evaluar y sanear los procesos jurídicos en contra y a favor de la empresa, de una parte, y de la otra, analizar la capacidad de gestión del equipo humano que se debería responsabilizar del proyecto de reorganizar la empresa y ponerla a operar en condición productiva y generadora de riqueza.

En rededor de esas doce variables esenciales de medición y corrección gravitan los “principios humanos o de buen gobierno de la empresa para decidir invertir en una firma cerrada o en riesgo de cierre”, fundados en incentivar reorganizar a las empresas teniendo como base dotar a cada una de una junta directiva idónea e independiente de socios y administración, que actúa bajo los criterios internacionales del buen gobierno empresarial, los cuales son los auspiciadores de confianza (Cegarra, Briones y Ros, 2005). La figura siguiente representa el

modelo propuesto para medir las potencialidades de la empresa en crisis y valorarla para decidir reorganizarla.

Figura 3. Diagrama del Modelo de Reorganización Empresarial (muestra las doce variables, agrupadas por área funcional, que se deben reestructurar para rescatar una empresa de la crisis y conseguir que genere valor)



Fuente: los investigadores con base en cruce de variables calificadas con el 60% de aceptación por parte del panel de expertos consultados.

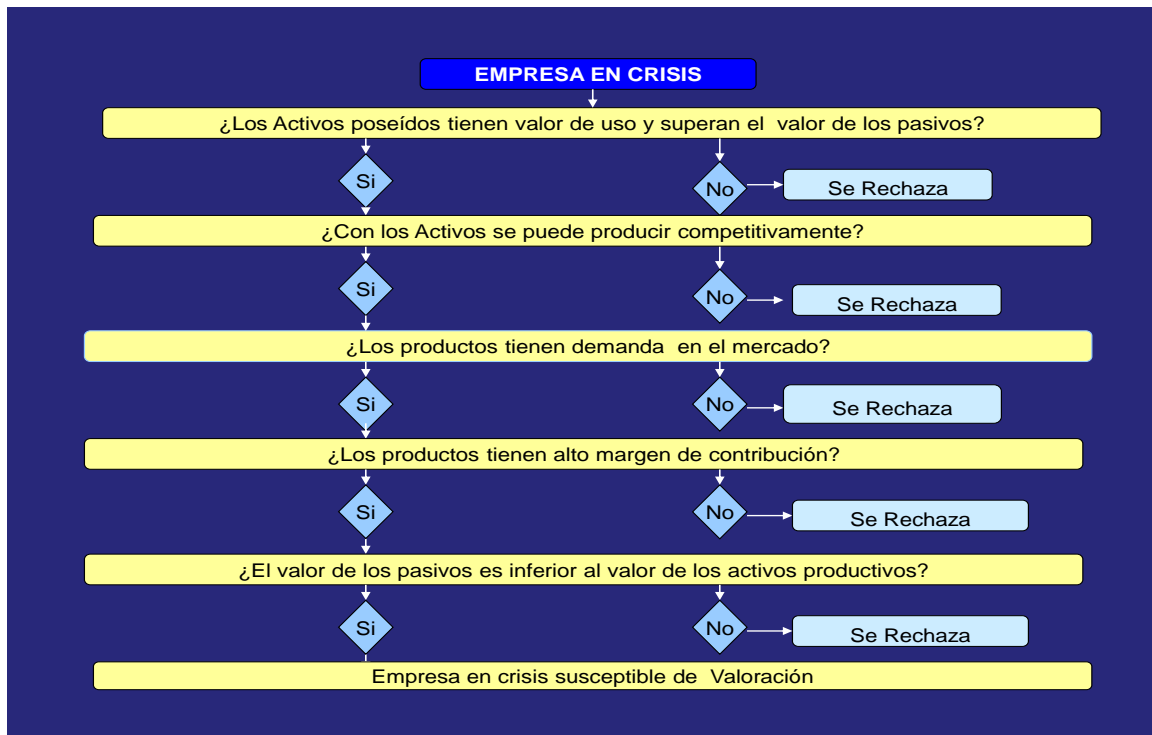
Aplicar el modelo, por parte de administradores y propietarios actuales de la empresa y nuevos emprendedores e inversores, significa evaluar la situación de la compañía en cada variable, decidir los cambios a realizar, medir las inversiones necesarias y calcular mediante proyecciones ajustadas a la realidad de la empresa y del mercado su potencial generador de riqueza, en un ambiente de competencia fuerte, requisito fundamental para conseguir

inversores de capital dispuestos a arriesgar su tiempo, trabajo y dinero en la empresa en reestructuración.

Para minimizar esfuerzos y costos por parte de emprendedores e inversores al evaluar el rescate de una empresa en dificultades, el modelo de Reorganización Empresarial propuesto no puede ser asumido como una metodología capaz de salvar a toda empresa en crisis de la liquidación definitiva, por lo que antes de aplicarlo en toda su amplia y profunda extensión, debe observarse que la empresa a intervenir cumpla previamente cinco criterios básicos, tomados del modelo construido, pero que bien podría determinar un conocedor de la ciencia administrativa, siendo ellos: a) que sus activos puedan tener valor de uso; b) que el valor de los pasivos sea inferior al valor de los activos productivos; c) que con los activos disponibles se pueda producir en condiciones de eficiencia para competir; d) que el portafolio de productos que se pueda elaborar, servir o comercializar con los activos tenga demanda en el mercado y e) que los bienes a producir, tengan alto margen de contribución unitario.

Así, el modelo suministra una herramienta de análisis previo, en la cual de no cumplirse alguna de las variables esenciales indicadas se rechazaría la iniciativa de reestructurar la empresa objetivo, como lo muestra la figura siguiente:

Figura 4 Condiciones básicas a cumplir por la empresa en crisis para ser valorada (se muestra las cinco variables críticas a observar en la empresa objetivo a rescatar, para validar aplicar el modelo de Reorganización Empresarial en toda su dimensión).



Fuente: Los autores con base en cruce de variables calificadas con el 60% de aceptación por parte del panel de expertos consultados.

5.1 Estimación del valor de la empresa en dificultades

Para demostrar la viabilidad de aportar recursos en el rescate de una empresa en dificultades por parte de inversores, los emprendedores estructuradores del rescate deben estimar la capacidad de la empresa de generar valor en el futuro próximo, ello implica probar la capacidad del modelo de responder ante dos aspectos esenciales, primero, medir que al reorganizar una empresa a través de cada una de sus doce variables en un trabajo integral planificado, se consigue hacerla productiva y rentable, y segundo, definir el método para establecer si una empresa en crisis tiene o no un valor económico, elemento este en el que finalmente debe converger el plan de reestructuración, como indicador último a ser evaluado por inversores de juicio experimentado, técnico y crítico adversos al riesgo en mayor o menor medida.

Así, el plan de reorganización debe partir de identificar la capacidad cierta de la empresa de cumplir los requisitos de mercadeo, evaluando si los productos actuales u otros que se puedan elaborar con los recursos de producción disponibles tienen aceptación en el mercado nacional y extranjero, lo que permite decidir la capacidad instalada (CI) a imprimir a la empresa, conduciendo ella a establecer la inversión total (IT) con que debería dotarse, según esta ecuación:

$$IT = APP + IMA + IKT + IGM + ISJ + IPA \quad (1)$$

Cada variable esta forzosamente amarrada a la definición de la capacidad instalada (CI) a imprimir a la empresa a rescatar y se explica en estos elementos:

APP = activos productivos presents. Consistentes en la relación de activos muebles e inmuebles, poseídos por la empresa en crisis, técnicamente valuados, aplicables a producción, comercialización y administración por tener disponibilidad para ser usados con eficiencia. Si la empresa dispone de ellos, siendo útiles a su desempeño, deben incluirse activos intangibles como valor de la marca, contratos de exclusividad para explotar una marca, cartera de clientes, contratos en proceso no cobrados anticipadamente, contratos de titularización en superficies distribuidoras y otras alternativas posibles.

IMA = inversión en mejora de activos. Cubriendo inversiones en reparaciones de activos muebles e inmuebles; adiciones para incrementar cantidad, calidad, rapidez y eficiencia en los procesos de elaboración de los productos o prestación de los servicios; adquisiciones y gastos de puesta a punto para poder producir, tales como hacer distribución de planta, organizar sistemas eléctricos, de acueducto, disposición de residuos y aguas servidas, sistemas de ventilación y otros aspectos. También se incluye posibles compras de activos muebles e inmuebles calculados como indispensables para imprimir a la empresa la capacidad instalada estimada como adecuada para atender la demanda esperada, operar con eficiencia, hacerla competitiva y generar la suficiente riqueza para autofinanciar el desarrollo de la empresa y retribuir a prestamistas y socios.

La IMA no necesariamente debería hacerse, pues emprendedores e inversores podrían estimar que los activos de la empresa en crisis están en buen estado y no es necesario ampliar la capacidad instalada disponible. En este caso, la ecuación de IT quedaría:

$$IT = APP + IKT + IGM + ISJ + IPA \quad (2)$$

IKT = inversión en capital de trabajo. Rubro complejo de definir en cualquier empresa operando o por abrir, en razón a la serie de aspectos que debe contener, pues se enfoca en establecer el dinero necesario, financieramente óptimo, capaz de garantizar la marcha fluida del ciclo operativo de la empresa, al permitirle adquirir materias primas e insumos complementarios; comprar servicios fundamentales como energía, agua, aseo y salubridad pública; junto a la adquisición de acceso a comunicaciones; trabajo de obreros y empleados, concesión de crédito a clientes, pagar servicios de asistencia productiva y de logística, entre

otros tantos hechos ocurridos durante la operación diaria de las empresas. Lo anterior conduce a proponer la ecuación siguiente para calcular el KT:

$$KT = CV_U * Q + CFX + CL_V + CC - CP \quad (3)$$

Dónde: KT, Capital de Trabajo para un período de tiempo (un mes normalmente); CV_u, Costo variable unitario o CV_{upp} (Costo variable unitario promedio ponderado); Q, Cantidad de unidades que se presupuesta producir por periodo (un mes); CF, Costo fijo para un mes; X, Número de meses a cubrirse en costo fijo (CF) (Esto mientras se alcanza punto de equilibrio); Cl_v, Costo Inventario, pudiendo ser de materiales, producto en proceso o producto terminado; CxC, Cuentas por cobrar; y CP, Cuentas por pagar, (se restan para significar que constituyen una disminución de la inversión total a realizar en KT, pues son el monto con el cual la empresa se financiera de sus proveedores).

Indicados los componentes de la ecuación de capital de trabajo (KT), las otras variables de la ecuación de inversión total (IT) que se vienen indicando contenidos en ella son:

IGM = Inversión en generación de marca. Variable está ocupada de establecer el dinero que se debe invertir periódicamente en los sistemas de comunicación para informar al público sobre la empresa y sus productos a efecto de conseguir penetrar y permanecer en el mercado e incrementar ventas en él, gracias a esa comunicación e incentivo a la cadena de distribución y venta y al consumidor final.

ISJ = La inversión en saneamiento jurídico. Constituye los costos que están dispuestos a sumir los nuevos inversores para cerrar todos los procesos jurídicos traídos por la empresa en crisis. Incluye costos de abogado, contadores y financieros que hubiesen prestado servicios en contra o a favor de la firma y que la misma este obligada a cubrir y no haya logrado eliminar mediante negociaciones dirigidas a obtener rebajas y condonaciones de este género de pasivos.

IPA= La inversión en pago a acreedores. Es el valor de las deudas a proveedores, bancos, administración de impuestos y otros a quienes se adeude dineros a la fecha de corte para la intervención de la empresa en crisis.

Una vez se tenga el número concreto que resume los cálculos de la inversión total, derivado de la capacidad instalada definida como la adecuada para competir y generar riqueza y del cálculo del capital de trabajo, puesto ello en un balance general inicial prospectado a una fecha estipulada como de relanzamiento de la firma, los interesados en reflotar la empresa deben

establecer el monto de su aporte de capital individual, que sumado indica el patrimonio o capital propio de la empresa, y el monto que la misma deberá financiar a través de crédito, de ser posible conseguirlo dada la situación de la cual se pretende sacarla.

El valor de la inversión total establecido desencadena el proceso de negociación entre las partes, los socios actuales tienen a su favor el valor de los activos productivos presentes; en contra, el monto de los pasivos de todo orden, siendo la cuestión a definir con los inversores convocados el que se hagan cargo de tales pasivos y la adición monetaria para capital de trabajo y saneamiento de pleitos jurídicos, junto a la generación de marca y mejora de activos, de ser indispensable esto último.

Los pasivos son negociables mediante la invitación a los acreedores a hacerse socios de la empresa a reflotar, o mediante la compra de la deuda por una fracción de su valor por parte de los nuevos inversores, o una combinación de estas dos opciones entre otras posibilidades.

La inversión en capital de trabajo podría resultar ineludible, no obstante, si la empresa en fortalecimiento conserva cuentas por cobrar de clientes con posibilidades ciertas de ser recuperadas, esto podría constituir un alivio para la empresa y sus nuevos dueños, siendo la tarea organizar el recaudo de los dineros, para aplicarlos a financiar el capital de trabajo presupuestado.

El dinero requerido para crear marca e invertir en las mejoras necesarias de activos productivos, junto a los remanentes de pasivos que no pudiesen ser cubiertos al capitalizarlos o cubrirlos mediante la entrega a los acreedores de activos improductivos, serían el valor que se pediría cubrir prioritariamente a los inversores.

Los inversores podrían tener mayor disponibilidad mental a invertir al entregárseles con claridad el valor de la inversión total demandada, la cual considerando los elementos expuestos quedaría expresada dentro de una ecuación cuyas variables son: activos productivos presentes (APP) ; inversión en capital de trabajo (IKT) e inversión en generación de marca (IGM) las cuales nunca podrían ser cero; y una serie de variables las cuales pueden tomar el valor de cero, de no contarse o requerirse de sus componentes, como inversión en mejora de activos (IMA); inversión en saneamiento jurídico (ISJ) e inversión en pago de acreencias (IPA); ello junto a cuentas por cobrar (CC) a favor de la firma; activos improductivos (AI); e incluso inventarios disponibles (ID) tales como mercancías disponibles para la venta, materias primas y hasta producción en proceso. Así, la ecuación de inversión total finalmente quedaría:

$$IT = APP + IMA + (IKT - CC - ID) + IGM + ISJ + (IPA - AI) \quad (4)$$

En la expresión $(IKT - CC - ID)$ se indica que de contarse con cuentas por cobrar e inventarios útiles, entonces la inversión en capital de trabajo requerida se disminuye en sus montos; mientras en $(IPA - AI)$ se connota que de existir activos improductivos con posibles compradores, al realizarse su venta o conmutación por pasivos, este valor se podría disminuir de las deudas aquí llamadas inversión en pago de acreedores.

La inversión total en realidad puede estar condicionada por distintas situaciones, pero más allá de cómo se llegue a su valor en función a los activos fijos, corrientes o intangibles con que cuente la empresa y al igual que sus pasivos, ella es el punto de partida, como se dijo, para iniciar las negociaciones para la reorganización de la empresa, siendo el punto culminante la determinación de su valor, al ser lo que demuestre si la empresa una vez reorganizada y operando, tomara un valor superior a la inversión en ella efectuada.

Propuesta la ecuación para definir la inversión total en una empresa a recuperar, el plan de reorganización avanza desarrollando cada variable del modelo en dirección a corregir las fallas del pasado, organizar el presente y proyectar el futuro, lo que permite colegir que el método apropiado para establecer el valor de una empresa en reorganización es el de los flujos de caja descontados, pues éste, al igual que en una empresa sana, operando generando riqueza, la cual vaya a ser adquirida por inversores de capital, es el que permite visualizar cual puede ser su comportamiento futuro, pues su pasado glorioso ya se fue, y lo que le debe interesar a los nuevos propietarios es como le puede ir en el futuro, justo cuando ellos serán quienes se beneficien o perjudiquen con sus resultados.

Efectivamente, un buen desempeño en el pasado no aseguro el éxito futuro, y viceversa, malos resultados anteriores no impiden generar riqueza en el futuro, por lo que se puede concluir que ambos tipos de empresa, las exitosas y las fracasadas una vez corregidas, se pueden valorar con la técnica indicada, empleando incluso la misma conocida ecuación, que para el caso de las empresas en dificultades, bien podría denominarse “ecuación para definir el valor de la empresa reorganizada” la cual se describe enseguida.

Para definir el valor presente de la empresa reorganizada (VER), se restaría al flujo de caja libre descontado (FCLD) el valor futuro de los pasivos totales presentes (VFPTP), considerando que las deudas o parte de ellas por alguna razón no se pudieron amortizar durante el proceso de reorganización y por ello un monto determinado debió dejarse para su pago posterior, derivado ese pago del flujo de caja operacional de la empresa. La fórmula entonces queda:

$$VER = FCLD - VFPTP \quad (5)$$

Esta ecuación no es ninguna novedad, aunque se esté presentando con la connotación de restar el pasivo acumulado que no se pudo pagar en las negociaciones previas a la reorganización, al flujo de caja libre disponible proyectado de la empresa en reestructuración, como vía para reflotarla, habiéndola valorado creyendo en su potencialidad productiva mediante la técnica de los flujos de caja libre descontados FCLD, pues para hallar el valor de los fondos propios de una empresa, Enrique Quemada Clariana (2006) procede sumando al valor presente de los flujos el valor residual, obteniendo así el valor de la empresa, al que resta el valor de la deuda neta. Este antecedente, base de la contabilidad, lejos de minimizar la conclusión matemática a la que se llegó la enaltece, pues se estima que se tiene respaldo en la propuesta, pues se está acudiendo al fundamento del conocimiento contable, empleado por estudiosos y profesionales consultores de la valoración de empresas cuando de definir el valor que de una empresa en venta se llevara a casa quien la vende.

La ecuación (5), se formaliza presentándola en todos sus componentes, simplemente reemplazando la conocida ecuación para hallar el valor de una empresa en correcta operación, esto es, el flujo de caja libre descontado, y la ecuación para llevar a un valor futuro una suma presente, así:

$$VER = \left(\frac{FCL_1}{(1+K_0)} + \frac{FCL_2}{(1+K_0)^2} + \frac{FCL_3}{(1+K_0)^3} + \dots + \frac{FCL_n}{(1+K_0)^n} + \frac{VR}{(1+K_0)^n} \right) - P(1+i)^n \quad (6)$$

Dónde: el Valor presente de la empresa reorganizada es el conocido Valor Actual de la Empresa (VAE), el cual es igual a la actualización de los distintos flujos de caja libre (FCL) a una tasa de descuento (K_0), más el Valor Residual (VR) de la empresa en el momento n , también actualizado al momento presente a la tasa K_0 . A ese resultado se resta el resultado del valor futuro del pasivo presente (P) que pudiese persistir después de las negociaciones de rescate de la empresa, a la tasa de interés (i) y por el periodo (n) que se pacte con los acreedores con los que no fue posible negociar el comprar la deuda o su incorporación como socios a la empresa en reorganización.

En esta ecuación el Valor Residual (VR) de la empresa en el momento n , también actualizado al momento presente a la tasa K_0 debe calcularse por aparte y una vez obtenido se reemplaza, así:

$$VR = FCLn (1 + g) / (K_0 - g) \quad (7)$$

Dónde: FCL_n es el FCL del último año proyectado, 1 es un factor fijo, K_0 es la tasa de descuento y g es la tasa de crecimiento anual acumulativa, la cual no debe ser mayor a la inflación y surge de:

g =razón de retención de utilidades x rendimiento sobre utilidades retenidas (ROE), esto es, g se obtiene así:

$$g = (\text{Utilidades} - \text{Dividendos}) / \text{Utilidades} \times (\text{Utilidades} / \text{Capital}) \quad (8)$$

Asume la ecuación para calcular el valor de la empresa reorganizada (VER) que:

El pasivo acumulado producto de la crisis que no se pudo pagar no se tiene porque hacerlo con los recursos frescos que lleguen producto de la inyección de capital efectuada por los inversores nuevos y antiguos. El objetivo primario de este recurso es proveer capital de trabajo, recobrar la generación de marca y mejorar la infraestructura de producción si ello hace falta. El beneficio de los tenedores de deuda de la empresa es que saben que ésta ha sido reorganizada y reestructurada financieramente, ampliando ello sus posibilidades de recibir el dinero que se les debe en el futuro próximo, lo que valida la segunda parte de la ecuación.

Ese segundo componente de la fórmula se elimina en caso de haberse pagado la deuda acumulada, bien al capitalizarla convirtiendo a sus tenedores en socios, o mediante su cancelación previa negociación para ganar condonaciones parciales de intereses y capital al ofrecer pago de contado con parte de los recursos inyectados por los nuevos inversores o entrega de activos no requeridos en el plan de producción de la empresa.

El pasivo acumulado en últimas no pagado queda a cargo de la empresa reflatada, quien cancelara mediante un plan de pagos ajustado a su flujo de caja operativo, razón por la cual se pone en la fórmula descontándola con una tasa de interés pactada.

El VER (valor de la empresa reorganizada) alcanzado será el fundamento para convocar a potenciales inversores y lograr que se comprometan con la propuesta inversora, pues un valor significativo será la demostración última de las bondades de la iniciativa emprendedora, pues se habrá demostrado que la empresa es capaz de tomar valor en el tiempo, de aplicarse el plan reformador aquí sustentado.

El VER es en consecuencia la base cierta y sustancial para negociar entre propietarios actuales de la empresa en análisis, con acreedores y emprendedores-inversores, pues estos agentes así podrán encontrar la cifra resumen, definitiva e indispensable, para decidir arriesgar sus tres categorías de recursos: financieros, tiempo y trabajo.

6. DISCUSIÓN DE LOS RESULTADOS

Los citados profesores Caballer y Mellado dicen que la valoración de una empresa es como la búsqueda del santo grial por los caballeros de la mesa redonda, una búsqueda de lo inexistente e insustancial. Si ello es así para una empresa a la que ellos se refieren en correcta operación, la cuestión sin duda se hace más compleja cuando de empresas cerradas o en riesgo de cierre se trata, pues ya algunos autores han indicado que el valor de una empresa cerrada es nulo, siendo esa percepción quizá la mayor limitación para este trabajo, la cual ha sido razón suficiente para que la mayoría de autores en el área de la valoración de empresas no hayan dedicado espacio en sus obras a las empresas en dificultades.

El que se haya acometido aquí esta tarea no responde al deseo de trabajar sobre lo imposible sino a la noción elemental, primaria, que la empresa en crisis puede tener valor, lo que finalmente se puede demostrar aplicando el método propuesto, y no por la opinión de los responsables de este trabajo, si por la opinión razonada y calificada de quienes trabajan con empresas en procesos concursales, de quienes desde la academia estudian el asunto, de los propios empresarios, de algunos autores quienes en sus respetados textos han dejado entrever que la empresa en crisis tiene valor, pero por sobre todo por los ávidos compradores de empresas con falencias que pretenden comprarlas a precios de quema o barata, sabiendo que ellas pueden retornar la inversión que se les aplique.

Planteada la posición general más fuerte encontra de este trabajo en los párrafos anteriores, en cuanto a sus resultados, ciñéndose a la formula VER (valoración de la empresa reorganizada), un observador podría objetarla, debido a que permite descontar el pasivo que la empresa arrastre, lo que significa que los nuevos emprendedores inversores se hacen cargo de la deuda una vez reestructurada la compañía.

A tal objeción a la formula, su respuesta puede plantearse así: si bien al dejar la deuda a cargo de la empresa una vez reorganizada se podría percibir como un premio para sus antiguos dueños, quienes permitieron dejarla llegar al estado de crisis, pudiendo argumentarse que ellos son los legítimos dueños de esa deuda, debiendo por tanto asumirla, es fácil rebatir tal argumento, recurriendo al citado autor Quemada Clariana, quien sostiene que al momento de venderse una empresa, su dueño no puede pretender tomar la cartera y pedir que se la paguen a parte del precio concertado, pues esa cartera favorable a la empresa ya hace parte de ella, es constitutiva de sus resultados operativos anteriores, está incluida en su balance, lo cual es

reciproco para los pasivos. Así como la cartera acumulada, lo positivo, es de la empresa; el pasivo acumulado, lo negativo, también lo es.

A pesar de las limitantes que se puedan advertir en la fórmula para determinar el valor de la empresa, cuando ella queda afectada por todo o parte de las deudas anteriores cuyo pago se deba diferir, ella cumple el objetivo superior de la ecuación, contenido en demostrar que una empresa reorganizada puede generar valor, dadas unas proyecciones de su futuro a un plazo de tres a cinco años, hechas las proyecciones con rigor, ajustándose a su capacidad de producción y la realidad del mercado. Ese es justamente el cometido de valorar la empresa en crisis mediante el esquema y la fórmula dichas, demostrar en cada caso que se podrá retornar la inversión a un costo de capital dado, pagar la deuda postergada y mostrar un valor presente neto de la firma positivo. Si una empresa reorganizada demuestra esto, sin duda ella tiene valor, y por lo tanto puede invertirse en ella.

Si bien la fórmula matemática en últimas destacada para valorar empresas en dificultades convergió en una ya conocida, centrada en medir la generación de flujos de caja libre a futuro, debe exaltarse que ello es válido pues el principio esencial para valorar una empresa radica en las proyecciones financieras que de ella se haga, en vez de la observación de su pasado puesto en estados financieros, pues lo que compra quien adquiere una empresa con buena salud o con falencias es su capacidad de generar riqueza en el futuro, si por supuesto pretende explotarla como unidad de negocio independiente.

Así entonces, la esencia del modelo encontrado no es la fórmula matemática pues ella en su fundamento ya existía, la esencia es la secuencia de doce pasos contenidos en el “Diagrama del Modelo de Reorganización Empresarial”, obtenidos en un proceso metódico de calificación de variables por parte del panel y el análisis del equipo investigador.

7. IMPLICACIONES

El presente trabajo implica para los autores ocuparse de la tarea de difundirlo entre docentes y alumnos ocupados de promover y hacer emprendimiento empresarial, a efecto que este público, en primera instancia, y posteriormente los inversores y empresarios, sean quienes lo evalúen y juzguen si sus resultados son aplicables o no. Sin esto, el esfuerzo de realizar la investigación caería en el vacío.

La difusión obliga a trabajar para conseguir espacios donde los resultados de la investigación sean cuestionados a efecto de hallar los defectos que los autores no han conseguido detectar, para con ello ajustar el trabajo y ahora si avanzar hacia una publicación en medio digital, físico o en ambas, que permita llevar esta propuesta al gran público, donde sea factible llegue a manos de empresarios, emprendedores, inversores, académicos y demás agentes que le puedan llegar a dar la utilidad práctica para la cual fue concebido: contribuir a evitar el cierre definitivo de empresas.

Para conseguir lo anterior, este trabajo debe ser expuesto en toda su dimensión, es decir, se debe mostrar a emprendedores e inversores como acometer el rescate de empresas en dificultades desarrollando cada uno de los doce pasos del modelo de reorganización empresarial, pues aquí, por razones de espacio, solo fue factible desarrollar uno, el referido a la “estimación del valor de la inversión total necesaria para reorganizar la empresa”, lo cual significaba establecer la fórmula para valorar empresas a reorganizar.

Si bien existen otras implicaciones, la de difundir el trabajo, resulta la más difícil y compleja, debido a los recursos que toma ello, materializados en dinero, tiempo y trabajo para los proponentes del modelo.

8. CONCLUSIONES

Las soluciones mostradas en este trabajo permiten plantear las conclusiones siguientes:

En la búsqueda de un sistema para valorar empresas cerradas y las que están operando en dificultades, para desde allí auspiciar su rescate mediante la intervención de emprendedores e inversores, se encontró que para determinar el valor de una empresa en crisis más importante que la fórmula matemática a la que se llegó, es haber encontrado un modelo de análisis cualitativo y cuantitativo que conduzca a reconocer su estado presente y proyectar su futuro, como lo permite la metodología propuesta en este trabajo, que bien podría denominarse “Programa Para Rescatar Empresas” o más simple aún “Reorganización Empresarial”, con cuyas doce variables se puede hacer la reestructuración y proyección para empresas en crisis, midiendo su capacidad de generar riqueza en el futuro.

Estableció el trabajo que el valor de una empresa en crisis no se determina por su pasado, activos intangibles como la marca y sus derivados difícilmente pueden ser tenidos en cuenta en la valoración, aunque si otros activos como contratos poseídos, curva de experiencia y las

sinergias que pueden brindar a potenciales inversores, siendo finalmente el elemento clave para realizar el rescate de la empresa, el monto de la inversión total que se presupueste, en rededor del cual propietarios, acreedores y nuevos inversores deben negociar su participación en el plan de rescate, ello contando con la información suministrada por la ecuación de valoración de empresas en crisis aportada, cuyo resultado se logra habiendo hecho las proyecciones técnicas para obtener el flujo de caja libre descontado.

El trabajo también consiguió concretar la plataforma conceptual para proponer a quienes trabajan en rededor del emprendimiento empresarial y a los propios emprendedores potenciales, que ellos pueden incluir en su menú de alternativas de acción emprendedora-inversora, a las empresas en riesgo de quiebra y aún a las cerradas, pues en ellas se pueden lograr innovaciones y por sobre todo realizaciones de orden productivo, económico y social útiles a inversores y la sociedad toda, disponiendo los emprendedores, a partir de este trabajo, de las herramientas técnicas para intervenir en empresas en crisis.

La recomendación a los lectores y tarea siguiente del equipo investigador, es continuar difundiendo el método hallado entre centros de apoyo al emprendimiento empresarial y los emprendedores, procediendo así a procurar su utilización, base esto de una próxima investigación, radicada en emplear el Modelo de Reorganización Empresarial en casos reales de empresas en crisis, en pos de convalidar el trabajo y afianzarlo como un sistema valido para evitar la liquidación definitiva de empresas.

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Influence of Mobile Telephony on Entrepreneurship in BRICs and Beyond: The Mediator Role of Education

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Abstract

Besides large population and rapid growth (Goldman Sachs 2003) the BRICs - Brazil, Russia, India, China and recently South Africa - have also attracted interest in recent years due to their increased technological diffusion and its impact on domestic entrepreneurship (Saxenian 2002, 2005). The limited studies conducted propose that returning Chinese and Indian migrant entrepreneurs from United States (US) with their 'foreign' acquired human capital (defined as education) are accelerating the process of technological diffusion and innovation in their home countries especially in information and communications technology (ICT) industries (Saxenian 2002, 2005). Yet, to date, previous studies have mainly focused on link between foreign education and innovation mostly in BRICs related countries. Thus, the extent to which domestic education level mediates the impact of technology on 'new business formation rates' across the developing world remains relatively opaque. Considering that mobile phone is one of the key ICT sectors in developing countries, this study examines whether and to what extent 'domestic' education level mediates the relationship between mobile phone diffusion and new business formation rates across the developing world - including BRICs and Non-BRICs Countries. Drawing on Knowledge Spillover Theory of entrepreneurship, the paper posits that due to the recent rise in education in the developing world, mobile phone diffusion will be positively associated with new business formation rates, and education level will facilitate (mediate) the relationship. Utilising Baron and Kenney's mediation test and Sobel's Test on country-level panel data on 66 developing countries, the results clearly demonstrate strong positive effects of education level as a mediator between mobile phone diffusion and new business formation rates not just in Developing Countries (Including BRICs) but also in Non-BRICs Developing Countries with the exception of least developed countries (LDCs). In LDCs, although the role of education level was not found to be significant, mobile phone diffusion was nevertheless found to be strongly associated with new business formation rates thereby suggesting that entrepreneurs in LDCs may simply be using mobile phone to start non-knowledge intensive businesses. Implications are drawn for policy.

Keywords: Entrepreneurship, New Business Formation, Education, Mobile Phones and BRICs.

1. Introduction

The analysis of the potential forces influencing entrepreneurship (defined as new business formation rates) across space has received much attention from the Knowledge Spillover Theory of Entrepreneurship (Acs et al. 2009; Audretsch and Keilbach 2007). The Knowledge Spillover Theory suggests that new business formation is a crucial contextual factor that is important for researchers and policymakers to understand, not just in developed countries but also in developing countries, as an important tool for stimulating growth and development (Acs and Virgill 2010). From this perspective, new business formation and its context are viewed as virtually inseparable (Venkataraman 1997). According to Li and Mitchell (2009) and Audretsch, Keilbach and Liemann (2006), Knowledge Spillover Theory takes the inseparability view of new business formation and context into account, suggesting that entrepreneurial opportunities are more likely to be generated in (1) contexts with higher levels of technology diffusion through networks; and that 2) education level will mediate the positive effects of technology on new business formation. As a result, the new business formation rates can vary across geographic regions, depending upon the context as determined by: technology diffusion and education levels. Hence several studies particularly in developed countries have been carried out that examine the influence of education and technology diffusion (especially through networks) on new business formation rates (Abubakar and Mitra, 2007; Abubakar and Mitra 2010; Acs and Armington 2004). However, according to Acs and Virgill (2010: p.491) “while the Knowledge Spillover Theory of Entrepreneurship was intended for developed economies, the externalities (that is education and networks of technology diffusion) identified by Audretsch, Keilbach and Liemann (2006) are valid for developing countries”. Yet, very little research, if any, has examined the impact of these externalities on new business formation rates across the developing world. The limited research conducted suggests that returning Chinese and Indian migrant entrepreneurs from advanced countries like US, with their ‘foreign’ education are accelerating the process of technological diffusion and innovation in their home countries particularly in information and communications technology (ICT) industries (Saxenian, 2002, 2005). However, to date, previous research has mainly focused on the relationship between education acquired by returning entrepreneurs from foreign countries and its impact on innovation mostly in BRICs related countries (BRICs - Brazil, Russia, India, China and recently South Africa). In contrast, the extent to which ‘domestic’ education level mediates the impact of technology diffusion on ‘new business formation rates’ across the developing world remains relatively unclear.

Accordingly, four major observations in developing countries (not only BRICs) provide the motivation for this study. First, in general, developing countries now have increasingly higher levels of education (UNDP 2010: p.36). For example, on average, a person aged 15 or older in 1960 had less than 4 years of schooling; by 2010 this number had doubled globally and more than tripled in developing countries (from 1.9 years to 6.4) (UNDP 2010: p.36). Secondly, developing countries have the fastest growing mobile phone market in the world (GSMA 2011). Thirdly, published 'micro-level' case studies suggest that the diffusion of mobile phone in developing countries has led to the creation of several innovations and extraordinary large amounts of new businesses not only in BRICs (Stanley 2005; Pyramid Research 2010). Fourthly, estimates suggest that mobile phone is having a considerable 'macro-level' impact on economic growth in developing countries (Deloitte 2007; Kathuria, Uppal, and Mam 2009). Taken together, these observations provide a strong motivation for one to investigate whether education level in a country mediates the positive relationship between mobile phone diffusion and new business formation rates in developing countries (BRICs and beyond). Therefore, this paper raises the following questions: 1) ***Across Developing Countries (including BRICs) in general, does level of education mediate the relationship between mobile phone diffusion and new business formation rates?*** 2) ***In Non-BRICs Developing Countries, does level of education mediate the relationship between mobile phone diffusion and new business formation rates?***

Consequently, this paper examines the questions in three key contexts of developing countries. These are: All Developing Countries (including BRICs), Non-BRICs Developing Countries and Least Developed Countries (LDCs). This allows one to examine whether the importance of education in mediating the relationship between mobile phone diffusion and new business formation rates in developing countries depends on inclusion of BRICs, or whether it matters in Non-BRICs developing countries and LDCs. The presentation of the paper is as follows. Section 2 of the paper outlines the Knowledge Spillover Theory of Entrepreneurship, with particular focus on technology diffusion and education as key factors that matter for new business formation rates across space. Section 3 develops a conceptual framework and hypotheses. The methodology is presented in section 4, and the findings in section 5. The final part presents the conclusion and implications for theory and policy.

2. Theoretical background: Knowledge spillover theory of entrepreneurship

The influential idea that new business formation rates are higher in some countries and regions because of knowledge spillovers is not a completely new phenomenon. Since the 1890s, Sir Alfred Marshall described regions as “having ideas in the air” (Marshall, 1890). According to Breschi and Lissoni (2001: p.258), knowledge spillovers refer to: a) transfer of technology generated within innovative firms to other firms; b) technology that spills over is “freely” available or acquired at less than its original cost by those wishing to search it out (non-excludability), and can be used by many users at the same time (non-rivalry); c) notwithstanding b., technology ideas that spill over are more easily transferred through networks, which are often favoured by being located in the same geographical area; that is, knowledge spillover has a spatial dimension. These suggest that knowledge spillovers happen because knowledge can be transferred to non-investing parties. This implies that entrepreneurs and small firms especially when located close to key knowledge sources can acquire technological ideas more easily, thereby making the new business start-up process easier for spillover beneficiaries (Saxenian 1994; Acs and Armington 2004). According to Acs and Virgill’s (2010), research works on the Knowledge Spillover Theory of Entrepreneurship identify technology diffusion through networks as important channel for knowledge spillovers.

2.1 Technology diffusion through geographic networks and its effect on new business formation rates in advanced economies

Technology diffusion generally describes the process whereby a product or service and the knowledge of its use and application move from a source, such as a large research and development (R&D) firm to a point of reception (for example entrepreneurs), which leads to commercialization often through new start-ups (Bozeman 2000; Acs, 2002). A prominent feature of the Knowledge Spillover Theory is that technology diffusion particularly through geographic networks plays a crucial role in creating opportunities for budding entrepreneurs to create new businesses (Zucker et al., 1998; Stuart and Sorenson, 2003). Consider for example Silicon Valley where the diffusion of internet technology created opportunities for new business formation by countless of entrepreneurs around internet technology, such as Jerry Yang (Yahoo), Larry Page and Sergey Brin (Google Inc.), Marc Pincus (Zynga), Aron Levie (Box) etc. This diffusion of technology according to Knowledge Spillover Theory into new businesses often occurs in spatially bounded networks (Saxenian, 1994; Abubakar, 2013). This is because entrepreneurs often find it easier to leverage social ties necessary to mobilize essential

resources and knowledge when they reside close to the source of the knowledge that spills over (Stuart and Sorenson, 2003). Thus, in advanced economies, technology diffusion particularly through networks has emerged as a major research topic in the literature on knowledge spillovers (Saxenian, 1994; Stuart and Sorenson 2003). It is well known in the Knowledge Spillover theory that technology differences explain a significant part of the variation observed across space in the rates of new business formation (Zucker et al., 1998). This implies that a major determinant of new business formation is technology diffusion in a region or country. This raises the question: what factor affects the rate at which technology diffuses through new business formation in a society? This is an important question that should concern researchers today, because it is a question that matters for policy makers trying to encourage the spread of technology and its impact on new business formation, as a means of creating opportunities budding entrepreneurs.

2.2 The role of education as a mediator between technology diffusion and new business formation in advanced economies

There is a vast literature on the link between technology diffusion and education (Nelson and Phelps, 1966; Foster and Rosenzweig 1995; Doms et al., 1997; Eaton and Kortum, 1999; Xu 2000; World Bank, 2008 etc.), and specifically for mobile phone diffusion in developing countries, education is seen as an important factor (Vodafone, 2005; Nyamba and Molozi, 2012). Scholars for a long time argue that the diffusion of technologies often requires human capital in the form of education (Abromovitz, 1986; Cohen & Levinthal, 1989; Cosar, 2011). Nelson and Phelps (1966) initiated this line of thinking by arguing that education helps people to perceive, evaluate and implement new production techniques and inputs. Human capital refers to an individual's stock of education, experience, skills and intelligence (Mitra, Abubakar and Sagagi 2011). Knowledge Spillover Theory suggests that education can make individuals start new businesses by enabling them to exploit technological opportunities (Audretsch, Keilbach and Liemann 2006; Acs and Virgill 2009). This is because education often gives individuals a feeling of autonomy, and the necessary skills to be able to develop technological opportunities (Acs, 2002; Verheul et al. 2002). Particularly in advanced economies, there is empirical support for this approach. For example, at the micro-level in Italy, a study by Colombo et al. (2004) finds that founders' educational background has a crucial influence on entrepreneurs' ability to start-up technology-based new businesses. At the regional level, a study by Zucker et al (1998) finds that the rise of new biotechnology businesses in the U.S. is intertwined with educational human

capital. And in United Kingdom (UK), based on county-level data on information and communications technologies (ICT) sector of East of England, Abubakar and Mitra (2007) found that networks between university and industry influence new business formation rates across space. And even beyond new businesses, a study by Doms et al. (1997) on manufacturing plants in the U.S. finds that plants with a higher proportion of workers with higher levels of education tend to use more advanced technologies. Thus, research suggests that educational levels can mediate the relationship between technology diffusion and formation of new businesses. Yet, despite this well recognized role, Knowledge Spillover research does not satisfactorily explain whether educational levels also mediate the relationship between technology diffusion and new business formation rates in developing countries. Nonetheless, as pointed out by Acs and Virgill (2010), although Knowledge Spillover Theory was intended for developed economies, the externalities (that is human capital and technology diffusion through networks), identified by Audretsch, Keilbach and Liemann (2006) may be valid for developing countries. Thus, in the next section, this paper will review studies on knowledge spillovers in developing countries (which largely focus only on innovation not new business formation rates).

3. CONCEPTUAL FRAMEWORK AND HYPOTHESES: EDUCATIONAL LEVEL AS A MEDIATOR BETWEEN TECHNOLOGY DIFFUSION AND NEW BUSINESS FORMATION RATES IN DEVELOPING COUNTRIES

Although there is a growing interest in the importance of education and its role as a catalyst in influencing technology based entrepreneurship in developing countries (Acs and Virgill 2010), there is currently only a limited number of studies on the topic in developing countries, most of which focus mainly on 'innovation' rather than 'new business formation rates' (see Table 1 for a summary). Thus, although progress has been made, there is still a lack of macro-level empirical studies on mediating role of level of education in the relationship between technology diffusion and new business formation rates across developing countries.

Table 1: Previous Research on Knowledge Externalities and Innovation in Developing Countries

| Author(s) | Sector/Space | Contribution | Gaps |
|----------------------------|--|---|------|
| Saxenian (2002) | <i>Sector(s)</i> : ICT industries <i>Space</i> : China and India | Case studies on spillover effect of transnational entrepreneurs on upgrading of innovation capabilities in China and India | 1,2 |
| Saxenian (2005) | <i>Sector(s)</i> : ICT industries; <i>Space</i> : China and India | Case studies on spillover effect of transnational entrepreneurs on upgrading of innovation capabilities in Taiwan, China and India | 1,2 |
| Kesidou and Szirmai (2008) | <i>Sector(s)</i> : Software; <i>Space</i> : Uruguay | +ve effect of knowledge spillovers on innovation by Software firms | 1,2 |
| Kesidou and Romijn (2008) | <i>Sector(s)</i> : Software; <i>Space</i> : Uruguay | +ve effect of knowledge spillovers on firms' innovation (particularly through labour mobility, company spin-offs, and networks among innovation actors) | 1,2 |
| Filatovchev et al (2011) | <i>Sector(s)</i> : High-tech; <i>Space</i> : China | +ve knowledge spillover effects associated with returnee entrepreneurs and multinational enterprise (MNE) employee mobility | 1,2 |

- 1) Not focused on new business formation rates in developing countries; 2) Does not investigate whether human capital mediates the link between mobile phone diffusion and new business formation in developing countries

This section there develops a conceptual framework for examining the extent to which educational level mediates the relationship between technology diffusion and new business formation rates in developing countries (that is including BRICs) and beyond BRICs. Thus, the framework is developed in three contexts of developing countries, that is All Developing Countries (Inc. BRICs), Non-BRICs Developing Countries and LDCs.

3.1 The research settings: developing countries

Developing countries are defined as low and middle-income countries (World Bank 2012). The World Bank definition is based on gross national income (GNI) per capita, with low-income countries being those with \$1,025 or less and middle-income countries being those with \$1,026 - \$12,475. Thus, the term 'developing countries' encompasses a diverse group of countries that include leading emerging economies such as BRICs and Next 11 and other least developed

countries, known as LDCs. BRIC refers to ‘large developing countries’ (Goldman Sachs, 2003: p.3) with the potential for growth in the coming few decades, to ‘become a much larger force in the world economy’ (Goldman Sachs 2003: p.3). While South Africa’s population is much smaller than the other four, it was nevertheless included in BRICs because of its economic leadership in Africa (Kahn 2011).

However, beyond BRICs (that is in Non-BRICs developing countries), there are other emerging economies popularly known as the Next-11 (Goldman Sachs 2007), some of which are also beginning to emerge as key off-shoring destinations, such as Egypt, Mexico and Philippines (CGGC 2010). The Next-11 is made-up of: Bangladesh, Egypt, Indonesia, Iran, South Korea, Mexico, Nigeria, Pakistan, the Philippines, Turkey and Vietnam (Goldman Sachs 2007). While the Next-11 may not have the BRICs like impact, they also have the characteristics of rapidly growing populations combined with significant industrial capacity or potential (Goldman Sachs 2007). Also, among the Non-BRICs Developing Countries, there are poorly developed countries such as LDCs. LDC is defined as a country that meets three criteria (UNCTAD 2011): a) A “low-income” criterion, based on a 3 year average estimate of the GNI per capita, with a threshold of \$905 for possible cases of addition to the list, and a maximum of \$1,086 for graduation from LDC status; (b) A “human assets weakness” criterion, involving a composite index known as the Human Assets Index, based on indicators of nutrition, health, school enrolment and literacy; and (c) An “economic vulnerability” criterion, made-up of a composite index known as the Economic Vulnerability Index, based on indicators of natural shocks, trade shocks, exposure to shocks, economic smallness; and economic remoteness. Therefore, these are countries characterized by very challenging environments, as they have some of the lowest levels of development among developing countries (UNCTAD 2011). Thus, developing countries encompass diverse countries with differences in levels of development, such as human development (see Figure 1).

3.2 Mobile phone diffusion, externalities and new business formation

This paper focuses specifically on mobile phone diffusion (as a form of technology diffusion) because considerable theory and empirical research suggests that mobile phones are among the most widely spread technologies in developing countries (Pyramid Research 2010), and have huge influence on economic outcomes in developing countries (Waverman, Meschi and Fuss 2005; Qiang, 2009). As mobile phone diffusion grows, its value to the society and economy also increases (Waverman, Meschi and Fuss, 2005). This is because, the more people connect to a communication network, the more such diffusion creates opportunities for

budding entrepreneurs to start new businesses in the sector (Aker and Mbiti, 2010) and access information, markets, and services faster, which in turn often boosts economic activities and growth (Waverman, Meschi and Fuss, 2005). Therefore, several macro-level studies have examined the economic impact of mobile phones on developing countries and found it to be positive and significant (Waverman, Meschi and Fuss 2005; Qiang, 2009: see Table 2 for a summary).

Table 2: Empirical Studies: Mobile Phones and Economic Performance in Developing Countries

| Author | Context | Findings | Gaps |
|--|--|---|------|
| Waverman, Meschi and Fuss (2005) | 92 developing and developed countries | Impact of mobile telephony on the GDP of developing countries is twice as great as that of developed countries | 1,2 |
| Sridhar and Sridhar (2007) | 63 developing countries | Mobile phones contribute positively to national output, on average, 16.2 percent for all developing countries | 1,2 |
| Muto and Yamano (2009) | Uganda | Mobile phone coverage expansion seems to induce the market participation of farmers in remote areas who produce perishable crops | 1,2 |
| Kathuria, Uppal and Mam (2009) | Indian states | Indian states with higher mobile penetration can be expected to grow faster, with a growth rate 1.2 percent points higher for every 10 percent increase in the mobile penetration rate. | 1,2 |
| Qiang (2009) | 120 developing and developed countries | For every 10 percentage point increase in the penetration of mobile phones, there is an increase in economic growth of 0.81 percentage points in developing countries, versus 0.60 percentage points in developed countries | 1,2 |
| Djiofack and Keck (2009) | 177 countries, 45 of which are Sub-Saharan | 1 percent increase in access to mobile phones is associated with 0.5 percent increase in real GDP per capita | 1,2 |
| Barberousse, Bernard and Pescatori (2009) | Haiti | Data confirms that mobile phone development acts as an engine for economic growth | 1,2 |
| Delloite (2009) | Sudan | 6 percent increase in mobile penetration might be associated with a 0.72 percent of Sudan's | 1,2 |

| | | | |
|---------------------------------|--------|--|-----|
| | | increase in total GDP | |
| Blauw and Franses (2011) | Uganda | Mobile phone use positively impacts economic development | 1,2 |

1) Does not examine at the macro-level whether mobile phone diffusion is positively associated with new business formation 'rates' across developing countries; 2) Does not investigate whether level of education mediates the link between mobile phone diffusion and new business formation rates in developing countries.

In this context, one of the major ways in which mobile phone diffusion impacts on developing countries is through new business formation (Aker and Mbiti, 2010). This is because large mobile phone companies in developing countries create indirect job opportunities for budding entrepreneurs by giving them to start new businesses, such as third party application developers, content providers, recharge card sellers, phone repairers and call center operators (Pyramid Research, 2010; Andjelkovic and Imaizumi, 2012: see Table 3 for examples).

Table 3: Micro-Level Case Studies Linking Mobile Phone Diffusion Networks between Mobile Phone Corporations and Local Entrepreneurs with New Business Formation In Developing Countries

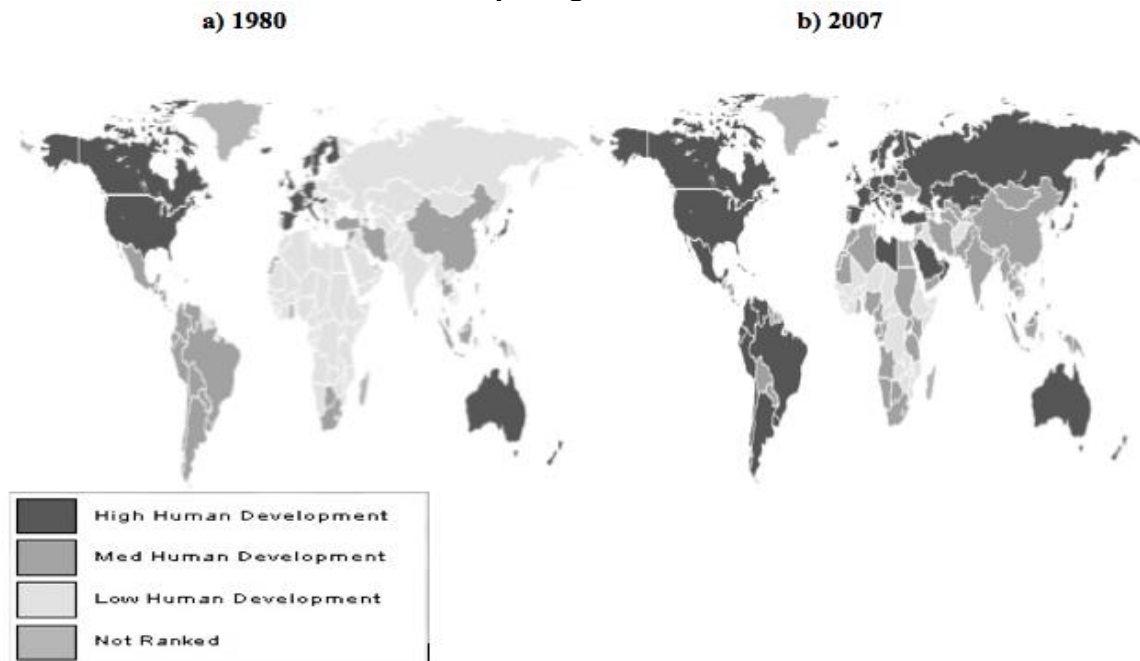
| Author(s) | Country | Networks between Mobile phone corporations and local entrepreneurs | Impact on New Business Formation | Gaps |
|---|-------------|--|--|------|
| World Resources Institute (2007) | Philippines | <i>Smart Communications and Globe Telecom:</i> created financial innovations that allow people to transfer cash from Bank to cell phone. | By 2007, over 1.5 million new entrepreneurs and shops had been created, helping customers with electronic uploads of voice or text messaging units | 1,2 |
| Sey (2008) | Ghana | In 2004, Spacefon (<i>now MTN Ghana</i>) cooperated with local entrepreneurs aimed at penetrating low-income markets. | By 2008, over 25,000 operators had been established around the country by local entrepreneurs | 1,2 |
| Stanley (2005) and UN (2010) | Bangladesh | Grameen started supporting local entrepreneurs in 1997 to set-up phone operating business in Bangladesh targeting lower income markets | By 2008, there were over 350,000 phone operators created by entrepreneurs | 1,2 |
| Pyramid Research | Nigeria | Operators of mobile services in Nigeria have | By 2010, local entrepreneurs had generated over 3 million | 1,2 |

| | | | | |
|---------------|--------------|---|--|-----|
| (2010) | | distribution networks with local entrepreneurs. | indirect related to mobile services. | |
| | Uganda | In 2003, Grameen Foundation, MTN etc launched Village Phone Uganda to promote connectivity and entrepreneurship for the poor. | By 2010 a total of about 35,000 active phone operators, 16,397 of which relate to village phone program. | 1,2 |
| | South Africa | <i>Vodacom</i> , supplies community phones to shops run by local businesses under franchise. | By 2010, a total, of 22,000 entrepreneur phone shops were established. | 1,2 |
| | Kenya | Safaricom in Kenya targeted low-income markets with M-PESA mobile money transfer. | The MPESA agent network expanded dramatically, reaching about 18,000 by April 2010. | 1,2 |

1) Does not examine at the macro-level whether mobile phone diffusion is positively associated with higher network externalities in terms of new business formation 'rates' across developing countries; 2) Does not investigate whether human capital mediates the link between mobile phone diffusion and new business formation rates in developing countries.

However, none of the studies investigates the extent to which level of education matters in the relationship between mobile phone diffusion and new business formation rates in developed countries at the macro-level. Yet, education may matter, especially because the Knowledge Spillover Theory suggests that an educated populace is more likely to have the ability to exploit technologies for new business formation (Zucker et al, 1998; Audretsch, Keilbach and Liemann, 2006).

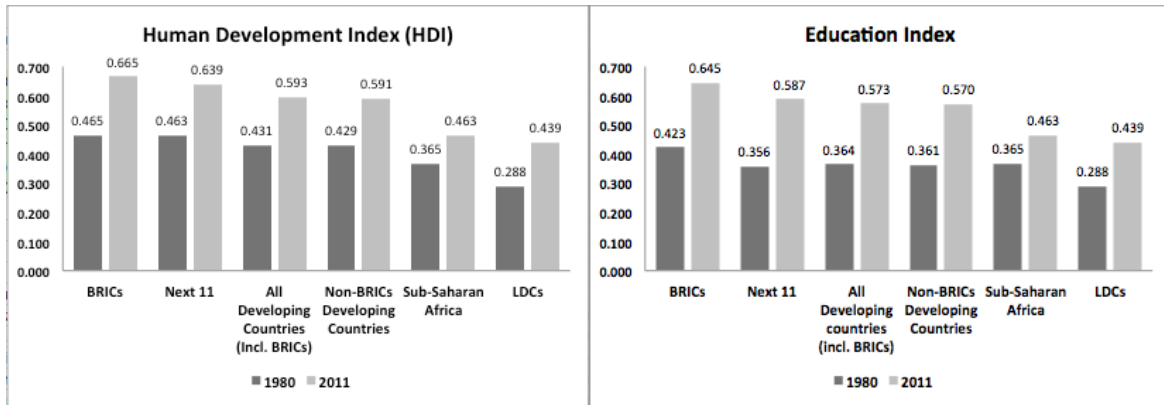
**Figure 1: Rise in Human Development Index in Developing Countries:
Comparing 1980 and 2007**



Source: UNDP (2012)

As shown in Figures 1 and 2a and b, there is a general rise in education across developing countries, with BRICs and Next 11 having higher levels than the average for All Developing Countries in both Human Development Index (HDI) and Education Index. Among the three main groups that form the focus of this study, the group All Developing Countries (Including BRICs) has the highest level of both HDI and Education Index, followed by the Non-BRICs Developing Countries and then LDCs.

Figure 2: Human Development Index & Education Indexes – 1980-2011 (Average)
(a) (b)



Note: The focus of this study are mainly: All Developing Countries Including BRICs), Non-BRICs Developing Countries and LDCs.

Source: UN Human Development Index (UNDP, 2012)

Therefore, considering that: 1) micro-level case studies suggest that mobile phone diffusion has positive externalities for new business formation in developing countries on a large scale (World Resources Institute, 2007; Pyramid Research, 2010); and 2) mobile phone diffusion is mediated by level of education (Abromovitz, 1986; Cohen & Levinthal, 1989; Cosar, 2011); and 3) that education is significantly related to new business formation rates (Zucker et al., 1998; Acs and Armington, 2004; Abubakar and Mitra, 2007), we argue that this proposition is likely to hold not just for BRICs but also Non-BRICs developing countries, considering that there are rising levels of education across developing countries in general even beyond BRICs (UNDP, 2012). Therefore, based on the above, I put forth 3 hypothesis that to test the central proposition:

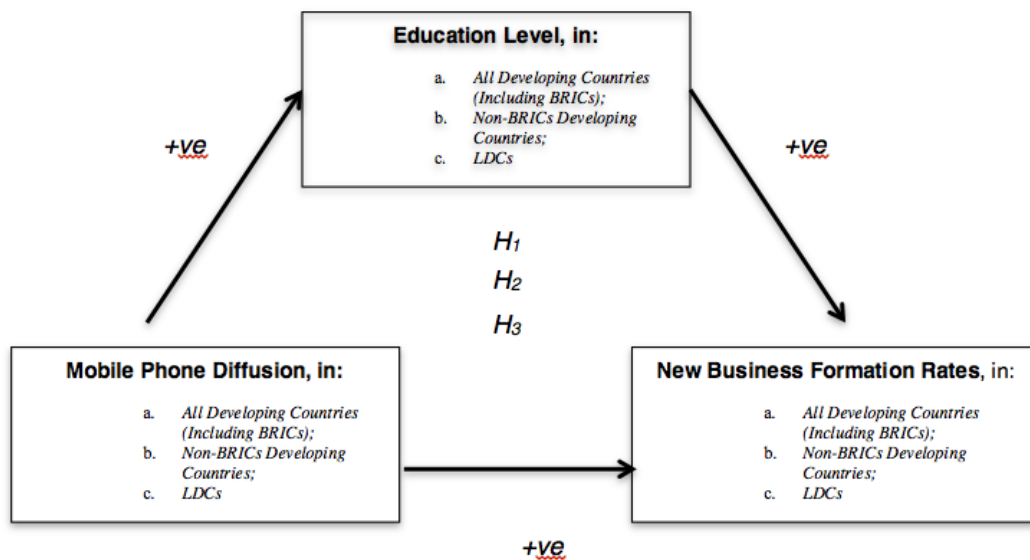
H_1 : In Developing Countries (including BRICs), *Mobile Phone Diffusion* will be positively related to *New Business Formation Rates* and Education Level mediates this relationship.

H_2 : In Non-BRICs Developing Countries, *Mobile Phone Diffusion* will be positively related to *New Business Formation Rates* and Education Level mediates this relationship.

H_3 : In LDCs, *Mobile Phone Diffusion* will be positively related to *New Business Formation Rates* and Education Level mediates this relationship.

Figure 3 depicts the hypothesized relationships. The link between mobile phone diffusion and new business formation rates in developing countries is based on large number of micro-level case studies suggesting that the diffusion of mobile phones through networks between mobile phone operators and local entrepreneurs are generating opportunities for new business formation in developing countries (Stanley, 2005; World Resources Institute, 2007) and Knowledge Spillover literature suggesting that technology diffusion through networks creates opportunities for entrepreneurship (Acs and Virgil, 2009). The role of education in mediating the capabilities of entrepreneurs to utilise technology for new business formation is derived from the argument that technology diffusion often requires education (Abromovitz, 1986; Cohen & Levinthal, 1989; Cosar, 2011; see Section 5.2 of this paper for explanation of control variables).

Figure 3: Conceptual Framework of the Study



4. Methodology

4.1 Sample selection

Panel data set was used to test the hypotheses. The sample under study is made-up of developing countries for which data is available on new business formation rates from *World Development Indicators* (WDI, 2012). Developing countries are defined based on World Bank's classification of low-income countries (those with \$1,025 or less) and middle-income countries (those with \$1,026 - \$12,475.) as developing countries. The sample was selected based on the following criteria: 1) developing countries, that is low and middle-income countries (this ensures

that only developing countries are selected); 2) having data on new business formation rates (so as to ensure that an acceptable measure of entrepreneurship is employed) (Acs and Armington, 2004). Based on the above criteria, a sample of 66 developing countries (out of a total of 144 developing countries) was generated, for which data is available on new business formation rates 2005 – 2009 from *World Development Indicators* (WDI, 2012). Thus, the sample represents 46 percent of the total population of developing countries. The sample is further divided into the following groups: All Developing Countries (Including BRICs), Non-BRICs Developing Countries and LDCs (see Table 4).

Table 4: List of the Countries in Each Sample

| Developing Countries (Inc. BRICs) | Non-BRICs | LDCs |
|--|------------------------|--------------|
| Albania | Albania | Bhutan |
| Algeria | Algeria | Burkina Faso |
| Argentina | Argentina | Cambodia |
| Armenia | Armenia | Ethiopia |
| Azerbaijan | Azerbaijan | Madagascar |
| Belarus | Belarus | Malawi |
| Belize | Belize | Maldives |
| Bhutan | Bhutan | Niger |
| Bolivia | Bolivia | Rwanda |
| Bosnia and Herzegovina | Bosnia and Herzegovina | Senegal |
| Brazil^a | Bulgaria | Uganda |
| Bulgaria | Burkina Faso | Vanuatu |
| Burkina Faso | Cambodia | Zambia |
| Cambodia | Colombia | |
| Colombia | Costa Rica | |
| Costa Rica | Dominica | |
| Dominica | Dominican Republic | |

| | | |
|--------------------------|-----------------|--|
| Dominican Republic | El Salvador | |
| El Salvador | Ethiopia | |
| Ethiopia | Gabon | |
| Gabon | Georgia | |
| Georgia | Guatemala | |
| Guatemala | Indonesia | |
| India^a | Jamaica | |
| Indonesia | Jordan | |
| Jamaica | Kazakhstan | |
| Jordan | Kosovo | |
| Kazakhstan | Kyrgyz Republic | |
| Kosovo | Latvia | |
| Kyrgyz Republic | Lithuania | |
| Latvia | Macedonia, FYR | |
| Lithuania | Madagascar | |
| Macedonia, FYR | Malawi | |
| Madagascar | Malaysia | |
| Malawi | Maldives | |
| Malaysia | Mauritius | |
| Maldives | Mexico | |
| Mauritius | Moldova | |
| Mexico | Montenegro | |
| Moldova | Morocco | |
| Montenegro | Niger | |
| Morocco | Nigeria | |
| Niger | Pakistan | |
| Nigeria | Panama | |

| | | |
|---------------------------------------|-------------|--|
| Pakistan | Peru | |
| Panama | Philippines | |
| Peru | Romania | |
| Philippines | Rwanda | |
| Romania | Senegal | |
| Russian Federation^a | Serbia | |
| Rwanda | Sri Lanka | |
| Senegal | Suriname | |
| Serbia | Tajikistan | |
| South Africa^a | Thailand | |
| Sri Lanka | Tunisia | |
| Suriname | Turkey | |
| Tajikistan | Uganda | |
| Thailand | Ukraine | |
| Tunisia | Uruguay | |
| Turkey | Uzbekistan | |
| Uganda | Vanuatu | |
| Ukraine | Zambia | |
| Uruguay | | |
| Uzbekistan | | |
| Vanuatu | | |
| Zambia | | |

a) Member of BRICs countries. However, the data from World Development Indicators on New Business registration is not available for China, so China is not included in the sample.

4.2 The dependent variables

New Business Formation Rates: The dependent variable for this study is a measure of the national rates of new business formation as measured by the number of new businesses

registered per working age population in the formal sector (Acs and Armington, 2004; World Bank, 2010). The data is drawn from *World Development Indicators* (WDI, 2012), which provides panel data on the number of limited liability firms registered for the first time between 2005 and 2009 (WDI, 2012). The study is limited to new business registration in the formal sector, not only because of lack of cross-country data on informal sector business start-ups (World Bank, 2010) but also because of advantages of formal sector participation, which include greater high-growth potentials (Schneider and Enste, 2000; World Bank, 2010).

4.3 The independent and mediator variables

Mobile Phone Diffusion: To measure mobile phone diffusion across countries, this paper uses data on mobile cellular subscriptions (per 100 people) from 2005-2009 WDI (WDI, 2012). These are subscriptions made for mobile phone services based on cellular technology that gives access to the public switched telephone network (WDI, 2012).

Education Level: To measure the level of education in each country, this study uses the UN Education index, which is one of the most recognized measures of education level across countries. This measures the mean of years of schooling for adults aged 25 years and also expected years of schooling for children of school entering age. The data for the Education index was obtained from UNDP's Human Development Index for the years 2005-2009 (UNDP, 2012).

4.4 Controls: other factors that may affect new business formation rates in different developing economy contexts

In order to ensure rigorous tests of the hypothesized relationships, this study uses a range of control variables on other factors that may affect new business formation rates in different developing economy contexts. Since the number of new businesses in each geographical area or country would tend to be proportional to the size of the area (Acs and Armington, 2004), control is applied for the size of country by using numbers of new businesses 'per working age population' (WDI, 2012). This is because **working age population** is preferred to population or employment as a size indicator, because it is a better measure of the number of potential entrepreneurs (Acs and Armington, 2004: p.250). This labour market approach has a particular appeal in that the entrepreneur starting a new business is assumed to live in the same geographic area as the new business and to have benefited from spillovers within that

geographic area (Acs and Armington, 2004). Using controls for working age population is particularly important especially when BRICs are considered in the sample, because large workforce is considered as one of the key determinants of the economic performance of BRICs (Goldman Sachs, 2003). A control variable for ***Migrant Returnees from Developed Countries*** was also included into the analysis, since returning migrants from developed countries may also contribute to entrepreneurship in developing countries (Saxenian, 2005). This again is particularly important because some studies in some BRICs countries and some emerging countries have observed that migrants in developed countries are contributing to entrepreneurial experimentation and upgrading in their home countries (Saxenian, 2005; Yang, 2005; Wahba and Zenou, 2012). The data for *Migrant Returnees from Developed Countries* was obtained from OECD StatExtracts - 2005-2009, data on outflows of foreign population from OECD countries (OECD, 2012). Controls are also included for *University Research*, because the Knowledge Spillover Theory argues that it is an important input in the entrepreneurship process as it generates the new knowledge needed for new businesses formation (Audretsch, Lehmann and Warning, 2005). *University Research* is measured using data on number of scientific and technical journal articles published, which was obtained from *World Development Indicators* 2005-2009 (WDI, 2012). Also, control for ***Population Growth*** was added because a growing population often increases the supply of potential founders of new businesses, or even growth in existing businesses (Acs and Armington, 2004). This is especially important because some LDCs are included in the sample, and economic performance in LDCs may be affected by population growth (UNCTAD, 2011: p.3). The data was obtained from *World Development Indicators* 2005-2009 (WDI, 2012). In addition, control was applied for varying rates of ***Economic Growth*** across the developing countries, as research suggests that economic growth as measured by GDP growth may influence entrepreneurship (Wong, Ho and Autio, 2005). Economic growth was measured using GDP growth, as reported in data from *World Development Indicators* 2005-2009 (WDI, 2012). Further, controls are also applied for ***Foreign Direct Investment (FDI)***, because research suggests that FDI influences entrepreneurship in some developing countries like China (Fu, 2008). FDI was measured using data on FDI, net inflows from *World Development Indicators* 2005-2009 (WDI, 2012).

4.5 Analytic methods and robustness

Baron and Kenney's (1986) test of mediation and Sobel's (1982) Test of indirect effects were both used for the analysis in order to ensure robust results. Baron and Kenney's (1986) test of

mediation involves establishing four conditions: 1) **Step One:** *The Independent Variable* (that is Mobile Phone Diffusion) is significantly related to the *Dependent Variable* (that is New Business Formation Rates); 2) **Step Two:** *The Independent Variable* (that is Mobile Phone Diffusion) is significantly related to the *Mediator Variable* (Education Level); **Step Three:** *The Mediator Variable* (Education Level) is significantly related to *the Dependent Variable* (that is New Business Formation Rates); **Step Four:** When controlling for the effects of the *Mediator Variable* (Education Level) on *Dependent Variable* (that is New Business Formation Rates), the effect of the *Independent Variable* (that is mobile phone diffusion) on the *Dependent Variable* (that is New Business Formation Rates) is no longer significant. Baron and Kenney's procedure is a common approach used to test mediators (Berger, Cunningham and Kozinets, 1999; Suliman, 2002; Preacher and Hayes, 2004; Zhu, Chew and Spranger, 2005). The regressions are based on ordinary least squares (OLS). Hierarchical regressions were also in testing the Steps 3 and 4 of Baron and Kenney's procedure.

Table 5 presents descriptive statistics for the key variables. The results reveal some important findings in relation to the key variables (that is *New business formation rates, Mobile phone diffusion rates and Human Capital*). First, the full sample containing ALL DEVELOPING COUNTRIES (INC. BRICS) has only slightly higher values than the sample containing NON-BRICS DEVELOPING COUNTRIES in relation to the key variables. Thus, although the ALL DEVELOPING COUNTRIES (INC. BRICS) sample appears to have slighter higher values, the difference does not appear to be much, in comparison to the NON-BRICS DEVELOPING COUNTRIES sample. This is likely because of the existence of other emerging economies such as the Next11 in the NON-BRICS DEVELOPING COUNTRIES sample. Secondly however, the sample containing LDCs appears to have significantly lower values in comparison to ALL DEVELOPING COUNTRIES (INC. BRICS) in all the key variables (that is *New Business Formation Rates, Mobile Phone Diffusion and Human Capital*). This suggests considerably lower levels of *New Business Formation Rates, Mobile Phone Diffusion Rates and Human Capital* in LDCs.

Table 5: Key Variables: Summary Statistics for developing countries

| | ALL DEV. COUNTRIES (INC. BRICS) | | | NON-BRICS DEV. COUNTRIES | | | LDCs | | |
|---|------------------------------------|----------|-----------|-----------------------------|----------|-----------|-------------|----------|-----------|
| | <i>Obs.</i> | Mean | S.D. | <i>Obs.</i> | Mean | S.D. | <i>Obs.</i> | Mean | S.D. |
| New Business Formation Rates | 317 | 1.8315 | 2.35147 | 298 | 1.8254 | 2.39544 | 64 | .7942 | 1.42972 |
| Mobile Phone Diffusion Rate | 325 | 63.7149 | 39.56118 | 305 | 63.0114 | 39.43357 | 65 | 23.6761 | 29.74651 |
| Education Level | 310 | .6257 | .16527 | 290 | .6248 | .16753 | 55 | .3749 | .13013 |
| GDP Growth | 330 | 5.1531 | 5.39840 | 310 | 5.1710 | 5.47036 | 65 | 6.6120 | 4.44473 |
| Population Growth | 330 | 1.2145 | 1.08715 | 310 | 1.2400 | 1.10411 | 65 | 2.5419 | .67489 |
| Scientific and Technical Journal Articles | 325 | 25.6812 | 33.58535 | 310 | 24.1141 | 32.75131 | 65 | 3.9835 | 3.65166 |
| FDI, Net Inflows | 323 | 3.9907E9 | 8.43611E9 | 308 | 2.6233E9 | 4.47590E9 | 65 | 3.0721E8 | 3.33341E8 |
| Migrant Returnees from Developed Countries | 325 | .4066 | .68537 | 310 | .4205 | .69861 | 65 | .0819 | .11473 |

5. RESULTS: TESTING FOR MEDIATION USING BARON AND KENNEY'S PROCEDURE

5.1 Step One

First, based on Baron and Kenney's (1986) procedure, the relationship between *Mobile Phone Diffusion* (independent dependent variable) and *New Business Formation Rates* (dependent variable) is investigated. Therefore, the standardised regression coefficient (beta) is assessed to determine the size of the relationship and whether it is significant. I employ several control variables, and the analysis for each research context is carried-out separately. If this association

is not significant, there is no mediation as there is no relationship to mediate. Different results are presented in Table 6 for ALL DEVELOPING COUNTRIES (INC. BRICS) and NON-BRICS DEV. COUNTRIES and LDCs based on Baron and Kenney's Step 1 procedure for testing mediation (Baron and Kenney's, 1986; Zhu, Chew and Spranger, 2005). The Table shows the Adjusted R^2 for ALL DEVELOPING COUNTRIES (INCLUDING BRICS) ($Adj. R^2 = .147$) and NON-BRICS DEVELOPING COUNTRIES ($Adj. R^2 = .137$) and LDCs ($Adj. R^2 = .440$). Although only a small amount of variance is explained in *New Business Formation Rates* by *Mobile Phone Diffusion*, this Table shows that the relationship is significant for ALL DEVELOPING COUNTRIES (INCLUDING BRICS) ($F = 11.231, p < .001$) and NON-BRICS DEVELOPING COUNTRIES ($F = 10.045, p < .001$); and LDCs ($F = 10.820, p < .001$). Thus, in all the three contexts, the relationship between *Mobile Phone Diffusion* (independent dependent variable) and *New Business Formation Rates* (dependent variable) appears to be significant.

Table 6: Mobile Phone Diffusion and New Business Formation Rates in Developing Countries

| | ALL DEVELOPING COUNTRIES (INCLUDING BRICS) | NON-BRICS DEVELOPING COUNTRIES | LDCs |
|-----------------------------------|---|--|--|
| | New Business Formation Rates (Model 1) | New Business Formation Rates (Model 1) | New Business Formation Rates (Model 1) |
| Mobile Phone Diffusion | .185** (2.788) | .178*** (2.629) | .418*** (3.353) |
| Education Level | | | |
| GDP Growth | .064 (1.219) | .060 (1.108) | .418*** (3.353) |
| Population Growth | -.103 | -.096 | .087 |

| | | | |
|---|--------------------|--------------------|------------------|
| | (-1.530) | (-1.401) | (.933) |
| Scientific And Technical Journal Articles | .046 (.705) | .037** (.557) | -.087 (-.829) |
| FDI, Net Inflows | -.002 (-.046) | -.044 (-.817) | -.066 (-.711) |
| Migrant Returnees From Developed Countries | .188*** (3.191) | .200*** (3.292) | -.097 (-.756) |
| Constant | (2.215)* | (2.273)* | (.015) |
| F | 11.231*** | 10.045*** | 10.820*** |
| Obs. | 358 | 342 | 76 |
| Adjusted R² | .147 | .137 | .440 |

*Sig. at the 0.1 level; *Sig. at the 0.05 level; **Sig. at the 0.01 level; ***Sig. at the 0.001 level (2-tailed)

5.2 Step Two

Second, the relationship between *Mobile Phone Diffusion* and *Education level* is tested and the beta examined for its size, its direction and significance. Again, many control variables are employed and each research context is analysed separately. If this relationship is not significant, then the hypothesised role of Education Level as a mediator cannot hold. Table 7 below presents the results. Separate results are presented for ALL DEVELOPING COUNTRIES (INC. BRICS) and NON-BRICS DEVELOPING COUNTRIES and LDCs. This is based on Baron and Kenney's Step 2 procedure for analysing mediation (Baron and Kenney's, 1986; Zhu, Chew and Spranger, 2005). Table 7 depicts the Adjusted R² for ALL DEVELOPING COUNTRIES (INCLUDING BRICS) (*Adj. R² = .584*) and NON-BRICS DEVELOPING COUNTRIES (*Adj. R² = .582*) and LDCs (*Adj. R² = .486*). The findings suggest that *Mobile Phone Diffusion* is significantly related to the *Education Level* for ALL DEVELOPING COUNTRIES (INCLUDING BRICS) ($F = 71.751, p < .001$) and NON-BRICS DEVELOPING COUNTRIES ($F = 67.710, p$

<.001); and LDCs ($F = 9.507, p <.001$). Therefore, in all the research contexts, the relationship between *Mobile Phone Diffusion* and *Education level* appears to be significant.

Table 7: Mobile phone diffusion is significantly related to the Education Level in Developing Countries

| | ALL DEVELOPING COUNTRIES (INCLUDING BRICS) | NON-BRICS DEVELOPING COUNTRIES | LDCs |
|--|---|-------------------------------------|-------------------------------------|
| | Education Level <i>(Model 1)</i> | Education Level <i>(Model 1)</i> | Education Level <i>(Model 1)</i> |
| Mobile Phone Diffusion | .244*** (4.745) | .223*** (4.268) | .406* (2.211) |
| Education Level | | | |
| GDP Growth | -.007 (-.167) | -.005 (-.128) | .016 (.158) |
| Population Growth | -.575*** (-11.020) | -.592*** (-11.116) | -.433*** (-3.448) |
| Scientific And Technical Journal Articles | .060 (1.231) | .038 (.780) | .301* (2.344) |
| FDI, Net Inflows | -.036 (-.902) | .059 (1.468) | .363*** (3.636) |
| Migrant Returnees From Developed Countries | -.019 (-.433) | -.023 (-.503) | -.315 (-1.669) |
| Constant | (26.664)*** | (26.228)*** | (5.915)*** |
| <i>F</i> | 71.751*** | 67.710*** | 9.507*** |
| <i>Obs.</i> | 303 | 288 | 55 |
| Adjusted R^2 | .584 | .582 | .486 |

*Sig. at the 0.1 level; *Sig. at the 0.05 level; **Sig. at the 0.01 level; ***Sig. at the 0.001 level (2-tailed)

5.3 Steps Three and Four

Finally, a hierarchical regression is performed in two steps. At Step Three of Baron and Kenney, the association between *Education Level* and *New Business Formation Rates* in Developing Countries is examined in the three research contexts. At Step Four, the relationship between *Mobile Phone Diffusion* and *New Business Formation* (tested earlier in Step One above) is examined again.

Partial vs. full mediation: The beta for Step Four is now examined. If *Education Level* is indeed a mediator, then the significant association between *Mobile Phone Diffusion* and *New Business Formation* observed in Step One (above) should no longer be significant. But if the regression coefficient is considerably reduced at the final step, but remains significant, then that implies partial mediation. Table 8 shows the two-step analysis. For ALL DEVELOPING COUNTRIES (INCLUDING BRICS), at Step Three, *Education Level* explains 26.4 percent of the variance in *New Business Formation Rates* ($p < 0.001$). At Step Four, the effect of *Mobile Phone Diffusion* is reduced to only being significant at ($p < 0.1$). Therefore, the final step suggests partial mediation for ALL DEVELOPING COUNTRIES (INCLUDING BRICS). For NON-BRICS DEVELOPING COUNTRIES at Step Three, *Education Level* explains 26.9 percent of the variance in *New Business Formation Rates* ($p < 0.001$). At Step Four, the effect of *Mobile Phone Diffusion* is reduced to only being significant at ($p < 0.1$). Therefore, the final condition for establishing partial mediation has also been met for NON-BRICS DEVELOPING COUNTRIES. For LDCs at Step Three, *Education Level* explains 37.7 percent of the variance in *New Business Formation Rates* ($p < 0.001$). At Step Four, *Mobile Phone Diffusion* still adds significantly to the variance explained ($p < 0.001$). Therefore unlike the other research contexts, for LDCs the final condition for establishing mediation has 'not' been met (see Figure 4a,b and c for a summary of empirical results).

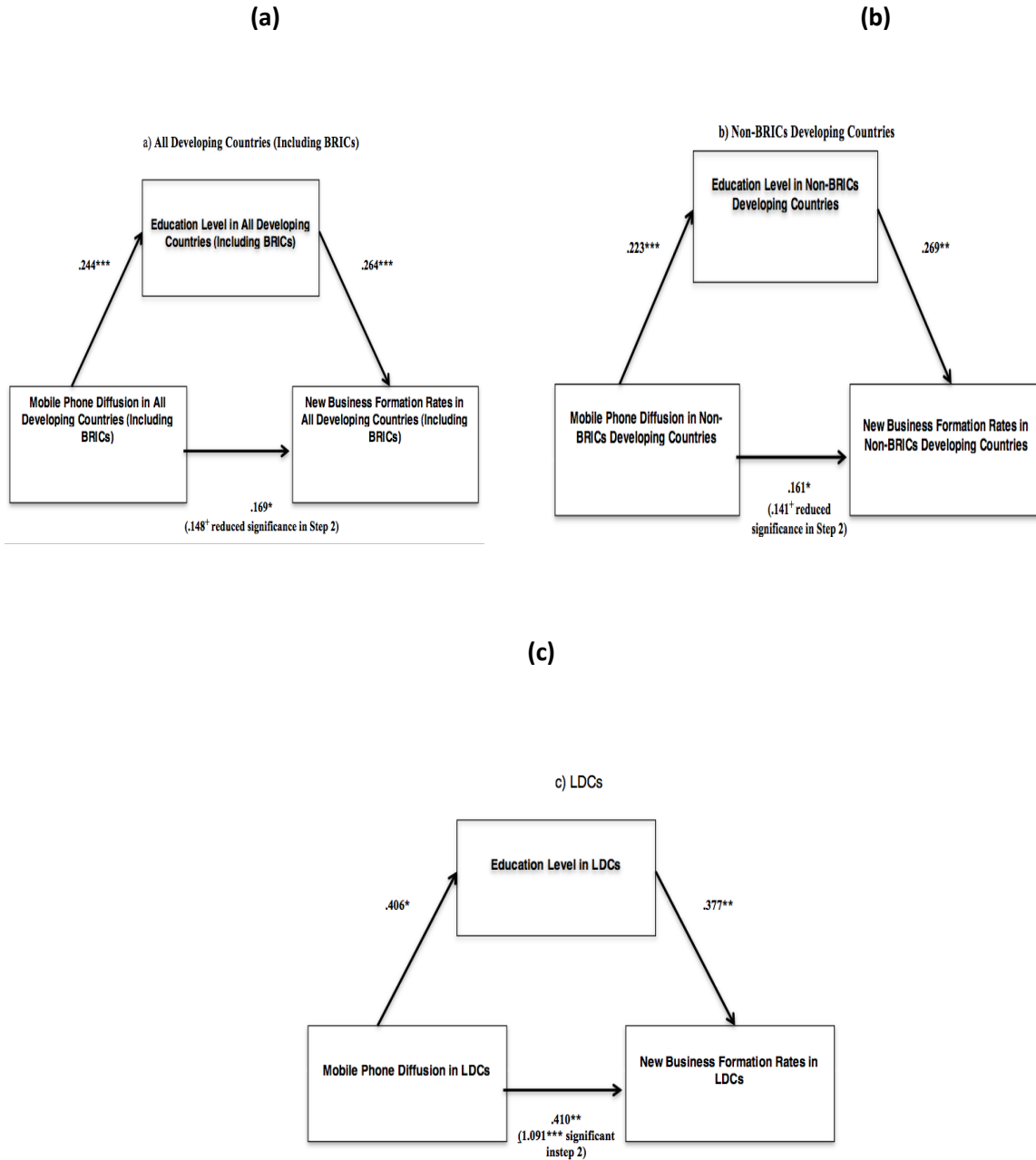
Table 8 Education Level as Mediator between Mobile Phone Diffusion and New Business Formation Rates in Developing Countries

| | ALL DEVELOPING COUNTRIES (INCLUDING BRICS) | | NON-BRICS DEVELOPING COUNTRIES | | LDCs | |
|---|---|---|------------------------------------|---|------------------------------------|---|
| | Education Level <i>(Step 1)</i> | New Business Formation <i>(Step 2)</i> | Education Level <i>(Step 1)</i> | New Business Formation <i>(Step 2)</i> | Education Level <i>(Step 1)</i> | New Business Formation <i>(Step 2)</i> |
| Mobile Phone Diffusion | | .148+ (1.927) | | .141+ (1.819) | | 1.091*** (10.087) |
| Education Level | .264*** (3.218) | .221** (2.604) | .269** (3.170) | .229** (2.631) | .377** (2.662) | .096 (1.140) |
| GDP Growth | .072 (1.318) | .106+ (1.847) | .071 (1.264) | .102 (1.745) | .058 (.585) | .195** (3.366) |
| Population Growth | -.029 (-.332) | .003 (.029) | -.012 (-.133) | .020 (.221) | -.155 (-1.118) | -.045 (-.569) |
| Scientific And Technical Journal Articles | .050 (.707) | .019 (.271) | .042 (.603) | .014 (.200) | .119 (.876) | .131+ (1.720) |
| FDI, Net Inflows | .008 (.137) | .003 (.047) | -.058 (-.983) | -.061 (-1.039) | -.182 (-1.587) | -.120+ (-1.845) |
| Migrant Returnees From Developed Countries | .202** (3.167) | .195* (3.067) | .216*** (3.278) | .210** (3.186) | .325* (2.269) | -.404*** (-3.726) |
| Constant | (-1.023) | (-1.306) | (-1.019) | (-1.313) | (-.350) | (-1.275) |
| Obs. | 291 | 291 | 277 | 277 | 54 | 54 |
| Adjusted R² | .170 | .178 | .162 | .169 | .506 | .843 |
| R Square | .187 | .198 | .180 | .190 | .562 | .864 |
| R Square | .187 | .011 | .180 | .010 | .562 | .301 |

| | | | | | | |
|-----------------|-----------|--------------------|----------|--------------------|-----------|------------|
| Change | | | | | | |
| F Change | 10.888*** | 3.714 ⁺ | 9.899*** | 3.309 ⁺ | 10.060*** | 101.757*** |

⁺Sig. at the 0.1 level; *Sig. at the 0.05 level; **Sig. at the 0.01 level; ***Sig. at the 0.001 level (2-tailed)

Figure 4: Summary of Empirical Results



5.4 Sobel Test and the indirect effects

The Baron and Kenney's (1986) procedure utilised above does not indicate whether or not the indirect effect of the *Mobile phone diffusion* through the *Education Level* is significant. The

Sobel Test (Sobel, 1982) can be used to test whether the indirect effect of the *Mobile Phone diffusion* on the *New business formation rates* through the *Education Level* is significantly greater than zero. The Sobel test entails the use of unstandardised regression coefficients for the effects of the independent variable (Mobile phone diffusion) on the Mediator Variable (Education Level) and the Mediator Variable (Education Level) on the Dependent Variable (New business formation rates) and their standard errors. The unstandardised coefficients and their standard errors for the relationship between *Mobile phone diffusion* and *Education Level* for ALL DEVELOPING COUNTRIES (INCLUDING BRICs) are: (unst. coefs: 0.001; Std. Error: 0.000); NON-BRICs DEVELOPING COUNTRIES (unst. coefs: 0.001; Std. Error: 0.000); LDCs (unst. coefs: 0.002; Std. Error: 0.001). The unstandardised coefficients and their standard errors the relationship between Education Level and New business formation rates) are: ALL DEVELOPING COUNTRIES (INCLUDING BRICs) (unst. coefs: 3.750; Std. Error: 1.165); NON-BRICs DEVELOPING COUNTRIES (unst. coefs: 3.838; Std. Error: 1.211); LDCs (unst. coefs: 2.962; Std. Error: 1.112). A Sobel test performed for ALL DEVELOPING COUNTRIES (INCLUDING BRICs) shows that the indirect effect of *Mobile phone diffusion* on *New business formation rates* through *Education Level* is significant ($p < 0.001$). For NON-BRICs DEVELOPING COUNTRIES, the indirect effect of *Mobile phone diffusion* on *New business formation rates* through *Education Level* is significant ($p < 0.001$). In contrast, for LDCs the indirect effect of *Mobile phone diffusion* on *New business formation rates* through *Education Level* is not significant ($p < 0.1$).

6. Conclusions and implications

This paper examines the extent to which *Education level* mediates the relationship between *Mobile phone diffusion* and *New business formation rates* in three contexts: ALL DEVELOPING COUNTRIES (INCLUDING BRICs), NON-BRICs DEVELOPING COUNTRIES and LDCs. The central finding of the paper is that while the relationship between *Mobile phone diffusion* and *New business formation rates* in ALL DEVELOPING COUNTRIES (INC. BRICs) follows a positive pattern, that relationship appears to be partially mediated by *Education level* of the developing countries. This finding also appears to hold even in NON-BRICs DEVELOPING COUNTRIES, which is likely due to existence of other emerging economies like the Next11 highlighted by Goldman Sachs (2007). However, in the context of LDCs, it was found that although the relationship between *Mobile phone diffusion* and *New business formation rates*

also follows a positive pattern, the relationship is not appear to be significantly mediated by *Education Level*.

6.1 Implications for theory and policy

The analysis contributes to the Knowledge Spillover Theory of entrepreneurship in developing countries in at least three important ways. First, it establishes a macro-level connection (for the first time) between a developing country's level of technology, that is, *Mobile phone diffusion* and the country's *New business formation rates*. Secondly, the paper suggests that although the relationship between *Mobile phone diffusion* and *New business formation rates* in developing countries is mediated by *Education level* even in NON-BRICS DEVELOPING COUNTRIES, the role of *Education Level* as a mediator of the relationship does not appear to be significant in LDCs. Thus, within developing countries, differences in contextual settings need to be taken into account when analyzing the role of *Education Level* in mediating the link between *Mobile phone diffusion* and *New business formation rates*. Thirdly, the empirical analysis is based upon rigorously collected authoritative multi-country data from WDI that answers the concern voiced by researchers for the dearth of macro-level empirical research on viability of Knowledge Spillover Theory across developing countries (Acs and Virgill, 2010).

The findings imply that governments in developing countries may need to consider developing appropriate policies for encouraging mobile phone corporations to network with local entrepreneurs, which can result in more opportunities for new business formation for local entrepreneurs. Secondly, the findings suggest that such mobile phone start-ups in LDCs may simply be non-knowledge-based mobile start-ups, which contrasts with those in emerging economies, that is BRICs and Next11 where education appears to significantly matter. As such governments in LDCs may wish to strengthen the relationship between *Mobile phone diffusion* and *New business formation rates* by making it more knowledge-based through encouraging education especially related to mobile phone technology. Such education development may have the effect of building the citizen's capacity to become knowledge-based innovative entrepreneurs in the mobile phone industry (Acs and Armington, 2004).

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Sub-Theme 6: Social Responsibility and Social Innovation

13th International Entrepreneurship Forum

Entrepreneurship and Development: The Idea of Inclusive Opportunity Creation

31 July – 2 August, 2014

**Exploring a methodology, based on Participatory Action Research to
develop social innovation: Case Study: Saving water in the
“Paramo” Guavio.**

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Abstract

Water scarcity is an issue which preoccupies often many organizations in the world. In Colombia, particularly in the Midwest, we have a natural setting where is "produced" a significant amount of water resources: the P-ramo of Guavio. This moor produces 70 % of the water consumed by the inhabitants of Bogotá, the Colombian capital city, which has a population closer to 8 million. It also is the generator of 10% of the energy used by the people around the country that is about 5 million of people. However, in spite of the wonderful opportunity that represents this moor, have occurred some droughts in the region that does foresee a future few viable. The organization of Engineers without Borders Colombia has been operating in this context.

The name EWB- Ingenieros sin Fronteras has been adopted by organizations in various countries. They are organizations that promote collaborative work between engineerís actors and other community and government stakeholders in order to support the solution of problems in vulnerable communities through a social approach with social innovation elements. In Colombia, since 2006 is given the name Ingenieros sin Fronteras Colombia (ISFCOL) to the home country organization of EWB, this is led by two universities: Corporaci n Universitaria Minuto de Dios (Uniminuto) and the Universidad de los Andes (Uniandes). The organization was created in a joint effort by a group of professors from both institutions in seeking to create spaces that allow, from academia, to develop initiatives for solutions to problems affecting Colombian communities within the framework of an institutional arrangement and an informal working practice. The main proposal is centred upon the creation of autonomous and social entrepreneurial spaces through which students and professionals from the two universities develop methodologies and activities that allow them to be apply in real Colombian situations. Likewise, the work is developed with the community, hence its local sense and historical knowledge is the guiding principle in the development of any of the initiatives developed. That dynamic favor the social empowerment and the development of the entrepreneurial spirit in each one of the participants in the projects.

In the exposed case, Engineers without Borders has developed a viable engineering solution that helped improve the quality of life of the region. The group designed an ISFCOL methodology, based on Participatory Action Research, which through mobile phones and internet technologies has managed, along with children and schools in the region the developing of an entire system to optimize water use.

Based on this study and its results the question addressed in this article is, How do the use of participative methodologies affect the development of social entrepreneur skills in rural communities and also the development of social innovations?

According to what has been previously mentioned, this article will present the methodology and how the partnership between university and school teachers and children has achieved an innovative water-saving model.

Keywords: Environment, Survival, Social innovation

1. Introduction

Guavio region in Colombia is an area with great natural resources. Perhaps the greatest of riches is the moorland which has one of the most abundant water reserves in Latin America. The water reserve is about 70% of the water needed for the 8 million inhabitants of Bogotá, the capital; further, thanks to the hydro area is generated near the 105 power all Colombia (about 40 million).

Two major problems in the region are presented. For one, always associated with the topic of water resources in the era of decreased rainfall starts slowly observe water shortages because, on the one hand, there are no systems, water reservoir, and there is a general awareness saving of the same. Furthermore, although there is a wide possibility of development associated with natural resources, young people in the region have no opportunities for economic development and prefer to migrate to Bogotá and other major cities of Colombia.

In this scenario works group Engineers Without Borders Colombia, a team of faculty- alumni-two engineering students of Engineering Faculties of the Universities of Los Andes and the Corporación Universitaria Minuto de Dios. This group seeks to create, in conjunction with vulnerable communities, opportunities for development and local social innovation. In the region of Guavio group Engineers Without Borders Colombia, started to develop joint proposals with the community to generate participatory schemes to develop innovative systems through which water management is optimized and interesting development opportunities are generated for youth in the region.

2. Context of the Study

According to the National Planning Department (DNP, 2007) Colombia is a country of exceptional natural and cultural richness and diversity. This was the basis on which the nation and its regions have built their strategies. Natural resources-soil, water, forests, aquatic resources, minerals, oil, landscape, etc. have been used and exploited to generate economic growth and social welfare. That higher economic growth has contributed significantly to improving the income and welfare of Colombians in recent decades. This situation has been accompanied by an environmental deterioration (problems such as deforestation, loss of biodiversity and water and air pollution).

The moors, water regulator ecosystem, has been affected by unregulated economic development. Moors are in imminent danger like other ecosystems by economic exploitation. In addition, there is a high probability of water rationing in Bogotá and some surrounding municipalities too.

The region of Guavio –Cundinamarca (near Bogotá) consists of several municipalities: Guasca, Gachetá, Ubalá, Gachalá, Junín, Guatavita, La Calera y Gama (University of Rosario, 2009). It is a region that is characterized by its natural resources and diverse climatic zones, water and moors tributaries are located in this region. (Chamber of Commerce of Bogotá & CEPEC, 2009).

As a consequence of this, some people have a wrong perception of water abundance. Those effects, such as climate change, unregulated economic development, among others are significantly affected water sources in these regions and endangering its water sufficiency. As a result, bad practices of citizens in the management of water resources (Corpoguavio, 2002) leading to inefficient use and wastage of the resource, for example: leaking hoses, inefficient irrigation systems, waste water rain, among others.

This reveals the need to sensitize target population for this project, is providing tools and resources that enable them to acquire the knowledge necessary to opt for an efficient management of water resources.

3. Project Objectives

The proposed goals for the project were:

- Strengthen capacities in the management of water resources in some municipalities of the Guavio and Sabana Centro provinces, with a focus on social innovation appropriation.
- Implement technologies and tools for the efficient use of water resources involving high school students, households, researchers, teachers and administrators of educational institutions in the region in its development.
- Implement an information system for interactive engagement between project participants.
- Generate knowledge and awareness in high school students on topics related to technology and innovation around the water resource to promote entrepreneurship. Implement a training program to share best practices and technology proposals towards the management of water resources.

4. Research Objectives

The objective of this study was to explore mechanisms that contribute to the participative development of social innovations and to the development and embodying of entrepreneurial skills in the participants. This aim was pursued including elements of experimental economy in order to have a better understanding about the behavior and economic decisions associated to the motivations and actions related with the use and water conservation in several contexts as: individual, home and community.

Additionally, the present work integrates two participative methodologies Participative Action Research and Gamification and incorporates elements of information technologies to improve a situation of potential scarcity of natural resources in a rural community. The integrated methodologies approach is employed with the purposes of generating synergies between the actors and to aboard the situation as an intrinsic process instead of consider it as far and external situation. Thus the present study sought to address this research question: How do the

uses of participative methodologies affects both the development of social entrepreneurial skills and the development of social innovations in rural communities?

5. Theoretical Context

This enquiry is supported, on one hand, on social entrepreneurship literature; on the other, on social innovation and experimental economy elements. Problematic situations associated to social contexts are characterized by some institutional and relational voids, the absence of strong links between the people belonging to a community and the obstacles that inhibit both: the emergence of entrepreneurial skills with social purposes, and the establishment of stronger social interactions through the development of participative conjoint projects.

Social Entrepreneurship

In contrast to historically predominant economic entrepreneurial approaches where the financial value is the predominant goal of the entrepreneur, emerges the study of entrepreneurial actions which prior the creation of better conditions in social problematic situations. According with Mair and Marty (2006) social entrepreneurship is a process that enable the possibilities of create value in a situation, this creation of value can be financial or social and this creation emerge of the combination of existent resources in new ways.

As Peredo & McLean (2006) claim Social Entrepreneurship (SE) places on activities that blur the limits between public, private and social sectors. As crossing of borders between sectors is in the root of the work of social entrepreneurs the study of their actions is close to the study of cross-sector partnerships which have been aboard since several organizational theories like the institutional (Vurro et al, 2009) or resource dependence (Selsky and Parker, 2010) where the institutional voids and the necessities of the partners help to explain the social entrepreneurial actions, moreover Montgomery, Dacin and Dacin (2012) stay that SE leverage the resources and reshape governance and institutional arrangements.

Another possibility to explain social entrepreneurial behaviour is given by Waddock (2010) who proposes that the role of social entrepreneurs consists on to create organizations that cross public-private-governmental boundaries, but how can those organizations be created? As Peredo & McClean (2006) and Martin and Osberg (2007) stay SE exist when the opportunities for creating and distributing social value are seized; additionally, they can be developed when their social mission is explicit and central (Dees, 1998). Finally, Mair & Marti (2006) consider the

SE as a process that after to combine available resources, enables to the participants to explode and explore new possibilities to meet unattended social needs. In that sense the social entrepreneurial skills birth when the opportunity to emerge is given because there exists a social purpose explicit and central and because the conditions surrounding the situation empower the participants to combine the existent resources in innovative ways.

Social Innovation

The social innovation concept has generated a debate around if any innovation is social or if it is only a possible case of innovation with some specific constitutive elements. Characteristic of the second line of the debate carried on between those two approaches is the central role that third sector organizations can play on the development of those innovations, as Mulgan (2006) stays those organizations activate and articulate latent efforts existent in the communities. Some authors have emphasized in that social innovations have the potential of modify the social systems (Leadbeater, 2008).

Although in this paper is recognized the social dimension of any human innovation, is considered that some of those innovations have some particular characteristics that made it a different kind of innovation. In the presented framework social innovation is understood in this research as a particular way of innovation which is close to community management of natural resources.

The concept of innovation has born framed in economic and technological perspectives (Schumpeter, 1934, Gee, 1981), however the social innovation although can be materialized in the production and introduction of a new good or technology produces during the process some change in the social relationships in a set of actor interacting around an specific issue of interest for all the participants.

In the proposals of Phills, Deiglmeiner & Miller, 2008; Bacon, Faizullah, Mulgan and Woodcraft, 2008, in the hearth of the social innovation are the communities that contribute in a novel way to the solution of they own problematic situations, because the process linked to the innovation leads to the emergence of latent social relations around those innovative practices.

In opposition to the authors of the technologic determinism, the proposal of this paper is close to the proposals of Max-Neef, Elizalde and Hopenhayn (1991) and (Lleras y Guti rrez, 2008) where the focus of the social innovation is to find technologies appropriated to the local circumstances. Experimental Economy

For Brandts (2007) is the method what separates the behavioral economy from experimental economy. One of the branches of the experimental economy seeks the possibility to observe the participants in more natural contexts but maintaining the control and replication characteristics required (Harrison and List in Brandts 2007). The studies based on the experimental approach have been employed to understand better situations which involve communitarian decisions in environments of scarce resources (Cardenas, 2009 a; C-rdenas, 2009 b).

One of the most interesting findings in experimental economy studies is the trend observed in the participants to contribute to the public good; additionally the fair treatment is other of the variables that have a preponderant importance in the response of the participants. According to Brandts (2007) is more relevant an honorable behavior, positives effects in the society and a fair process than the exclusive prevalence of an economic rationality.

In the measure that the mere economic rationality is questioned as the natural way of behavior of actors in a social problematic situation, are the deviant entrepreneurs who can materialize new ways to address that problematic. They can employ a rationale where the better use of public good is prevalent and where the participative logic is aligned with the common goals of sustainability creating the conditions to develop social entrepreneurships.

6. Research Strategy and Methodological Choices

As is purposed by Ramirez, Plazas, Torres, Silva, Caicedo M and Gonz·lez (2012); Aldana Reyes (2004) In this inquiry were employed a systemic perspective in reason to the Involvement of several actors with interests pluralistic which requires to integrate different points of view about the problematic situation. Also, the methodologies which support this research are a differential factor of it. The project developed two methodologies framework employed: Gamification and Participatory Action Research. (PAR).

Gamification

It is by definition to apply the design thinking of games in which applications are not directly involved with games with the purpose to make them more enjoyable and more engaged. This approach seeks to be close to the nature of the persons desire to play and to compete, Achieving high levels of engagementí (Swan, 2012:p13). Additionally is possible to say that the methodology is based on the idea of use the game approach and the way that people think

where is playing a game with the purpose of achieve a higher participation and engagement of the audience and applied it for solving real life problems (Zichermann, 2010)

This methodology was selected taking in account a relevant aspect in the situation: the target population, the project was developed with young students between the fourteen (14) and eighteen (18 years) and for those students the scarcity of water is not a close problematic because in their environment exist the false perception that the region is plenty of water and that the water sources will be productive for a long time from now.

Nowadays, young students have contact with some kind of game which is usually associated with entertaining situations (Zichermann, 2010), and for that reason the active employment of Gamification approach permits the participation of the students in the project as it were a game. That activity involves them in the previously exposed problematic situation employing a game approach.

The purpose of the methodological design is to solve real problem employing and alternative approach which give place to an increased engagement from the students. The process developed follows repeatedly a spiral design which represents a set of stages. Starting from the identification of the problematic situation and the design of the game are generated increasingly new challenges, where conditions to win change, and informing periodically leader's position table and prizes, also the periodic publications in the social networks are delivered.

When the cycle is running again, the participants look for solving conflicts that can emerge depending on the context; also the cycle's dynamic knowledge foments the creation, consciousness and sustainability. In the figure 1 is presented the explained spiral process.



Figure 1 Gamification elements methodology (Zichermann, 2012)

Participatory Action Research –PAR

Participatory Action Research is a methodology that integrates the communities with the evaluation of a problematic situations that they perceive, at the same time that contributes to the proposal and implementation of possible solution by themselves, the purpose of this type of engineering projects is to help the community to be autonomous, organized and independent (Ramirez, Bengo, Mereu, Bejarano, & Silva, 2010).

The main engine to gain the active participation of the community where the project will be implemented is the methodology, as is presented by James, Milenkiewicz & Bucknam (2008). Sustainability of projects involving this methodology depends on the way they are integrated into the local culture and the social, environmental and economic conditions context, institutions and technologies available. The community will be responsible of get involved in the decision making guided by an institution that guide the methodological process, and the process leads to increase the consciousness and the compromise about the problematic situation, what facilitates the decision making process which contributes to the purpose of increase the communitarian knowledge and experience (Kindon, Pain & Kesby, 2007).

The main characteristics of PAR methodology are described next, those are part of a permanent iterative cycle where both the community and the research team are involved (Kemmis & McTaggart, 2007).





Figure 2 Cycle of PAR Methodology, (As Proposed by Rueda, 2012).

To obtain positive results with the use of participatory methods is not enough, also are important two aspects; first, the identification and engagement of all parties involved (stakeholders) and in second place to address and resolve conflicts that arise from changes in the context, they should be selected and identified from the earliest stages of the process, in order to start negotiations, consult with stakeholders with the purpose to develop a constructive plan (Ramirez , Bengo, Mereu, Bejarano, & Silva, 2010).

Stakeholders Involved

The project was designed with the participation of a variety of actors belonging to a secondary school from the region and non-profit and private sector organizations. As the purpose of the research was framed in a better management of water in the region of P-ramo Guavio, the water sources were the focus around all the participants were related acting as stakeholders. The actors were: teachers and students of Engineers without Borders Colombia, schools in the region, private sector enterprise which built a website containing relevant information about the process.

The role played for each actor in this social enterprise is described next:

Engineers Without Borders (EWB) Colombia: is a non-profit organization (NPO) to which belong teachers and students of the Universidad de los Andes and also from the Corporación Universitaria Minuto de Dios which belongs to Minuto de Dios Organization, the aim of EWB Colombia is to observe-design-implement-operate engineering projects in partnership with local communities to improve certain conditions of vulnerability of these. This project also involved the CEDE research centre from Faculty of Economy of Universidad de los Andes where have been developed recent projects about management of scarce natural resources. Together with the community developed around a model of social entrepreneurship tailor-made small projects to optimize and rationalize the use of water in the region.

El Carmen –Guasca Secondary School: This is a local school that has 12 venues spread across different locations of Guasca municipality. Thanks to the commitment of teachers particularly who teaches computer science, the model were integrated successfully in the practices of an

important group of students. The school what has resources in information technologies has successfully integrated this activity to their different curriculum processes.

Inalambria: is a private company which belongs to the telecommunications sector, it was developed by a group of engineers at the University of the Andes. It is working with different social impact projects and develops enterprise mobile solutions. This company supported the development and management of the information system that facilitated the development of two central contests developed as pedagogic dynamics: contest for water earning and generation of technology and science proposals.

Other local actors: besides the secondary school students, the local advisors and student's families played a relevant role in the dynamic of the project because give place to the installation of social innovative in the local sphere. While the local advisors were young people of the region that leaded the workshops, designed by the researchers, the families support the process of data collection an earning of water practices proposed by the students. In summary the local actors permitted the better installation of empowerment practices in the target population related with the efficient use of hydric resources making use of the experience and knowledge that they have of the region. School Teachers: developed monitoring task about the participation of the students, they gave part of the time in their classes to students can develop the activities of the project, additionally an incentives system which gave rewards to the students in the evaluation of topics as biology, chemistry, physics, projects development and Spanish class.

Students: they belonged to secondary classes and participated in training sessions, workshops and other activities which make they close to the management of hydric resources, those activities where designed using the previously explained methodological approaches: gamification and PAR, promoting a healthy competition between the participants.

7. Data Collection and Analysis

Teams were formed by each participating grade, teams name referred to words in Chibcha dialect (ancestral indigenous culture of the region). For the first and second phase were settled 10 teams. Each team had a flag with a figure that represents an animal, an element or food. Data was recollected by surveys and web platform of the project. This platform facilitated to capture water saving data and water issues location.

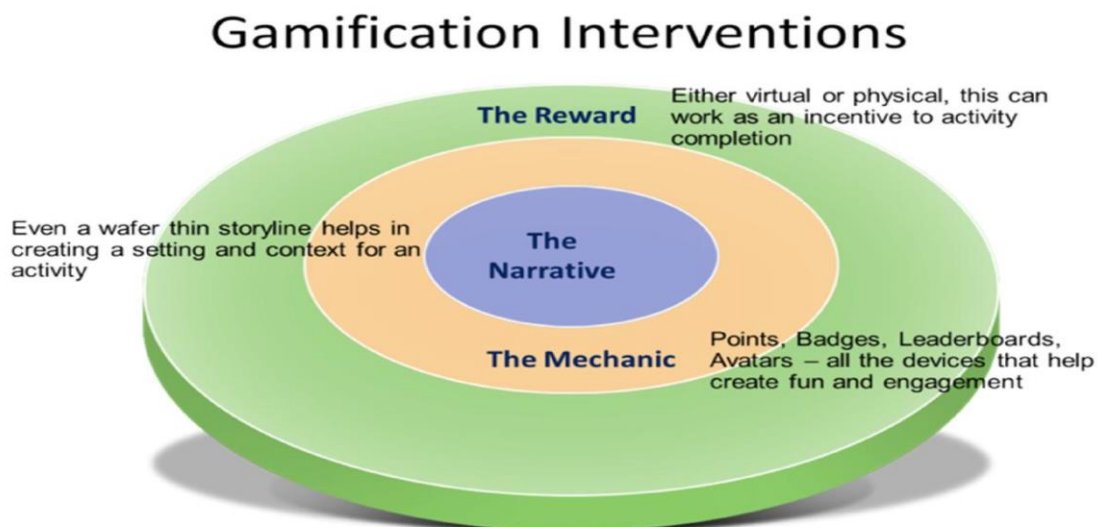
Also, this platform allows to project managers to analyse this information with different summary graphics, like number of visits, detail of the day and time of the visit, number of individual reports, by group and by school, level of participation, messages and reports sent, photographs loaded, and geotags. To analysis the water saving data was necessary a control group, this group was located in the same region with the same conditions, but without treatment (project implementation).

8. Results and Findings

Solution Proposed

The requirements and characteristics of the project seek to integrate local water issues and technologies in educational settings. Many options were explored, however the characteristics and availability of technologies at local schools aimed to a web platform.

The theory behind the proposal solution is Gamification. This theory was selected to promote the active participation of students; this allowed becoming boring tasks into fun and stimulating activities for students. To integrate this theoretical framework to project was necessary to develop three essential components which are presented in the next figure:



Graph 1. Gamification Components.(based on Zichermann, 2012)

In this case, iRewardi is twofold, the first is based on social recognition and the second technology prizes. The selected iMechanicî was a competition at different levels (schools,

grades and individual), where the participants receive rewards by participation and by level of savings achieved. The participation is measured by number of report that participants upload and water saving is measured by water consumption variation. The 'Narrative' used in the project are water issues at Guavioís Region and how technology and crowdsourcing can help to reduce the level of water consumption in households participating students while they learn to use these technologies?

The selected technology was a web platform that allows students to interact each other online around local water issues. The students can use platform tools to reference their location and register their water saving. Geotag clusters measure the participation level. These geotags allow to quantifying the participation at different levels (individual, groups and schools). Further savings reports, students can report about local water issues of their community uploading photos, videos, audios and news.

Ushahidi technologies support all of these technologies, for this project Inalambria Internacional was the provider of this platform. To promote interaction between students in other technologies spaces, the project also design a Facebook fan page called "Agua de Todos para Todos - Water of all, to all". In this fan page the students can view news, pictures, comments and other related posts of water issues. Facebook also allows attending students' questions and concerns about project and its characteristics online by chat.

Additional, in the early phases of the project was used SMS to communicate and to interact with students, giving them feedback savings achieved during each week of the competition.

Results

During implementation of the project in 2012, the project was able to involve 100 students from grades 10° and 11° in a rural school in Guasca municipality. The results achieved in 17 weeks were: water savings of 11% (65,4 liters per week), the effective participation was 50% and were sent 3.115 SMS.

In 2013, another rural school and grade (9°) were aggregated to the project. The channel of communication was changed to Ushahidi platform. With these changes, the project was able to involve 478 students, the students achieved a water saving of 7,83%, they sent 811 web reports and geotagged 52 water issues. Further student involvement, the project achieved also the participation of teachers and school staff adopting the good practices learned too.

In addition, the students participated in 10 training sessions on topics such as best practices in water resource management, entrepreneurship, use of natural resources and innovation. These encouraged students to think about entrepreneurship, it were structured in parallel with students 5 environmentally sustainable business ideas around the water resource.

This project showed how through what is apparently a competition could be used to learn and to promote entrepreneurship at an early age.

Research Findings

Given the design of the research project the findings will be presented developing two lines: methodological and social innovation and entrepreneurship.

In the methodological line, the use of PAR and gamification in an integrated way shown be a powerful approach because opened the possibility to local and regional actors to install practices of conjoint building, they were appropriated to the target population.

The goal of participative methodologies is not only to give place to the participation of a variety of actor but give place to the incorporation of learnings for the daily life of them. Although the PAR methodology is not a novelty given it has been employed since 70ís, in this research project has generate positive results given the reasons presented next.

In first place the conjoint work between school, universities and families has permitted to build collectively and continuously the actions to be followed. One of that was the suggestion that the participants made about incorporate Internet tools to communicate the advances and amounts of water earnings and not only through text messages, internet communication opens the possibility of a double way flux of information and the students can share and compare achievements and ideas. That dynamic of share and participate led to the conjoint building of future stages of the process, school and universities have designed workshops employing participative approaches.

A second effect was the increased participation of the students in class projects and the teachers have incorporated those participation processes to their own learning projects in class, particularly in biology, information technologies and Spanish classes.

The PAR was ideal as methodological framework oriented to the social reality. The fundamental interest of the project was to generate the social appropriation of the learnings developed for all

the participants. For that reason, IAP give place to a stable articulation between the actors so they could to formulate conjointly project proposal where the parties can develop an integrated work.

The relation between society and technology has been a topic of increasingly interest because exists a debate between the benefits and positive and negative effects that the technologies have in the human relationships. In the case of this research project where the human relationships and behaviours are in the base of the theoretical approach, was found that the technology acts as a strong support to the participative construction of initiatives and projects.

The technological tools employed permitted to the participants: to recognize good and bad practices in the use of water; to share active collective learnings and best practices about hydric resources management; to propose methodologies and technologies to improve the use of water, taking in account local realities; to understand the role that information and communication technologies play contributing to the diffusion of agreements, changes in preferences and valuation of practices around water use; to be a channel to propose and develop pedagogic strategies oriented to the sustainable use of water in the local scope including incentive mechanisms; finally, to study the role that those information and communication technologies play in the diffusion of social norms and changes in the valuation that individual made in face of the of the problem of scarcity of water.

In the second line, related with social innovation and social entrepreneurship the results show that opening opportunities to participate in the recognizing of problematic situations and also in the proposal of solutions to improve the conditions that give place to that situations and constitutes a fertile terrain to develop social entrepreneurial skills in the participants. It was the case of the school where the participation of students exhibited an important increase not only in topics related with the curriculum but in the attitudes of the students in face of the problematic of a potential water scarcity. Also the teachers and families understood that the possibility of trigger some changes about the situation is on their hands and using their current resources. As was presented previously, the work of social entrepreneurs is change the arrangements of rules and relationships in a way that using the existent resources the hydric resources management can be improved in order to benefit the actors and stakeholder of the situation.

Moreover, experimental economic approach elements included in the design of the project permitted to observe that when the people raises awareness about its role in a problematic can contribute in a more conscious way improving the ancestral mechanisms that they used to manage a situation. Some aspects of the individual and collective decisions in the use of hydric

resources were observed in particular the general thought that the region is plenty of water which is a false belief and the project permitted to some actors to be aware of that.

Finally, social innovation was a consequence of the previously expose, as the relationships between the actor and stakeholders were re-framed, the technological tools contributed to those emergent re-framing of relationships and the economic rationality oriented to the maximization of profits was not the predominant one in the small projects proposed by the students, the results of the research strongly suggest that the use of participative methodologies contributes to the development of social entrepreneurial skills and also to the development of social innovation when the local conditions are taken in account in the design.

9. Implications

On the one hand, based on Participatory Action Research (PAR or PAR for its acronym in English), all players are partakers of the saving process. The synergy of all parties is required for the purpose of research is not extrinsic to the process but, on the contrary, active links and permanently to students and teachers in the schools, the families of the students, the linked universities and other cooperating process. Although not a novel methodology, since it has produced since the 70s, this project has generated very positive results for the following reasons:

Learning, school and universities work together has allowed families to be building and permanently collective actions that will follow.

One example was the contribution of the student community to respect not only to note that text messages generate collective action could change practices for the proper use of water resources. That was why it was included in the next part of the project, with the possibility of combining internet technologies. As a result these students have achieved demonstrate their achievements against the savings and savings share experiences with other students who do not necessarily know. The bet is to generate, through active participation with this technology, an appropriation of water problems and a proposed work collectively to generate, from the student communities and their environment, a draft environmental impact.

An increased participation of the students was observed. It has been noticed that teachers additionally have linked these processes share their own learning projects in their courses

(particularly biology teachers, systems, and Spanish).

The PAR methodology has allowed conduct ongoing feedback among all stakeholders and to build collectively the next phases of the project. Particular emphasis that universities are as participatory as schools is made. So much so that it has built workshops joint work together.

The PAR has been ideal as a theoretical framework aimed at social reality. The main focus of the project is to generate social appropriation of learning that all participants achieved. Therefore, as a theoretical framework offered by the IAP, generates an ideal to excel and co-construct the proposed integrated work between the parties joint.

The development of participative proposals incorporating local knowledge was a remarkable result of the project; however the open question is if the mechanism of local advisors and the involvement of the families developed during the processes will remain installed in the practices of the actors.

The use of participative methodologies lead to the researches to re-frame their epistemological position in face of their role, this kind of approaches blur the limits between the observation and the intervention giving the opportunity to contribute at the same time with analytical contributions and practical interventions always taking in mind the risk that entail being a kind of judge at jury in a process.

10. Conclusion and Future Work

This project helped generate a social innovation model whereby the most important factor was the integration of young students from the region who actively participated in the saving model and optimization of water. For one interesting model was created savings. But most important was that, thanks to the participatory model, college students were able to observe problems and development opportunities around water issues and environmental.

Therefore future work is to replicate this model of entrepreneurship in young people from other towns in the region Guavio. This will seek to reach about 1,500 students and impacting about 5,000 people in the region. The assumption is that you will save on water and that graduates of these schools find new opportunities for environmental entrepreneurship in the region. And with that, possibly, the desire not to migrate to cities to generate opportunities for local development with regional impact will increase. This new venture will be held by the hand of Cundinamarca to additionally achieve extra ownership of managers and local rulers.

In the near future, the proposal is that the model developed on this project can be replicated and escalated. In that order of ideas the fundamentals that need to be preserved in future action research projects about the management of natural resources are: to optimize the water use through the development of innovations and focalized entrepreneurial initiatives oriented to the earning of a scarce resource; to facilitate that actors and stakeholders be aware of the water management; to impact young population, students of schools and universities, in order to have a middle and long term impact about the rational use of water.

The synergy between the actors and stakeholders that emerges from the design of the project, give place to the creation of pertinent models that enhance the development of social entrepreneurs making use of the local strengths.

In relation with the use of information and communication technologies its use is pertinent when they are of easy social appropriation; in that context those technologies support the implementation of reliable, the innovation possibilities and the starting-up of new entrepreneurial initiatives.

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CREATION AND MANAGEMENT IN COLOMBIA IN THE FIELD OF GLOBAL BUSINESS

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Abstract

This document summarizes the results of the development of the investigation conducted in 2013, which was to analyze the processes of creation and management of companies in Colombia from the perspective of a highly competitive global scenario. It is studied among other things, the difficulties of doing business in Colombia, public policy of entrepreneurship and the challenges that entrepreneurs face in this scenario. This research is motivated by the poor results of the programs in the country designed to foster entrepreneurship; by the results in terms of competitiveness of our country, of strategic sectors and in particular of our businesses; and evidence showing that Colombia is one of the countries where more companies are created, but where the highest level of mortality of these registers is done, with an average of (3) years of business life; moreover, it is also important to consider that the new global competitive scenario presents new ideas, new problems and new challenges. The study includes an analysis of the theoretical framework on which the venture is based in Colombia, the difficulties and challenges in the creation and management of companies in Colombia are analyzed against the highly competitive global scenario in which Colombia, according to the Forum International Economic, remains in position (69) and there is no sign of progress, which places national entrepreneurs face major challenges.

The study sought to provide answers to questions such as: What variables have been decisive in the outcome of programs creation of new companies in Colombia, as part of a New International Economic Order?, What factors have influenced the creation, growth, and sustainability of Enterprises in Colombia in recent years and which constitute challenges and difficulties for the creation and business management?

As an objective of the study, it was seek to identify the main challenges and difficulties for the creation and management of companies in Colombia, in order to propose strategic actions for growth and sustainability of business initiatives.

Keywords: Entrepreneurship, difficulties and challenges, Entrepreneurship, Business Management, Growth and Sustainability, business development.

1. Introduction

National economies face the challenge of a global market characterized by constant change, high competitiveness relies in particular on the availability of capital and seeks to improve daily profitability margins which have fallen substantially in recent years, requiring them to their, not only effectiveness in productive enterprises but also an adequate financial management to maximize use of available resources. According to these requirements, it is necessary to identify the difficulties and challenges faced by entrepreneurs in startups and established small and medium businesses, which are struggling for growth and sustainability in this highly competitive economic environment as a first step in designing activities to overcome these difficulties and advance the development of business.

The development work has a systemic approach in which are considered within a business environment that affects its performance, identifying the different functional areas internally, which are interrelated and also with the environment. In the work is made a brief description of the theoretical framework on entrepreneurship is its regulations and some policy instruments aimed at stimulating the creation and management of companies in Colombia, secondly the difficulties and challenges to finally raise some basic conclusions are addressed. The work mainly focuses on documentary analysis and experiences of entrepreneurs and students of Business Administration programs in the city of Bogotá.

2. Theoretical review

The concept of entrepreneurship that nowadays is common to associate the people who organize and take the risk to start a business seeking to achieve future profits was included in economic theory by Richard Cantillon (1697-1734); Later Jean Baptiste Say (1767-1832) incorporated the term entrepreneur. The term has been used and translated into other languages, mainly English, and later to the Spanish as a synonym for merchant, adventurer or employer, although its precise meaning is an entrepreneurial project. Then the concept was popularized in England by John Stuart Mill in 1848, in his Principles of Political Economy, then fell into oblivion and disappear from the economic literature in the late nineteenth century (Vecino and Bautista, 2009).

The lever that moves the world; Being the ideal vehicle to create jobs, innovate, increase productivity and develop better business models, entrepreneurship drives economic progress and is the strongest defense against the status quo. (La Nación.com 2009); although many may be surprised, statistics show that more than half of the new jobs are originated in firms with less than five years. In other words, entrepreneurs are the creators of more jobs, and the job creates wealth. The product of their work, therefore, is the engine of economic growth and progress.

At the beginning of the 1970s, economic models based on assumptions of neoclassical economics and Marxism, began to show that minimizing costs and making decisions with perfect information were not working efficiently; large corporations do not give the answers expected economic growth or created enough jobs. Meanwhile the socialist bloc only showed growth in the production of weapons. The economies of Latin America meanwhile stagnated and recorded high rates of inflation, which later came to be hit by debt and hyperinflation. With the added difficulty that politicians did not make their contribution from the public to the business creation and management companies as key alternatives in job creation and sustainable growth in their countries.

In 1979, the report called The Job Generation Process (Birch, 1979), which is evidence that small businesses in the United States generated 82% of new jobs. Report that caught my attention because it was considered in the political agenda and thereafter in all countries of the world a similar trend reflecting the importance of SMEs evidence.

Another aspect of importance in the process of theoretical foundations of entrepreneurship was done in 1889 by Barreto, who classified into four categories on the entrepreneurial role played in the economy: coordination, arbitration, support innovation and uncertainty. The entrepreneur as a coordinator goes back to Jean-Baptiste Say, French political economist of the early nineteenth century. According to this author, the employer hires combines factors of production (such as land, capital and labor) and operates as the communication link between the various classes of producers and between producers and consumers. According to Israel Kirchner, pure entrepreneurial notes the opportunity to sell something at a higher price than you can buy it, noting opportunities for arbitrage profits and proceed accordingly, directs entrepreneurial markets toward their equilibrium. Other Austrian economists conceive the entrepreneur as an innovator who disturbs the order and balance existing market. According to Joseph Schumpeter, who popularized this view, entrepreneurs implement new combinations of means of production and thus create new products, production methods, markets, sources of supply or ways of organization. These new combinations induce the creative destruction of the old order

causing changes and economic growth. However, Schumpeter entrepreneurs did not assume the risk of their innovations (Quoted, Neighbor and Bautista, 2009).

Schumpeter's contribution in the conceptual development of business history, in particular the recognition given by the employer as the engine and boost for the development. Is that introduces the new combination of factors. But the businessman in modern capitalism thrives on progress and social progress in science and technology. To understand the potential of development of a region and historical processes that led to the formation business not just look at the action and entrepreneurship of some people, it is necessary and essential to understand and study the development of knowledge and the means and mechanisms for social addition, the apprenticeships or developments in science and technology.

Since the 1980s is addressed monitors how the entrepreneur and entrepreneurship in the textbook Principles of Economics. The conclusions (Kent, 1989) were that the entrepreneur has been ignored, submitted improper or only in a partial way in the university books about introductory economics. A review on the books of the 1990s yielded similar results (Kent & Rushing, 1999), which concludes that it was not given due importance to the entrepreneur and its relation with the economy is not explained, which deprives students an understanding of how the dynamics of economic process works.

Waterfront real contribution to the growth of the economy and certainly to employment generation, Birch (1989) explains that there are three types of new businesses; Mice are companies with fewer than 20 employees, the Elephants are companies with over 500 employees, and the Springboks are the new small companies with great potential and ability to grow quickly. Although in the past 25 years small businesses have generated two thirds of net employment in the American private sector, it was the work of only a few fast-growing companies (Bhidé, 2001). These analyzes continued shedding light on the importance of gazelles rather than small businesses in general, then in 1994 it was discovered that only 24% of businesses started in 1985 and still surviving, recorded some increase in employment (Duncan & Handler, 1994). Meanwhile, Birch and Medoff estimated that between 1988 and 1992, 4% of all companies (about 350 thousand gazelles) generated a ratio of 60% of new jobs created in the economy of the United States of America (Bhidé, 2001). With these data, Bhidé concluded that of the 700 thousand companies that start every year in this country, it would abound hairdressers, laundries and other such companies, which he called marginal, and not those that create sustainable jobs. (Quoted by Neighbour and Bautista, 2009).

In the last two decades of the twentieth century, the issue of entrepreneurship became prominent in Latin America, motivated by the successful results of some countries and businessmen forged in this area and stimulated new theories of endogenous growth that leads to concentrate on the local efforts as a determinant for the performance of regional economies factor. In this context, international organizations have shown great interest in studies of entrepreneurship, through the generation of papers and bibliography, as well as proposals to national governments to facilitate or encourage the creation of new businesses. Examples are the Doing Business project, the World Bank, from a neo institutionalist perspective, measures the regulation to do business in 181 countries and regions (World Bank, 2009).

Another case is the OECD that addresses entrepreneurship through books and papers, which emphasize the relationship to new businesses and economic growth (Audretsch&Thurik, 2001), in these documents is manifest its interest in form policy makers on the relationship between entrepreneurship and economic growth, for which two variables are based comparing the rate of entrepreneurship, economic growth and job creation. (Ahmad & Richard, 2008). This trend continues in Latin America, for example, at the IDB are advanced programs to foster entrepreneurship through recommendations for project formulation (Angelelli&Prats, 2005). Additionally, in recent years proliferated studies on entrepreneurship and small and medium enterprises in the region, as well as books and reports relating economic development and the creation of new companies (Kantis, Angelelli, &Moori Koenig, 2004) (Kantis, Ishida , & Komori, 2002).

In Colombia the conditions of economic, political and social instability, the purchasing power of the population and problems in distribution of wealth, the situation of public order and security and often the lack of a political settlement to bring the clear rules and democratic citizen participation should be carefully studied to determine how these extent have driven or limited initiative and innovative capacity of the population. From another perspective, the analysis should serve as a benchmark for understanding the ability of employers have had to overcome with great skill and dexterity huge limitations and barriers imposed by an unfavorable or adverse institutional definitely. It is a cyclical relationship of cause and effect, nature, entrepreneurship and the type of entrepreneur who defines a region depends on institutional conditions, rules, values and principles that have been created, the reward system encourages entrepreneurs for their productive, unproductive and even destructive of wealth. But entrepreneurs and entrepreneurship in a community are creating rules and forms of competence and relatedness, which in turn influence the design and development of institutions.

Carl Schramm, president of the Ewin Marion Kauffman Foundation, an organization that promotes entrepreneurship, argues in *The Entrepreneurial Imperative* (Harper Collins, 2006) that has left behind the era of post-industrial capitalism, overcome by entrepreneurial capitalism, born between 1985 and 1990, whose exponents in the United States, were Bill Gates, Steve Jobs and Michael Dell, now become models for almost everyone (Gross, 2009).

2.1 Legal Framework (Ministerio de Comercio, Industria y Turismo, 2009)

Law 29 of 1990 which provides for the development of scientific research and technological development are issued and granted extraordinary powers.

Law 344 of 1996, by which rules aimed at rationalizing public expenditure dictate, extraordinary powers are granted and other provisions are issued.

Act 590 of 2000 on promoting the development of micro, small and medium Colombian company, amended by Law 905 of 2004 and Law

1151 of 2007 by which the National Development Plan 2006-2010 is issued.

Law 789 of 2002 which created the Enterprise Fund.

Act 1014 of 2006, to promote the culture of entrepreneurship.

Act 1286 of 2009, which Act 29 of 1990 amending, transforms Colciencias Administrative Department, the National System of Science, Technology and Innovation in Colombia strengthens and other provisions.

Decree 393 of 1991, by which association rules for scientific and technological activities, research projects and creation of technologies are given.

Decree 585 of 1991, whereby the National Council for Science and Technology was created, reorganizing the Colombian Institute for the Development of Science and Technology and other provisions.

Decree 4466 of 2006, by which Article 22 of Law 1014 of 2006 on establishment of new businesses it regulates.

Decree 2175 of 2007 on the administration and collective portfolio management, in which some aspects of the FCP were determined.

Decree 525 of 2009 by which Article 43 of Law 590 of 2000 on the gradual quasi-payment is regulated.

Decree 1192 of 2009, which the 1014 Act 2006 on the promotion of entrepreneurship culture and amending other provisions.

Resolution 470 of 2005 of the Financial Superintendence, which allowed the establishment of Private Equity Funds.

Circular 8 2008 the Financial Supervisory Authority, which authorized fund managers of pension system of compulsory pension funds to invest in private equity Colombians.

2.2 Planning instruments or related undertaking, (Ministry of Commerce, Industry and Tourism, 2009)

CONPES 3297 of July 26, 2004, which defines the Internal Agenda for Productivity and Competitiveness.

CONPES 3424 of 16 May 2006 on the Opportunity Bank.

CONPES 3439 of August 14, 2006, which established the National Competitiveness Management System (Decree 1475 of May 2008 includes the MCIT at the Technical Secretariat and defines Confecámaras MCIT and coordinate the Regional Commissions COCOM).

CONPES 3484 of August 13, 2007, on national policy for productive transformation and promotion of MSMEs.

CONPES 3527 of 23 June 2008 on the National Competition Policy and Productivity. According to the National Competition Policy and Productivity, a country can increase the value of their production by 3 ways: by producing more (productivity), producing better (increasing quality) or producing new products (production patterns). Entrepreneurship is key to achieving productivity growth and hence its close relationship with competitiveness.

CONPES 3533 of July 14, 2008, Basis for the adequacy of intellectual property to the national competitiveness and productivity.

CONPES 3582 of April 27, 2009, National Policy on Science, Technology and Innovation.

3. Methodology

In the first step, are selected and analyzed the variables and indicators that are the basis for the development of diagnostic difficulties and challenges in the process of information, results of specialized studies on the subject, indicators and information from companies is used. It is designed and analyze the difficulties and challenges matrices to establish the status of the environment for the creation and management of companies in Colombia.

Once the variables and indicators are selected, the analysis of the same is done to determine their current status and their influence on the maceration or management companies and thus get an overview and to determine whether: Is there an apparent relationship between variables? Direct? Reverse? A linear relationship between the values? Etc. With this analysis, trend forecasts of business are conducted according to the environmental conditions that allow us to consider the findings of the study. In the data analysis it were classified the primary and secondary selected sources, this information was obtained from the macro-environment (which was approached from secondary sources) and the micro-environment or business, from the primary sources.

3.1 Evaluation criteria

For the evaluation of each of the indicators, consideration was given four values, which were weighted for the evaluation of variables and each difficulty or challenge, which is organized according to the acceptable proportion, as indicated in the table below:

| CRITERIOS DE EVALUACION | | % FAVORABLE | |
|-------------------------|---|-------------|-------------------|
| ALTO | 1 | ALTO | $n \leq 25\%$ |
| MEDIO ALTO | 2 | MEDIO ALTO | $25\% > n > 60\%$ |
| MEDIO BAJO | 3 | MEDIO BAJO | $60\% > n > 85\%$ |
| BAJO | 4 | BAJO | $n > 85\%$ |

Source: Prepared

4. Discussion –Results

In the corporate environment, ie those forces that surround and influence the life and development of enterprises, controllable forces as they are: the factors of production (labor, raw materials and inputs, knowledge, capital) and the activities of organizations (human resource management, operations and production, finance and marketing), and uncontrollable forces such as competitive, distributive, economic, socio-economic, financial, legal, physical, political, sociocultural, changes in the workforce (skills and attitudes towards work) and technological. To which the role of multilateral organizations in the world of international business is added; agreements between countries; free trade agreements (ICTs); preferential agreements; binational agreements; mergers, acquisitions and business alliances; barriers to entry and exit of business among others, posed for new business initiatives in Colombia a challenge to creativity, innovation and modernization, which allowed to be competitive both in our own markets and on the international stage.

Studying nature and environmental factors influential in the creation and management of companies in Colombia, it is essential, even more so by the strong changes that occurred in the last two decades. These changes have materialized in: integration of the world economy overall trend towards a new economic and political order, strong social change, with external effects and within the company itself, a high technological change causes and new competitors emerging sectors based in new technologies, and the emergence of new competitors in the Third World or newly industrialized countries in key sectors.

In Colombia the difficulties faced by entrepreneurs are of great magnitude, yet whose behavior, in most cases, the process affects the entire business network. Most of them are based on phenomena typical of a developing economy with strong vestiges of protectionism and an ineffective political and governmental environment, specifically in its public policy development, which in many cases can be considered that inhibits or destroys the development options.

It is noteworthy that the Ministerio de Comercio, Industria y Turismo (2009) identifies several problem areas for the creation of companies in Colombia, and according to the same ministry based on these axes can be defined and clearly identify the policy challenges national entrepreneurship. They consisted of business informality; Procedures and the associated high costs of doing business; Difficult access to financing; Limited access to markets; Little access to technology; Low protection of property rights; Low levels of innovation; Resistance entrepreneurs to share ownership of the company; Under little interagency coordination and development of entrepreneurial skills. Note that today (2014), these are still considered

problematic axes and advances in creation and management of companies with a global vision remains more important in corporate governance challenge for the country.

Today the most relevant data management and entrepreneurship in the city of Bogotá (2014), which accounts for over 50% of existing companies in Colombia are among others the following: 76.2% of 26,278 companies more sold in 2013, according to the Superintendencia de Sociedades, is concentrated in Bogotá, where they have 14,223 registered companies; Antioquia, with 3,534 companies; and Valle, with 2,273 companies. For a total of 20,030 companies. Bogotá continues to lead the creation of companies in the country in 2013, according Confecámaras, the number of enterprises reached 64,033, while in 2012 was 63,999. Bogotá increased rates of consumption of the people, which makes it more attractive start-ups than other cities.

According to the same entity, Bogotá it is also recognized its potential as an export city of nontraditional products or non-energy mining. The total exports for February 2014 was \$ 455.8 million of which \$ 411.5 million are in non-traditional.

According to this report (Confecámaras, 2014), firms in the city have been able to find sources of production based on the value added by the ability of its workforce. The main exporting sectors in the city are agriculture, services (located in other industry for \$ 106 million) and manufacturing. Of the latter, the value of exports of low and medium technology is highlighted for \$ 84 million and \$ 86.2 million respectively. During the course of the previous year, the sector that is dedicated to the wholesale, retail and vehicle, the latter was the more established companies, with a total of 110,680 of 275,032 records of births, according Confecámaras. This economic sector, which contributed 12.1% to the total GDP in 2013 recorded 14,373 new registrations of companies, 96,307 were made by individuals.

Colombia was the first country in Latin America that reached, in 2014, total coverage of high speed internet. Since then the country focused on developing content and applications that provided opportunities for Colombians to exponentially improve their quality of life. This dynamic linking allowed the education system to the needs of development. Human capital was the main resource to consolidate the digital revolution that made Colombia had more and better doctors, teachers, engineers, technicians and technologists.

The pressure on the exploitation of natural resources is increasing, and Colombia will be in exploration for productive uses and environmentally unsustainable resource from its abundant jungle territory, plus the country faces a great challenge and is achieving sustainable development for the economy.

Another important aspect is to analyze the trend of the global industry and as local businesses should find an expansion model that allows them to be competitive on the global stage. The global trend in industrial production would focus on the future, the application of biotechnology to the production process, and where the industry is clearly understood as a cluster of developments in services, electronic commerce, exploitation of land and non-land resources, and Great Collection of virtual reality-based services.

In Colombia an aspect that is assigned the major responsibility is to the Public Policy at all levels, public institutions are not the most efficient and transparent and do not tend to quality and wellbeing of the population. As in Hong Kong, only 2.9 deaths per 1,000 live births and life expectancy of 79.3 years for men and 85 years for women. To cite the case of the telecom industry has been and will be linked to the need for people to be connected with each other but also to the rising need to connect with their environment or, put another way: have your world to hand immediately. The trend is mobile devices that complement the capabilities of today's smartphones, such as wristwatches that control the physical activity of users. But these mobile devices are just the tip of an iceberg called the 'internet of everything', that is, the network will keep connected to our entire ecosystem: And the Country requires the achievement from the provision of a mobile device without education and knowledge to manage inflation.

Undoubtedly, the new institutional framework for developing leaders requires them to monitor the implementation of projects and public service needs for infrastructure and housing. The state is a true facilitator of development and its regulatory role has allowed a transparent, agile and simple institutional framework. It is necessary that within the agricultural and livestock own responsibility in the food chains business is assimilated. We operate in the open world trade supermarket and if we do not adjust to it, soon products will leave the shelves. And not only from the outside, also national.

It is imperative that policymakers recognize and differentiate two types of activity: one, that of the peasant economy, subsistence, for which players must create conditions (public goods) that allows them to increase their income and raise their standard life. The other, of agricultural,

large and small producers. Is not the same peasant milking his (3) cows, and an acre planting potatoes, cassava and some vegetables to sell in his farm and the results of this operation helps him to cover other basic needs, than the large producers. All traders are going to sell products to provide experience and do not think that virtuality replace the experience of touch, to interact with vendors in a mall, the experience of feeling the breeze, the smells, the flavors, look for several kids eating ice cream in the hands of their parents.

Those responsible for running an organization think every day about how to address the development and growth of the company, ensuring that lasts over time, beyond the period of management; a company which, of course, create economic wealth, but that is socially inclusive, accepted, valued for its act with people and the planet they lent us.

We must be aware that the way we buy and the place where we will do it is going to change, not to mention the media we use. The whole world will function as a store. Purchases shall not be restricted by geographical barriers and the concept of convenience will not necessarily be in the local. Technologies such as image recognition, achieved what I see and I can buy it on the spot, challenging the concept of centralized purchasing and the barriers of time and space.

In this process, the social quality is not an option, it is also an obligation for the market and their businesses; it is a parameter that requires the company is in the core business. Then means that the strategy gurus and paved the way for a rethinking of Corporate Social Responsibility in Colombia and its consolidation in the long run.

Undoubtedly the weakest part of the country is the education system that is not the way to their relevance. The question is, why?, educate society can not be seen exclusively as a whole and that educational policies impact the same way the whole society; by simply being written and socialized (laws, decrees, rules, media, etc.), where all of society benefits in the same way; situation that is not true, among other arguments because education is a process that involves people from different social, religious, ethnic, regional. Educate for a diverse society in the regional, cultural, ethnic, economic, crisis managers and leadership in the public sector and widespread inequality.

Another variable and more sensitive to impact and affect society which is corruption, we are educating in corruption, have lost the values and capitalist society progresses misunderstood creating a new conception of values supported by the easy money and opaque activities.

Under this scenario the companies operate in Colombia, 80% of SMEs fail within five years and 90% is less than ten years. Why? Failure figures are overwhelming SMEs in any country are analyzed. Statistics indicate that, on average, 80% of SMEs fail within five years and 90% of them is less than 10 years. For owners of SMEs, the reasons for failure is necessary to look for outside companies, but business analysts focus more on identifying the causes of failure in SMEs themselves, and in particular, the ability of responsible management

In this paper, the different categories of difficulties in creating and managing companies in Colombia, particularly in the City of Bogotá, from indicators that show the degree of influence within each are evaluated.

Matrix 4.1 Difficulties in creating and managing companies

| MATRIZ EVALUACIÓN DE DIFICULTADES | | | | | | |
|-----------------------------------|-------------|------------------|------------|---------------------|---------------|----------------|
| DIMENSIONES | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado | (B / A) * 100 | Interpretación |
| TRAMITES | 10% | 0,40 | 1,9 | 0,185 | 46% | ALTO |
| PRODUCCIÓN | 15% | 0,60 | 2,5 | 0,37 | 61% | MEDIO ALTO |
| MERCADEO | 20% | 0,80 | 2,5 | 0,49 | 61% | MEDIO ALTO |
| FINANZAS | 20% | 0,80 | 2,3 | 0,47 | 58% | ALTO |
| TALENTO HUMANO | 15% | 0,60 | 2,6 | 0,39 | 65% | MEDIO ALTO |
| ASPECTOS GUBERNAMENTALES | 10% | 0,40 | 2,8 | 0,28 | 70% | MEDIO ALTO |
| ASPECTOS AMBIENTALES | 10% | 0,40 | 2,5 | 0,25 | 61% | MEDIO ALTO |
| TOTAL | 100% | 4,00 | | 1,99 | 50% | ALTO |

Source: Information processed by authors, 2013

The results obtained 50% / 100, show a high degree of difficulty for the creation and management of companies in Colombia, particularly those small businesses, considering variables in their analysis and procedures, constraints to production, marketing, management financial, human talent development, government issues (public policy), environmental aspects and the global environment or the process of internationalization.

Clearly the economic environment poses significant challenges especially to small and medium enterprises, especially to new business initiatives but should also recognize that reaches to affect large national companies; some of the main problems are the decline in per capita GDP, social inequality because of the poor distribution of income, high unemployment and corruption, instability linked to poor corporate culture and business values, the low technological level, and high costs of production and distribution among others; aspects that are reflected in the low

purchasing power of the population and low levels of savings and investment, which becomes barriers to business creation and management and thus to the development of the country.

In these conditions it is important to analyze the large gap between large enterprises, medium and small, as they should take steps to encourage entrepreneurship from small businesses. It is clear that small need professionalization, capital, technology and this in turn requires investment, but make it a priority even when negotiating FTAs and these small businesses are an important part of production chains and if not probably survive competition neither will do great.

4.2 Matrix Procedures in the creation of companies

| MATRIZ DE TRAMITES | | | | | | |
|--------------------|-------------|------------------|------------|---------------------|---------------|----------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado | (B / A) * 100 | Interpretación |
| Numero | 20% | 0,80 | 2,00 | 0,40 | 50% | ALTO |
| Tiempo | 20% | 0,80 | 2,00 | 0,40 | 50% | ALTO |
| Costo | 20% | 0,80 | 2,00 | 0,40 | 50% | ALTO |
| Eficiencia | 10% | 0,40 | 2,00 | 0,20 | 50% | ALTO |
| Eficacia | 15% | 0,60 | 2,00 | 0,30 | 50% | ALTO |
| Corrupción | 15% | 0,60 | 1,00 | 0,15 | 25% | ALTO |
| Total | 100% | 4,00 | | 1,85 | 46% | ALTO |

Source: Information processed by authors, 2013

The results show that through the years the paperwork has been a high degree of difficulty, although it has been decreasing the number of steps at the same time have a positive impact on the time spent on the formation of a company or standardized procedures in business management. As the paperwork was observed not only generate confusion and waste of time but also affect the costs of production and distribution, efficiency, and effectiveness of companies and also becomes a factor in corruption for many entrepreneurs and ordinary citizens in the desire and despair generated decide these difficulties influence the decisions of those responsible for these procedures in institutions.

According to Doing Business, which identifies the bureaucratic and legal obstacles to a new entrepreneur must overcome to register and start a new company. It examines the procedures, time and cost of introducing a commercial or industrial company to 50 employees and with an initial capital of 10 times the gross national income per capita and that includes all the necessary procedures to register a company, time average per employee for each procedure, official cost of each procedure, and the minimum capital required as a percentage of per capita income. The results below will be recorded. The results for Colombia as mentioned above have

greatly improved, but the perception we have in the business and social environment is reflected in the evaluation. According to BD Colombia in the capacity to undertake business qualifies for 2012 at the 66th position among 179 countries.

4.3 Difficulties in production processes

| MATRIZ DE PRODUCCIÓN | | | | | | |
|----------------------------|-------------|------------------------------|------------|-------------------------|------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado posible (A) | Evaluación | Resultado ponderado (B) | / A) * 100 | Interpretación |
| Tecnología | 20% | 0,80 | 2,5 | 0,50 | 63% | MEDIO ALTO |
| Costos de producción | 20% | 0,80 | 2,5 | 0,50 | 63% | MEDIO ALTO |
| Recursos técnicos | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Materiales y suministros | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Personal calificado | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Investigación y desarrollo | 10% | 0,40 | 2,5 | 0,25 | 63% | MEDIO ALTO |
| Productividad | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Total | 100% | 4,00 | | 2,45 | 61% | MEDIO ALTO |

Source: Information processed by authors, 2013

In production processes the results, 61% / 100%, high average show problems that are reflected in the results of companies started and for those starting these businesses are clear difficulties in the availability of new technologies, the high costs of these technologies, production costs, lack of technical, material and supplies, trained personnel, research and development and finally the low level of productivity. In existing companies lack of training for business management is evident, companies concentrate their capital in fixed assets sacrificing its working capital and liquidity and default pos operating capacity at competitive market levels.

It is important to mention the low industrial development at local and national level, given that research in Colombia, as a program and object allocation of public budget resources, has been of little importance, and participation and allocation of resources for research and development technology within the national GDP does not correspond to the problematic and its growing need for more research and technological innovation in work processes. In terms of spending on science and technology, the balance over the past three years yields an unfavorable balance to the challenges the country faces in order to achieve successful international insertion. The Colombian government through Colciencias program has established policies to support the productive sector so that, through the growth of productivity and competitiveness, increase their participation in national and international markets, in this process it is worth noting the efforts made by the Technology Development Centres, Regional Centres and Business Incubators Productivity Database Technology, institutions are expected to play a key coordinating role in

the National Innovation System (NIS) through the generation and transfer of technologies that help create companies seeking competitive internal and external markets.

4.4 Difficulties in marketing processes

| MATRIZ MERCADEO | | | | | | |
|--------------------------------|-------------|------------------------------|------------|-------------------------|---------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado posible (A) | Evaluación | Resultado ponderado (B) | (B / A) * 100 | Interpretación |
| Estudios de mercados | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Estrategias de precios | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Pronosticos de ventas | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Productos de empresas informal | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Cultura del consumidor product | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Desarrollo de productos | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Total | 100% | 4,00 | | 2,45 | 61% | MEDIO ALTO |

Source: Information processed by authors, 2013

The difficulties of this activity is focused on the availability and knowledge of market research, designing pricing strategies, sales, competition with the products of informal enterprises, the informal culture of consumer products and lack of innovation and creativity in the development of new products.

Projection to the international market, most of this companies produced and marketed for the national and local markets. This presents a risk to the sustainability of the company if no growth alternatives pose toward finding new market segments to expand their geographical expectation possibility of competitiveness in the international market; no product diversification in business is evident.

4.5 Financial Difficulties

| FINANZAS | | | | | | |
|-----------------------------------|-------------|------------------|------------|---------------|---------------|----------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | ponderado (B) | (B / A) * 100 | Interpretación |
| Ventas | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Administración del capital de tra | 5% | 0,20 | 2,5 | 0,13 | 63% | MEDIO ALTO |
| Información contable y Análisis f | 5% | 0,20 | 3,0 | 0,15 | 75% | MEDIO ALTO |
| Políticas para los clientes | 5% | 0,20 | 2,0 | 0,10 | 50% | ALTO |
| Tamaño de la Empresa | 5% | 0,20 | 2,0 | 0,10 | 50% | ALTO |
| Endeudamiento | 5% | 0,20 | 3,0 | 0,15 | 75% | MEDIO ALTO |
| Rentabilidad | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Crecimiento de la Empresa | 5% | 0,20 | 2,0 | 0,10 | 50% | ALTO |
| Costos y gastos | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Fuentes de financiación | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Inversión | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Costo | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Normatividad | 5% | 0,20 | 2,0 | 0,10 | 50% | ALTO |
| Riesgo | 5% | 0,20 | 2,0 | 0,10 | 50% | ALTO |
| Total | 100% | 4,00 | | 2,33 | 58% | ALTO |

Source: Information processed by authors, 2013

The main difficulties encountered are: the level of sales management, the management of resources available for the operation, quality and availability of accounting and financial reporting, policies of sales, firm size, debt, growth and sustainability, costs and expenses, sources of financing, investment decisions, regulations and risk management.

In the financial field priority variables are: Needs and sources of resources, firm size, liquidity, debt, profitability, business growth, problems and solutions in finance. Normally companies expect greater growth in the short term and force businesses to achieve thereby generating unsustainable growth that ultimately lead to business bankruptcy. In Colombia are obvious difficulties in financing new ventures and to fund ongoing business so companies use more than two funding sources, financial institutions are the primary source. As for the size of firms, the structure shows that about 96% are small firms which determines their ability against financial institutions, markets and against the front of his Business Management, just as the sources for Entrepreneurs are not enough and this remains one of the major limitations in the development and management companies in Colombia.

If we summarize the major financial problems of firms; illiquidity is given for delay in the collections portfolio, followed by lack of financial planning and tax issues. Non familiar companies have as a main financial problem the illiquidity because portfolio collection, followed by difficulties in funding sources. The actions by firms to solve the financial problems are:

seeking new sources of funding, increase efficiency in loan recovery and improve operational efficiency.

4.6 Difficulties related to the Human Resource

| TALENTO HUMANO | | | | | | |
|-----------------------------|-------------|------------------|------------|---------------|---------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | ponderado (B) | (B / A) * 100 | Interpretación |
| Administración de personal | 10% | 0,40 | 3 | 0,30 | 75% | MEDIO ALTO |
| Profesionalización | 15% | 0,60 | 2 | 0,30 | 50% | ALTO |
| Modelo de Educación | 15% | 0,60 | 3 | 0,45 | 75% | MEDIO ALTO |
| Formación en emprendimiento | 10% | 0,40 | 3 | 0,30 | 75% | MEDIO ALTO |
| Informalidad | 10% | 0,40 | 3 | 0,25 | 63% | MEDIO ALTO |
| Costos | 10% | 0,40 | 3 | 0,30 | 75% | MEDIO ALTO |
| Normatividad | 10% | 0,40 | 3 | 0,30 | 75% | MEDIO ALTO |
| Productividad | 10% | 0,40 | 2 | 0,20 | 50% | ALTO |
| Cultura empresarial | 10% | 0,40 | 2 | 0,20 | 50% | ALTO |
| Total | 100% | 4,00 | | 2,60 | 65% | MEDIO ALTO |

Source: Information processed by authors, 2013

In the assessment of the difficulties related to Human Resource, are considered as priority variables personnel management, and distribution of professional staff according to functional areas in business, education and basically education models implemented recently in Colombia, entrepreneurial training, the size of the informal sector in the country, the costs of labor forces, labor law, corporate culture and finally the low level of productivity. One of the problems currently facing small businesses is the lack of professionalization of managerial staff as an alternative solution to the problems of administrative efficiency of enterprises, this is a major problem in family businesses where just 65% of companies are run by professionals. The main administrative problems are related to the non-delegation, lack of strategic direction and lack of clear definition of responsibilities.

4.7 Difficulties with Government Related Aspects

| FACTORES GUBERNAMENTALES | | | | | | |
|-------------------------------------|-------------|------------------|------------|---------------|---------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | ponderado (B) | (B / A) * 100 | Interpretación |
| Políticas Gubernamentales en ap | 20% | 0,80 | 3,0 | 0,60 | 75% | MEDIO ALTO |
| Protección del gobierno | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Situación Política a Nivel Nacional | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Situación Política a Nivel Local | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Tendencias Ideológicas del Gobier | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Gremios y Grupos | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Constitución Nacional | 10% | 0,40 | 4,0 | 0,40 | 100% | MEDIO BAJO |
| Legislación en General | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Total | 100% | 4,00 | | 2,80 | 70% | MEDIO ALTO |

Source: Information processed by authors, 2013

The existence of political stability instills general social stability in particular to the business sector, good stability impact on safer investments both interior and exterior, for this reason, it is necessary for the state to regain its legitimacy and to regain the trust of Colombians in the State, it is necessary to think of a state to defeat crime with democratic authority, to defeat corruption with practical measures and promote political reform with changes in their institutions to introduce austerity, generate savings and produce results in the priority areas of social investment, also applies to the local government, which is working to regain its legitimacy.

The political situation analysis includes international, national and regional levels and their impact on the development of the business of SMEs. The analysis describes a characterization of political stability and the tendency of the system, the description and analysis of institutional policies of the state and its institutions, which in one way or another relate to the business activities of SMEs. In the legal analysis, we sought to identify the effect of the rules that impact directly or indirectly in the business, whether commercial, criminal, labor, civil and tax character. Originating in the constitution, laws and decrees by economic activity itself.

Political situation at the national level, local political situation, ideological tendencies of government unions and pressure groups, national constitution and law in general: were the following variables considered.

Sources of information on special legislation taken into account were: Superintendent of companies, Financial Superintendence, National Council of economic and social policy (Consejonacional de política económica y social COMPES), Chamber of Commerce, Bureau of registration of public instruments, Secretary of Public Health, Secretary of municipal finance,

Secretary of municipal government, the Social Insurance Institute, Labour Inspectorate, Safety family compensation, Colombian Institute of Family Welfare, National Learning.

As for the unions and pressure groups in Colombia have been developed over the years as an elite, at the highest levels of political institutions, state and private, causing hegemony closed position in which it can be said that few people who are entitled to an opportunity to present their speech and ideologies, enforcement mechanism, is why is this variable qualified as poor. In what refers to the Constitution and general laws, it can be concluded that Colombia has enjoyed a tradition of judicial defense of the supremacy of the constitution, which guarantees the protection of the rights governing Colombia.

4.8 Difficulties related to environmental issues

| ASPECTOS AMBIENTALES | | | | | | |
|--|-------------|------------------|------------|-------------------------|---------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado (B) | (B / A) * 100 | Interpretación |
| Impacto Ambiental que Generan las Labores | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Incentivos y Restricciones para el Desarrollo de las Actividades | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Normatividad Ambiental | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Contribución Mejoramiento Medio Ambiente | 20% | 0,80 | 3,0 | 0,60 | 75% | MEDIO ALTO |
| Infraestructura de Servicios | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Cultura ambiental | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Total | 100% | 4,00 | | 2,45 | 61% | MEDIO ALTO |

Source: Information processed by authors, 2013

In Colombia and around the world are concerns about ecological problems that have been defined with any degree of precision such as global warming, the greenhouse effect, the destruction of the ozone layer, acid rain, etc., but while striking lack of political and legal action and public response to environmental requirements. During recent decades, pollution levels in Colombia have had a growing trend; pollution levels were recorded in the main cities of the country placed to Bogota, Cali, Medellin, Barranquilla and Cartagena with high rates of pollution. Meanwhile, the transport sector is characterized by demanding the most quantity of energy and generate the highest air pollution. Despite the productive and cultural homogenization that occurs nationwide, local and regional specificity of environmental and

population processes requires strengthening the regional dimension in the formulation, implementation and monitoring of environmental policy.

The momentum of the long-term development requires recognizing the vast economic, social and demographic heterogeneity, consistent design and implement appropriate policies and national realities. To achieve the objectives of growth and development is necessary to focus public policy in addressing the causes that produce and reproduce poverty; work to improve the living conditions of the population through the development of its attributes, reduce discrepancies in the levels of productivity and income. It is essential to note that the arbitrary exploitation of natural capital undermines the ability of ecosystems to meet current and future needs of the population and the needs of their own economic system.

4.9 CHALLENGES IN THE CREATION AND MANAGEMENT OF COMPANIES IN COLOMBIA

It is essential to take into account all the difficulties mentioned up here, because in turn become remains to entrepreneurship and management of small businesses mainly.

| MATRIZ EVALUACIÓN DE RETOS | | | | | | |
|------------------------------|-------------|------------------|------------|---------------------|---------------|----------------|
| RETOS | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado | (B / A) * 100 | Interpretación |
| NUEVOS EMPRENDIMIENTOS | 15% | 0,60 | 1,9 | 0,28 | 46% | ALTO |
| CRECIMIENTO Y SOSTENIBILIDAD | 20% | 0,80 | 2,6 | 0,52 | 65% | MEDIO ALTO |
| PRODUCTIVIDAD | 25% | 1,00 | 2,5 | 0,61 | 61% | MEDIO ALTO |
| COMPETITIVIDAD | 20% | 0,80 | 2,5 | 0,50 | 63% | MEDIO ALTO |
| INTERNACIONALIZACIÓN | 20% | 0,80 | 2,4 | 0,47 | 59% | ALTO |
| TOTAL | 100% | 4,00 | | 2,10 | 53% | ALTO |

Source: Information processed by authors, 2013

As can be seen the most important challenges that entrepreneurs and small business in Colombia facing are new ventures that refers to new business ideas, innovation and creativity, internationalization, involving for new businesses face participation in international markets and for this dynamic and forward planning process leading to a successful conclusion of the internationalization of firms as one of the strategies to sustain in the global context, in this process is crucial and competitiveness a major challenge for what it implies for companies expressed in quality, price, service and responsiveness to the speed with which changes occur in the markets; the competitive being implies high levels of productivity, therefore the challenge

of being productive should be taken in its full extent by new entrepreneurs, these challenges must be accompanied by a well structured to ensure the growth and financial sustainability of enterprises process.

4.10 The challenge of new ventures

| NUEVOS EMPRENDIMIENTOS | | | | | | |
|--------------------------|-------------|------------------|------------|---------------------|---------------|----------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado | (B / A) * 100 | Interpretación |
| Nuevas ideas de negocios | 20% | 0,80 | 2,00 | 0,40 | 50% | ALTO |
| Nuevos diseños | 20% | 0,80 | 2,00 | 0,40 | 50% | ALTO |
| Alianzas estratégicas | 20% | 0,80 | 2,00 | 0,40 | 50% | ALTO |
| Creatividad | 10% | 0,40 | 2,00 | 0,20 | 50% | ALTO |
| Innovación | 15% | 0,60 | 2,00 | 0,30 | 50% | ALTO |
| Nuevo conocimiento | 15% | 0,60 | 1,00 | 0,15 | 25% | ALTO |
| Total | 100% | 4,00 | | 1,85 | 46% | ALTO |

Source: Information processed by authors, 2013

In the national context the lack of innovative ideas is evident and these are manifested in the product concept, design, branding, packaging, new marketing, creativity, and innovation are the ultimate expression of the new knowledge acquired in vocational training evidenced when the value added in the Colombian economy in production processes, one of these samples is the formation of exports that its main export products are those that are sent to international markets under conditions discussed that produces nature (coffee, beans, oil, coal, flowers, etc.) and wasted a great resource for the transformation of new products and services that generate economic dynamism in GDP, growth and declining unemployment.

According to the Ministry of Commerce Industry and Tourism in Colombia have been created during the last three (3) years 636 665 companies, of which 625,361 are micro, small 9,408, 1,477 medium and 419 are great. From the above it can be concluded that 99.9% of the total companies created in the country during the years 2006, 2007 and 2008 belong to what the Law 905 of 2004 called MSMEs. These figures show that a very high percentage of the country's business sector is in a state of Micro, Small and Medium Enterprises, and so should be designed policies that allow business strengthening (MinCit, 2009). In the same proportion that Colombia is a country with recognized ability to entrepreneurship and business creation, it is also about the anticipated closures. Additionally, to further support the importance of addressing the issue of closure of businesses as an important part within the framework of the business formalization, it should be noted on the concerns that entrepreneurs regarding the high costs

(both monetary and transaction time) that currently has close a business. This is a barrier that entrepreneurs take into account when considering the formal initiation of business, (Ministry of Commerce, Industry and Tourism, 2009).

4.11 The challenge to grow and be economically sustainable

| CRECIMIENTO Y SOSTENIBILIDAD | | | | | | |
|------------------------------|-------------|------------------|------------|---------------------|------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado | / A) * 1 | Interpretación |
| Ventas | 25% | 1,00 | 2,5 | 0,63 | 63% | MEDIO ALTO |
| Utilidades | 25% | 1,00 | 2,5 | 0,63 | 63% | MEDIO ALTO |
| Apalancamiento | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Inversiones productivas | 20% | 0,80 | 3,0 | 0,60 | 75% | MEDIO ALTO |
| rentabilidad | 10% | 0,40 | 2,5 | 0,25 | 63% | MEDIO ALTO |
| Perdurabilidad | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Total | 100% | 4,00 | | 2,60 | 65% | MEDIO ALTO |

Source: Information processed by authors, 2013

According Mac Henan (1979), the only real growth is the utilities, all other forms of growth, firm size, product volume, market share, increase costs but not net profits. Therefore, a policy must be unquestionable asset allocation in order to maximize profit growth; other asset allocations must be considered contrary to this policy and oppose growth, human resources must be managed as growth assets, all other administrative forms profits erode and weaken people; is difficult to create products and services brand and is even more difficult to market, this makes it extremely difficult to beat the competition too strong, the other products are treats for the competition and no opportunities for one, in this vein, is vital to consider the role of the market which is to create, in the mind of a customer, exclusive additional value perceptions, all other perceptions are useless or harmful, in other words have no additional value for the customer, ultimately the most important sensitivity to manage a growing business is the customer. All others are allowed to compete with it demonstrate that the administration is sensitive to market needs that are ultimately the source of growth, (Hanan, 1979).

4.12 The productivity challenge

| PRODUCTIVIDAD | | | | | | |
|-------------------------|-------------|------------------|------------|---------------|---------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | ponderado (B) | (B / A) * 100 | Interpretación |
| Tecnologica | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Laboral | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Del Capital | 15% | 0,60 | 3,0 | 0,45 | 75% | MEDIO ALTO |
| Creación de Valor | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Los activos productivos | 20% | 0,80 | 2,0 | 0,40 | 50% | ALTO |
| Capital intangible | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Total | 100% | 4,00 | | 2,45 | 61% | MEDIO ALTO |

Source: Information processed by authors, 2013

Productivity reveals the quality and efficiency in the use of resources and the mechanisms used in the production process of goods and services. For this reason, the sustained increase in productivity it is critical to improve the standard of living of a society. Also, is the primary determinant of living standards of a country and the national income per capita. The productivity of human resources determines wages and capital productivity determines the benefits you get for the capital owners

Kenichi Ohmae (2005), on his visit to Colombia, recommended refocusing the business model to prevent sudden death, Colombia an enviable geographic position, a skillful and resourceful human capital, the second full biodiversity of the world and an entrepreneurial establishment, recorded at low levels of economic growth and an alarming social inequality, perhaps because the country has not had a clear development strategy, a long-term coherent foreign to politics and pettiness, ¿Is there a future ?, Yes, said Ohmae, but must define the future, create strategic business units and place at least two or three brands from the list of the world's first 100 (Mission SME, 2005).

As mentioned before, the Colombian business structure consists mainly of Micro and SMEs, but these, facing serious problems which are synthesized in Conpes 3527 2008 as problem areas that prevent Colombia's competitiveness: Low added value in production processes, Low productivity and capacity to generate employment in the formal sectors, in particular, low productivity of the agricultural sector, high levels of business and labor informality, Low levels of innovation and technology absorption, Shallow depth of financial markets, Deficiencies in transport and energy infrastructure, Low quality and low relevance of education, unfriendly tax structure to competitiveness, Lagging penetration of information technology and connectivity,

environmental degradation as limiting competition, weakness in the institutional structure with competitiveness.

In the industrial sector for SMEs, the first problem they face is the lack of technology. Different studies (DNP and Colciencias (2006), DNP (2007), Colciencias (2008)) show that in the field of Science and Technology, the central problem has been the low country's ability to identify, produce, disseminate, use and integrate knowledge. This problem is associated with: 1). Low levels of business innovation Innovation is related to investments in both the private and public sector. According to the Observatory of Science and Technology (OST (2007)), in 2006 Colombia's investment in research and development (R & D) was 0.18% of GDP, very low compared to international standards. 2). Insufficient human resources for research and innovation. 3). Low social appropriation of science, technology and innovation. 4). Lack of focus on long-term strategic areas. 5 Regional disparities in scientific and technological capabilities

Colombia currently has a growing gap with the developed countries, not only in research and generation of scientific knowledge, but also in the development of new processes, products and organizational and marketing systems arising from innovation processes. According to international measures of competitiveness, Colombia has plenty of room for improvement. Three indicators of international competitiveness are very common Global Competitiveness Index, prepared by the World Economic Forum (WEF) Competitiveness Index of the Institute for Management Development (IMD) in Switzerland, and the Index of Ease of Doing Business (Doing Business) World Bank (DB). According to recent data, Colombia occupies in the FEM (2013) the 69th position among 148 countries; IMD (2013), position 41 among 55 countries; and DB (2012), the 66th position among 178 countries, buna positions as reflected in the actual state of business activity in the country.

4.13 The Challenge of Internationalization

| INTERNACIONALIZACIÓN | | | | | | |
|--------------------------|-------------|------------------|------------|---------------------|---------------|-------------------|
| VARIABLES | Ponderación | Máximo ponderado | Evaluación | Resultado ponderado | (B / A) * 100 | Interpretación |
| Exportación pasiva | 10% | 0,40 | 3,0 | 0,30 | 75% | MEDIO ALTO |
| Exportación directa | 20% | 0,80 | 2,5 | 0,50 | 63% | MEDIO ALTO |
| Alianzas Internacionales | 20% | 0,80 | 3,0 | 0,60 | 75% | MEDIO ALTO |
| Inversión extranjera dir | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Estrategias globales | 15% | 0,60 | 2,0 | 0,30 | 50% | ALTO |
| Cultura Internacional | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Productos de mercado | 10% | 0,40 | 2,0 | 0,20 | 50% | ALTO |
| Total | 100% | 4,00 | | 2,40 | 60% | MEDIO ALTO |

Source: Information processed by authors, 2013

The effects of model openness and internationalization of the economy adopted in the early 90s and the recession that took place in the country in 1998 and 1999, and the recent global economic events have exposed the level of competitiveness of Colombian SMEs, and imposes the challenge of improving every day to stay in the domestic market and expand into new markets internationally.

The challenge of globalization for businesses and new enterprises should focus on the following aspects: psychological International Open; international culture; Joining the world; Get global technology, certified via acquisition or outsource it clean; Develop national capacity business cooperation to achieve economies of scale (research and development, market penetration and others); International distribution channels as possible to reach the final consumer; Internationally via Joint Venture Partner to quickly enter the world market and thus obtain, capital, technology and international distribution. Get a permanent capacity assessment and analysis of the world market to identify trends and opportunities; Capture the Andean market before others do; create preferably globalized multinational companies; Generation of managers form a comprehensive market and market capture general manager.

Undoubtedly one of the main concerns of business is business expansion model that meets the needs of a global market.

5. Conclusions

The New International Economic Order materialized in the Globalisation has resulted in the global, regional, national and local economy significant transformations and existing businesses and new business initiatives "unprecedented competition, requiring them to speed, flexibility and innovation to respond to the changing environment "(Bettis and Hitt, 1995). This implies for great entrepreneurs challenges that revolve around responsiveness to the speed with which changes occur in the market, which some experts as Lemmaire (1997), this new scenario, a new attribute is from which the company determines its dynamic development. Even authors like Hitt, Ireland and Hoskisson(2001), this new competitive environment generated by the technological revolution and increasing globalization presents many challenges for existing organizations, among them, a greater ability of the company to develop and exploit their innovation processes.

The study results in which courage are visible problems in training, the model of education, training of entrepreneurs, corporate culture, organizational culture, among others; problems of red tape; difficulties due to the lack of sufficient sources of funding; high production costs; uncertainty; little progress in research and development; low business competitiveness of the country in general; ignorance of the forces impacting business today, posed them to the company including the following challenges and difficulties: The development of new designs, effective fashion trends, response to technological renovations, practical application of responses new marketing strategies, training on new ideas for efficient administration, automation of processes, from design to after sales service, new forms of business association, the use of preferential trade advantages for positioning within a market The foreign competition in the domestic market, the use of modern technology, labor rights, technical standards, sanitary and phytosanitary standards, provisions on environmental protection, rules of origin, intellectual property agreements, the liberalization of trade in services and public procurement agreements.

To address these challenges companies must develop strategies that involve: Psychological openness, international culture, Joining the world, get certified global technology, develop a capacity for national business cooperation to achieve economies of scale, research and development, market penetration , distribution channels that best reach the consumer, international partner, to quickly enter the world market and thus obtain, capital, technology and international distribution, obtaining a permanent capacity assessment and analysis of the world market to identify trends and opportunities, Capturing regional markets, preferably Create global enterprises and build a generation of managers of global market.

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Social enterprises in Lima: concepts and operational models

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Abstract

The social enterprise movement in Lima is growing. More and more people are becoming interested in the area, in events that disseminate it, and in a range of initiatives that aim to promote it. In Peru in general and Lima in particular there has been increased interest in promoting the social enterprise movement in recent years, with good results. Young people in particular are more aware of social and environmental issues, and look upon enterprises as organizations with the legitimacy and the potential to address these problems.

Nonetheless, this interest has not been accompanied by the generation of knowledge that contributes to an understanding of the peculiarities and complexities of this promising sector. That is precisely the objective of this study, which is divided into two sections: 1) the concepts; and 2) the operating models of social enterprises. The first section sets out various interpretations and definitions of the term "social enterprise." The second part characterizes six different operating models of social enterprises that are active in Lima. Specifically, it describes the relationship between the social enterprise, the market, and the beneficiaries.

This research employs a qualitative methodology. In addition to the extensive review of the literature, 39 interviews were held with government officials, social entrepreneurs, academics, and representatives of non-governmental, multilateral aid, and private-sector organizations linked in some way to social enterprise.

This work was carried out as part of the "International Comparative Social Enterprise Models" project, financed by the Belgian Science Policy Office in collaboration with the EMES International Research Network.

Key words: Entrepreneurship, social enterprise, social entrepreneurship, cooperatives, Peru.

1. Introduction

According to Peru's constitution of 1993, the country's economic model is a social market economy. Article 58 states that "private initiative is free. It is exercised within a social market economy. Under this system, the state drives the country's development and acts primarily in the promotion of employment, healthcare, education, security, public services, and infrastructure." (Perú 1993, p.1). The fundamental principle underlying this economic model is respect for economic freedoms, while remaining at the service of individuals (Olivos 2011, p.1). However, despite the economic growth undergone in recent years,¹ Peru has made limited progress in terms of social development. As Ghezzi and Gallardo (2013, p.39) point out:

"...the performance of the Peruvian economy has been more unequal and, therefore, less outstanding than economic variables such as GDP, inflation, or debt suggest. Moreover, the progress made in aspects that also influence the wellbeing of the population, such as security, justice, corruption, political representation, and education was, when it was detectable, even more limited. Thus, the evolution of the Peruvian economy is not well balanced: better in macroeconomic indicators than in those that more directly capture population wellbeing."

In conclusion, the Peruvian state has not succeeded in reducing social gaps despite sustained economic growth. Gaps even exist in the meeting of basic needs (Instituto Nacional de Estadística e Informática 2013).

In this context, there is a case to be made for social enterprises as potential vehicles for reducing these gaps. As pointed out by Borgaza, Galera, Nogales, & Programme des Nations Unies pour le 4-5), "social enterprises provide an innovative approach and are effective as poverty reduction agents that can contribute to the promotion of cohesive communities".

On a national level most actors involved in the social entrepreneurship ecosystem stated that Peru has considerable potential for the development of successful social enterprises: on the one hand, it has favorable economic conditions, and on the other, citizens, especially young people, are more aware of social and environmental issues and are increasingly looking to ensure that their endeavors have more meaning and value than simply "lining the pockets of the company owner". Moreover, a series of initiatives have emerged that could encourage the growth of this new sector, such as contests promoted by the state and the third sector or the creation of the "Promotion Committee of B System" created to promote the certification of "B corporations" (a type of social enterprise) in Peru. Finally, Peru's first association of social

enterprises is to be formed, which stands as evidence of the activity that is being generated around this sector.

¹ According to World Bank data

(<http://datos.bancomundial.org/indicador/NY.GDP.MKTP.KD.ZG/countries>), in 2009 Peru's GDP grew by 0.9%; in 2010, 8.8%; in 2011, 6.9%; and in 2012, 6.3%.

2. Review of the literature

2.1 Review of concepts

2.1.1 Social enterprise

The term "social enterprise" is relatively new to Peru, so there is not a wealth of secondary sources that explores this area. Nonprofit organizations have the most experience in creating and developing social enterprises. Two such organizations are Cesvi and NeSst. Cesvi (n.d), defines a social enterprise as a "private nonprofit organization engaged in the production of goods and/or services, employing excluded individuals and fulfilling a social or environmental purpose" (p.9). Meanwhile, NeSst (2014) regards a social enterprise as "an innovative business that seeks to resolve a social problem in a sustainable and profitable manner" (p.9). As far as Márquez, Reffico, Berger & SEKN (2010)² are concerned, social enterprises are "private organizations that implement market strategies to finance themselves, with the aim of generating social value for their members, collectives and/or communities, whether they are legally constituted as nonprofits or cooperatives" (p. 97).

Although secondary sources that specifically relate to social enterprises are scant, there is a good deal of material that deals with specific forms of social enterprises such as cooperatives, nonprofit organizations, and microfinance institutions.

2.1.2 Cooperatives

A cooperative is an organization that groups together a number of individuals with the aim of engaging in a business activity whose operation is based on the cooperation of all its members. This grouping seeks to generate benefits for members through the provision of a good, service, or work. These organizations are based on four main principles: free and voluntary association; self-help as a means of solving one's own problems; self-management to enable members to run their cooperatives; and the absence of profit-making operations, given that the purpose is to generate benefits for members (PRODUCE 2009).

² This book is included as a source that reflects Peruvian circumstances, as two researchers from the Universidad del Pacifico took part in its creation.

In Peru, cooperatives are currently regulated by the General Cooperatives Law (Ley General de Cooperativas), which was passed in 1981.

Cooperatives in this country have two complementary classifications. The first uses the structure of cooperatives as a classification variable by dividing these organizations into service cooperatives (set up to provide services to its members) and worker cooperatives (set up to give work to its members). The second categorizes them according to the economic activity in which they are engaged. There is a total of nineteen economic activities, including farming, fishing, industrial, transportation, and savings and credit cooperatives. Cooperatives have specific regulations governing their internal structure and operation, as well as a specific economic and tax regime (PRODUCE 2009).

The first Peruvian cooperatives emerged in the 19th century, and were started up by European immigrants in the port of Callao. The first cooperative in Peru was founded in 1866, but it was not until 1902 that the cooperative was incorporated into the Commercial Code as a legal concept.

In the 1960s laws were passed in favor of cooperatives, such as the tax protection regime, which marked the beginning of the state's concern for cooperativism (Mogrovejo, R., Vanhuynegem, P., Vásquez, M., International Labour Office., ILO Subregional Office for Andean Countries 2012). This decade also stood as the high point of the cooperative movement in Peru, with 2,939 such organizations registered.

Some years later the military government fostered cooperative development with a paternalistic and interventionist slant when it implemented the Agrarian Reform Law (Ley de Reforma Agraria), which imposed the agrarian cooperative model of production to peasants. In so doing the government violated the cooperative principle of voluntary and open membership (PRODUCE, 2009), which, coupled with other factors, led to the failure of these cooperatives throughout the country. This prompted a distrust in Peruvian society toward cooperatives which still endures today.

In 1990 Alberto Fujimori applied a series of economic measures in an attempt to bring hyperinflation under control. These measures followed the precepts of the Washington Consensus, which aimed at a neoliberal economic policy that privileged private companies over other forms of wealth generation, such as cooperatives. This precipitated the liquidation of major savings and credit cooperatives, as well as the exclusion of other types of cooperatives from public policies and business promotion programs. In 1993 a new political constitution was approved, which removed all mention of cooperatives from its contents (Mogrovejo et. al. 2012).

Several years later, in 2008, the Ministry of Production was established as the authority with competence for the promotion and development of cooperatives, and, to this end, the Cooperatives Office was opened in 2009 (Mogrovejo et. al. 2012).

The presence of cooperatives in Peru is significant; "almost 6% of the economically active population are members of a savings and credit cooperative, while a considerable percentage of coffee and cocoa exports is accounted for by agricultural cooperative production" (Mogrovejo et. al. 2012, p.9). According to Ministry of Production figures, 1,765 cooperatives were known to be active throughout Peru as at November 2012. Most were concentrated in Lima (45.6%), followed by Puno (7.4%), Junín (5.9%) Arequipa (5.7%), and Callao (4.2%) ("Produce: Actualmente operan 1,765 cooperativas", 2012). These cooperatives encompassed more than 3 million members ("Nueva Ley General", 2014).

2.1.3 Nonprofit organizations

Nonprofit organizations comprise the third sector. These organizations work towards social or environmental ends, and are financed entirely or primarily through donations.

The third sector in Peru has been built on the foundations of the Andean traditions of solidarity and self-help. Because of the historical weakness and the authoritarian and exclusive nature of

the state, the third sector has been on the rise (Sanborn & Cueva 2000). Moreover, a number of organizations, such as the Catholic Church, have aided the development of this sector over time.

However, the evolution of this sector has not been constant, but characterized by intermittent growth and spells of reduced activity (Sahley & Danziger 1999). Different contextual forces have converged over the years to engender the creation of new organizations of this type.

After independence, at the start of the 19th century, numerous mutual aid societies were established. These were initiated by artisans and workers with the aim of looking after members of the community in the event of illness, accident, or death.

Throughout the 19th century and the first half of the 20th, the Peruvian elite embarked upon the practice of philanthropy. Inspired by Christian charity and moral considerations, the upper classes took to setting up benefit societies with a view to helping those most in need.

Nonprofit organizations established from 1975 onwards were motivated by a strong political and ideological impetus. These organizations were founded on the basis of the ideology of solidarity with popular movements. They saw themselves as political actors in opposition to the state, and were therefore responsible for championing alternative development strategies to benefit the poor.

At the start of the 1980s, the new nonprofit organizations were more likely to be specialized agencies centered on a given sector. This marked a departure from the former nonprofit organizations, which provided multiple services to a specific community. Thereafter, because of the rise of terrorism, the third sector was left to assume wider responsibilities that ranged from attending to the population's basic needs (food, healthcare, housing, and security) to defending human rights.

In the 1990s, once terrorism had been subdued, Peru entered into a period of macroeconomic stabilization. In this period, greater emphasis was placed upon public policies oriented toward poverty reduction and social development. In addition, Peru underwent a process of forming and multiplying new nonprofit organizations (Sanborn & Cueva 2000). At the same time employers began to express more concern for their environment, which led to the development of corporate social responsibility. In a certain way, this could be seen as an updated and more corporate version of the old philanthropic practices of the Peruvian upper classes. On this basis charitable, philanthropic and social responsibility practices took on renewed significance (Portocarrero & Sanborn 1998).

In short, "the proliferation of the third sector owes largely to the fact that neither the state nor the economic elites were capable of guaranteeing basic rights and services for large sectors of the population. Consequentially, a range of private and self-managed alternatives were resorted to" (Sanborn & Cueva 2000, p.45).

At present, there are 727 nonprofit organizations in Peru. Of these, 40% are found in Lima (Webb & Fernández Baca 2013).. Ironically, the poorest departments most in need of aid are those with the least non-profit organizations; in many cases they number less than five

Many traditional nonprofit organizations have made the transition to becoming social enterprises and more are expected to follow suit, given that international cooperation funds decreased after Peru was reclassified as an upper-middle-income country by the World Bank.

2.1.4 Microfinance Institutions (MFIs)

Microfinance institutions have had a history of success in Peru. These organizations have the social objective of offering financial services to the poorest section of society (made up of low-income families and small and micro enterprises) not served by traditional banking (Aguilar & Clausen 2009). This means that, intrinsically, microfinance institutions are social enterprises. Nonetheless, given that many of these organizations have grown exponentially and have even been purchased by commercial banks, some experts have cast doubt on their social intent. For the purposes of this study, however, all, microfinance institutions will be considered as social enterprises.

"The microfinance industry is comprised of a combination of large and small banks; NGOs,³ Development Entities for Small and Micro-Enterprises Edpymes (Entidades de Desarrollo para la Pequeña y Microempresa - EDPYMEs. These are NGOs that have been converted into specially-regulated financial institutions); financial institutions; rural banks (cajas rurales; small banks aimed at agriculture and small companies); municipal banks (cajas municipales; municipal savings and credit banks); and credit cooperatives. The common factor to all of these organizations is the participation in the small loans market, with most being financially self-sufficient" (Conger, Ingra & Webb 2009, p.14).

Between the 1960s and the 1980s, the mutuals and the savings and credit cooperatives (SCCs) dominated the microfinance scene. Subsequently, between 1985 and 1990 they were weakened considerably by the economic hyperinflation to which the country was subject. From

1990, a series of neoliberal reforms were implemented to rescue the declining Peruvian economy by eliminating insolvent and unsound financial institutions, which included big state-run banks, mutuals, and SCCs (Conger, Ingra & Webb 2009). Thus, "in 1992 the housing mutuals disappeared and most of the savings and credit cooperatives declared themselves bankrupt due to the restrictions of the political economy" (p.64). Nonetheless, as has been mentioned previously, the SSCs continue to have a presence in Peru.

Another kind of MFI are municipal banks, decentralized financial institutions that look to serve groups that are overlooked by the formal loan system. These institutions started to emerge at the end of the 1970s. In the 1990s, Rural Savings and Credit Banks (CRACs) were established

³ NGOs is the acronym for Non-Governmental Organizations, which are synonymous with nonprofit organizations.

as financial institutions originally aimed at the agricultural sector. Afterwards, they added to their portfolio of products commercial lines of credit for micro and small enterprises (Quispe, León & Contreras, n.d.). There are currently thirteen municipal banks and nine rural banks located throughout the country (SBS Directorio de empresas supervisadas 2014).

For the last six years running, Peru has obtained first place in the Global Microscope ranking devised by Economist Intelligence Unit, which attests to the sound environment for microfinance institutions in the country. This can be attributed to a number of factors: Peru has an appropriate regulatory framework governed by the Superintendency of Banking, Insurance, and Pension Fund Managers (Superintendencia de Banca, Seguros y AFP - SBS) and a competitive and innovative market, while progress has been made in customer-protection measures. Added to this is the country's economic stability, a solid and profitable financial sector, and legislation that does not create obstacles for microcredits (Ríos-Henckell & Martínez 2014). Another important aspect is that the Peruvian microfinance industry is the least concentrated and most diversified, with the three largest institutions accounting for just 38% of all loans (Trujillo & FOMIN 2013).

As at 2012, Peru has 142 microfinance institutions, of which 50 are regulated and 92 are not. Taken together they manage a portfolio worth US\$ 7,132,931,469, of which 95% corresponds to regulated institutions. They have a combined total of 2,839,649 customers, 87% pertaining to regulated entities. That is to say, most of the Peruvian microfinance market is in the hands of regulated institutions. Loans are worth an average of US \$2,909 while the average interest rate is 26.5% (Trujillo & FOMIN 2013).

There is still a long road ahead for the microfinance institutions, as the level of access to banking services is still low for the region: approximately 30% of the Peruvian population has access to banking, compared with 80% for Chile.

2.1.5 Related concepts

Inclusive Businesses (IB) refers to those economic activities that allow the poorest to participate in value chains (as consumers, suppliers, or distributors) to generate benefits that bring about improvements in their quality of life (Márquez, Reffico & Berger 2009). As such, low-income sectors connect to conventional markets with the aim of substantially improve their living conditions (hence the use of the term "inclusive", unlike other approaches that seek simply to "sell to the poor"). These initiatives allow poor communities to access conventional markets more effectively, fully, and extensively (Márquez, Reficco, Berger, & SEKN 2010).

Social Responsibility (SR) According to ISO 26000 (2010), SR is the responsibility of organizations for the impact that their decisions and activities have on society and the environment. It entails an ethical and transparent conduct that contributes to sustainable development, responds to the expectations of the stakeholders, obeys the law, and is integrated throughout the organization. That is, it is an ethical way of running any organization (companies, universities, etc.).

B Corporations are those that "offer solutions to social and/or environmental problems. They are aware that profits are needed to maintain and grow a business, but they are not willing to generate these profits at any cost." (B Corp n.d.). Basically, these are social enterprises legally registered as business corporations. However, to be considered B corps the organizations must meet certain requirements. One of the most important is to set in the statute that the company aims to achieve a social or environmental purpose, besides financial, taking into account the impact of their decisions on their groups of interest.

2.2 Operating models of social enterprises

Overall, Peruvian literature on the operating models employed by social enterprises is scant. Only Cesvi (n.d.) systematized the experience it had in forming social enterprises to provide work to individuals excluded from the labor market. Thus, for the identification of social enterprise models in Peru, we have resorted to international studies.

Alter (2003) regards operating models as the representation of the dynamic through which social and economic value is created. She has identified eleven operational models of social enterprises. These are:

- a) Entrepreneurial support model: the social enterprise sells business and financial management advisory services to the beneficiary population. Thereafter, the beneficiaries improve their products/services to sell them to the market.
 - b) Market intermediary model: the social enterprise provides advisory services to improve products and provide credit services to the beneficiaries, who are made up of small agricultural producers. In turn, the social enterprise buys the beneficiaries' products and sells them to the market.
 - c) Employment model: the social enterprise provides employment to the excluded, and then sells the products or services they produce on the market. In addition, the workers receive training to improve their skills as workers.
 - d) Fee-for-service model: social enterprises sell their social services directly to the beneficiaries, who may be individuals or organizations.
 - e) Service subsidization model: the social enterprise sells products or services to the market, utilizing part of this income to fund social programs. Here, business and social parts share costs, assets, operational components, and income.
 - f) Market linkage model: the social enterprise offers the service of broker to producers (beneficiaries) and buyers on the market, and provides market information to both. The social enterprise charges a fee for this service.
- Organizational support model: the social enterprise sells products or services to the market and part of the revenues are used to cover the costs of an associated nonprofit organization that generates social value by attending to beneficiaries.
- h) Private-sector partnership model: this model consists of an alliance between a for-profit company and a nonprofit organization. This partnership creates a social enterprise to engage in a business activity that will be taken to market, with income utilized to attend to beneficiaries.
 - i) Franchise model: social enterprises sell their proven business model to other organizations so that they can run these enterprises as their own.

j) Complex model: the social enterprise uses a combination of more than one operational model.

k) Mixed enterprise model: a number of social enterprises operate as business units with their own objectives and structures. This model tends to be utilized by mature social enterprises.

For their part, Defourny & Kim (2011) identified five categories of social enterprise in East Asia. These are:

- a) Trading non-profit organization: a nonprofit organization that seeks funding sources through a commercial dynamic.
- b) Work integration social enterprise: an organization that provides employment to individuals who are excluded from the traditional labor market.
- c) Non-profit co-operative enterprise: a collective of individuals who group together to cover their unmet needs through an organization founded on traditional cooperative principles.
- d) Non-profit organization and for-profit organization partnership: a business corporation supports a nonprofit organization, or they jointly set up a new organization with a social mission.
- e) Community development enterprise: an organization that promotes local, primarily rural-based participative development is set up through a partnership comprised of different groups (nonprofit organizations, companies, and public entities).

3. Hypotheses

Based on a review of the literature, the following hypotheses are posed:

Hypothesis 1: The concept of social enterprise is not well-known in Lima.

Hypothesis 2: The group of individuals that manages the concept of social enterprise believes this connotes organizations that pursue a social or environmental mission that are economically self-sustainable. Aspects relating to the legal structure and dividends policy are unclear.

Hypothesis 3: The operational models proposed by Alter (2003) correspond to the reality of social enterprises in Lima.

4. Methodology

The methodology followed in this study was qualitative: 39 interviews were held with different actors involved in social enterprises in Lima. The interviews took place in March, April, and May, 2014. These were semi-structured and had an average length of 40 minutes.

The table below shows the number of interviewees per organization category.

Table 1

| Category | Number of interviewees |
|-----------------------|------------------------|
| Academic | 6 |
| Multilateral agencies | 2 |
| Third sector | 6 |
| Public sector | 6 |
| Private sector | 4 |
| Social entrepreneurs | 15 |
| TOTAL | 39 |

5. Results

5.1 The concept of social enterprise

The term "social enterprise" is not well-known in Peru. The fieldwork shows that the academics, multilateral agencies, the third sector, and social entrepreneurs are the groups that employ the term the most.

With respect to the concept, there are certain aspects for which there is consensus and others for which there is not. Consensus is formed around two points: the social or environmental mission of the organization and its economic self-sustainability. As two of the interviewees pointed out:

"For me it is an enterprise that has a business model that allows profitability at the same time as addressing a particular social problem and generating positive benefits to tackle that social problem" (Interviewee from a multilateral agency).

"It is a business that solves a social problem in a financially sustainable manner. This involves a social mission, but one that utilizes market tools in its accomplishment" (Interviewee from the third sector).

5.1.1 Legal framework and dividends policy of the social enterprise

Because Peru does not have a specific legal framework for social enterprises, the aspects on which different positions were taken were precisely those related to the legal structure and the dividends policy that these organizations should have. Both points are related, as a given legal structure would entail certain provisions for the management of revenues. In Peru, the Corporations Law (Ley de Sociedades) governs all for-profit organizations, and gives them freedom to decide what to do with their profits. On the other hand, the Civil Code regulates nonprofit organizations, requiring them to reinvest revenues in the organization. Finally, cooperatives have a specific legal structure that stipulates the return of all surpluses (revenues) to members in proportion to the services utilized (PRODUCE 2009).

In practice, social enterprises adopt the legal structure that best fits their needs. Some even opt for both forms, which means that it is possible to find a nonprofit organization and a company operating alongside one another for a single purpose.

As has been mentioned, some interviewees contend that social enterprises should be registered as nonprofit organizations, others as companies, while still others feel that the legal structure matters less than their mission to tackle a social or environmental problem and their self-sustainability. Moreover, some of those interviewed believe that revenues should be reinvested: "social enterprises will always reinvest proceeds in the activities of the organization, unlike the other form, where revenues are shared out. Money is not an end; it is the means of truly fulfilling our purpose, our social objective."

Other groups feel that this aspect is not of relevance in deciding whether an organization is a social enterprise, as pointed out by one interviewee: "a social enterprise is a company that does business. This generates profits that serve to pay for a social cause. This must be at the heart of, or the main purpose, of the company. There are two ways of doing this: one in which dividends are shared out, and another in which they are not." On this subject, another interviewee opined that "the distribution of revenues is completely legitimate. It is a decision for the organization, it has the freedom because the legislation does not impose restrictions. This does not take away social enterprise status."

In addition, most interviewees were of the opinion that the main difference between a company and a social enterprise is that the latter pursues a social or environmental purpose, unlike companies, whose purposes are purely economic. Moreover, they agreed that the main difference between a social enterprise and a nonprofit organization is that the former is self-sustainable while the latter is sustained primarily by financial donations. Some also added that social enterprises have a better management a traditional non-profit organization.

5.1.2 Difficulties in the identification of social enterprises

Some interviewees maintained that despite agreement on the criteria for identifying a social enterprise, determining which organizations possess this status is less straight-forward, as in-depth knowledge of a social enterprise is required to attest to its social or environmental purpose.

Added to this is the fact that some organizations that operate as social organizations do not self-identify as such. From what has been found in this study, there are two main reasons for this: a lack of knowledge of what a social enterprise is, and an aversion to the term "enterprise"

due to what some see as its negative connotation based on an association with profit-motivation at any cost.

Added to these conceptual difficulties is the confusion caused by the current use of other terms to refer to these organizations; some of these terms are inclusive businesses, social responsibility, nonprofit organizations, and B corporations.

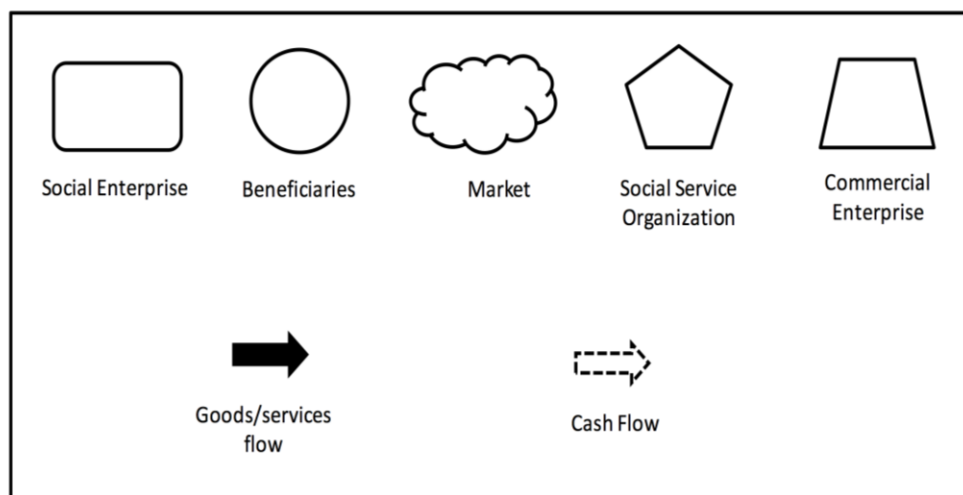
5.2 Operating models of social enterprises

The operating models of social enterprises represent the dynamic between the social enterprise, its beneficiaries (target population of the social or environmental purpose) and the market to ensure the creation of economic and social value.

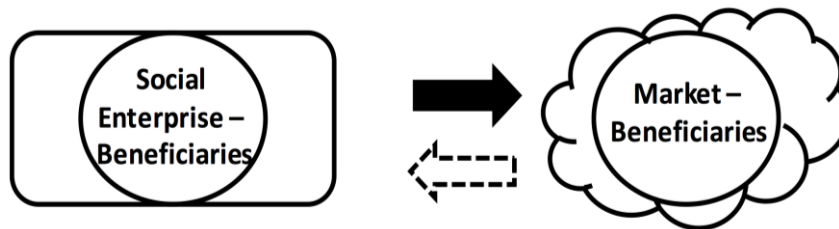
The following categorization draws on the operating models proposed by Alter (2003), given that these models are based on Latin American social enterprises, and thus should reflect the circumstances in Peru. On this basis, the information collected from the interviews and secondary sources is assessed to propose a series of models that apply to Peruvian circumstances.

Shown below is a legend for understanding the graphic representations of the models.

Diagram 1: Legend



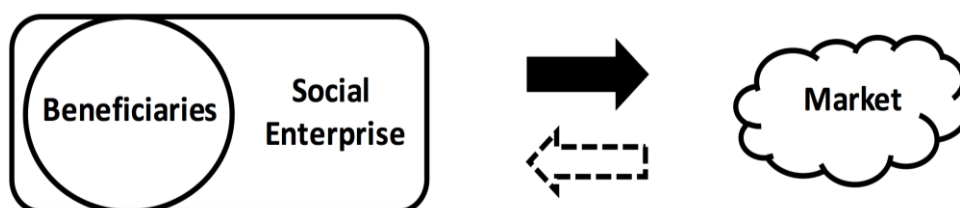
Model 1: Partnership



In this model, those who receive the social value are, in turn, owners and customers. The motivation behind the establishment of a social enterprise is provision of goods and/or service to partners. The initial capital required to set up the social enterprise is placed by shareholders who are, at the same time, beneficiaries. The products or services are sold at prices that are affordable to customers who are, at the same time, beneficiaries. In this way, they receive a product or service that they would not otherwise have access to, as well as dividends (in the event that revenues are generated and the legal structure of the organization allows it).

An example of an organization that employs this model is the Santa Rosa Savings and Credit Cooperative. In this case, a group of citizens (initially encouraged by a local priest) contributed startup capital to form a cooperative. As owners, they sit on the member's assembly and thus take part in the cooperative's decision-making processes in a democratic way. This cooperative structure does not share out dividends, though any profits generated are distributed to members in proportion to the services they have utilized. In turn, beneficiaries can access credits and a series of additional services offered by the cooperative, such as economic support for the family of a deceased member. As with most savings and credit cooperatives, this organization only provides financial services to its members, not to third-parties.

Model 2: Work Integration



Organizations of this kind are set up for the main purpose of offering dignified work to groups that are excluded or at risk of exclusion from the job market. Thereby, social value is generated. These groups join the company as workers. The company produces goods or services that are later sold on the market, thus generating a flow of financial resources.

One example of this model is Empanacombi, an organization created to promote access for individuals with disabilities to the job market. Empanacombi sells high-quality fast food, employing deaf-mute individuals in its food production and customer service areas. Moreover, its stores are provided with signage designed so that customers can communicate with staff using sign language (Personas Haciendo la Diferencia 2013).

Model 3: Bridge



In the bridge model, the social enterprise acts as a facilitating agent to connect a group of suppliers with the market. This brokerage service is a valuable means of helping suppliers to overcome barriers to market entry, such as cultural or geographical distance from potential customers or a lack of expertise in management tools. Moreover, social enterprises train suppliers to improve their product or service offering.

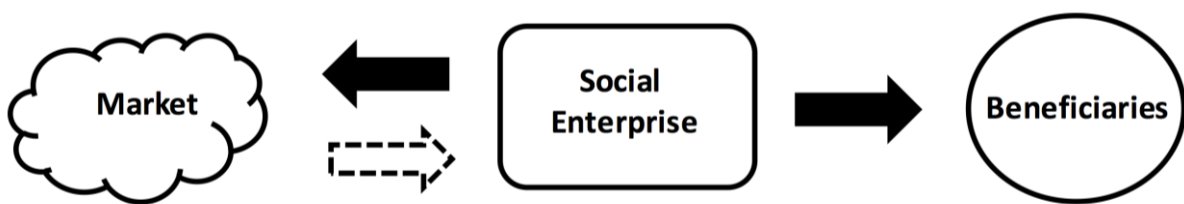
The social enterprise is economically sustained through the deduction of a percentage of its suppliers' sales. As such, the value created for beneficiaries is twofold: training to enable more competitive products or services and market access and, in turn, income from the sale of products or services through a new channel.

One example of how this model is employed is provided by Duhem, a social enterprise that promotes healthy and responsible consumption through a web portal. The products sold on this online store "benefit many more than just the buyer" (Quienes somos, n.d.), as part or all (depending on the case) of the money earned goes toward a number of social causes. For example, Operación Sonrisa sells a range of products whose proceeds are used to support

children with cleft lip and palate. Duhem also sells products that are environmentally responsible in and of themselves, such as organic or biodegradable goods.

Aside from sales, the founders of Duhem recognized a need among certain suppliers to receive advice on marketing in order to enhance the market appeal of their product. As a result, they now offer support of this kind free-of-charge.

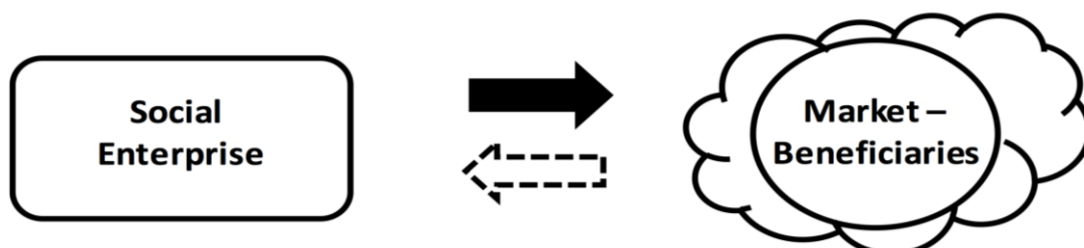
Model 4: Delegated social responsibility



In this model, the market, primarily private companies, procure the services of a social enterprise to execute their social responsibility programs in the field. The social enterprises do the fieldwork and interact directly with beneficiaries on behalf of the client. In parallel, the social enterprises usually implement other social programs financed by international funds or donations. All the programs that they execute, whether financed by companies or international cooperation, have a social purpose. That is, all their activities - the financing source aside - are aligned to their social purpose.

For example, the NGO Visión Solidaria "designs, executes, and assesses social projects focused on the school community which are financed by private companies and local and international donors." Thus, it executes "Mi City" program for Citibank, which empowers children and adolescents to break the cycle of poverty by teaching them about the rights and responsibilities of children, adolescents, and youth, as well as fostering a culture of saving. It also fulfills "Viva Quiérete" project for the youth-oriented makeup company CyZone. The project consists of a set of talks and exercises on self-esteem, social skills, and disorders such as bulimia and anorexia, with the aim of promoting a healthy lifestyle to adolescents (Visión solidaria Proyectos, n.d.).

Model 5: Fee-for-service



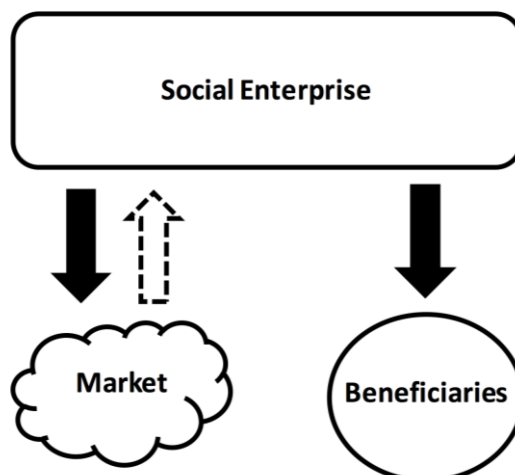
In this case the social enterprise sells products or services that in and of themselves create social value, whether for customers, society at large, or the environment.

The organization X-Runner provides an example of how this model is applied. X-Runner sells dry toilets and provides the service of collecting the solid waste generated by the product. The toilet is ecological, portable, and functions without water. The solid waste generated is collected by the company once per week, and is converted into compost through an environmentally-friendly process. Thus, the quality of life of those with limited resources is improved through access to a basic service that was previously lacking, and a contribution is made to protecting the environment. From 2012, X Runner has operated in Villa El Salvador, a district of Lima in which there are three million people without access to water or sanitation (Un sanitario ecológico y que no necesita agua para el Perú ¡Bienvenidos, X-Runner! 2013). The company's income is generated through payment for the toilet and the waste collection service.

Model 6: Cross-subsidization

The idea behind cross-subsidization is that the organization has a business activity that generates funds for two purposes: to cover operating costs and to fund social programs. In Peru, there are number of models based on this system; these will be set out below:

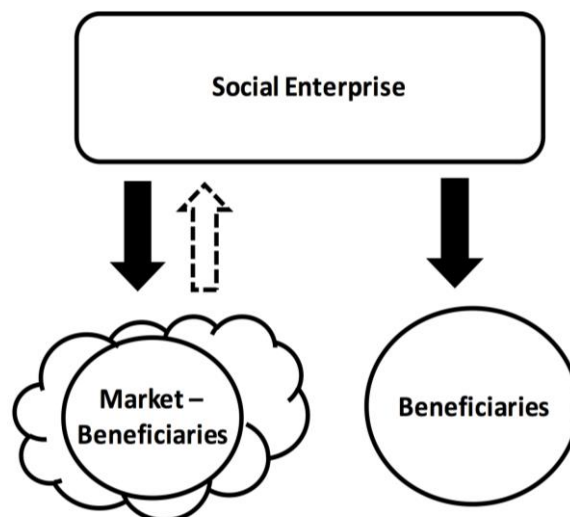
Model 6 A: Simple cross-subsidization



In this model, the social enterprise sells a product or service on the market, with part of the proceeds used to cover operating costs and the other for financing social programs.

La Tarumba is a circus, theater and Peruvian music company that puts on shows for the general public. It also runs a school where circus classes are given, as well as social programs that work with vulnerable youths. La Tarumba is economically sustainable on account of the income generated by its shows and the school. Of this income, 30% goes toward social programs. Moreover, it occasionally receives funds from international cooperation, which are also set aside for its social programs. An example of this is the agreement La Tarumba signed with the IDB's Multilateral Investment fund (MIF) to create the program "The social circus as an option to enhance employability" (El circo social como alternativa para mejorar la empleabilidad). This program "consists of the training of youths to improve their employment and entrepreneurial conditions, as well as the development of a regional model that will help to lower the youth employment rate in the region." (Alianza con el BID FOMIN, n.d.).

Model 6 B: Simple cross-subsidization with customers at the base of the pyramid

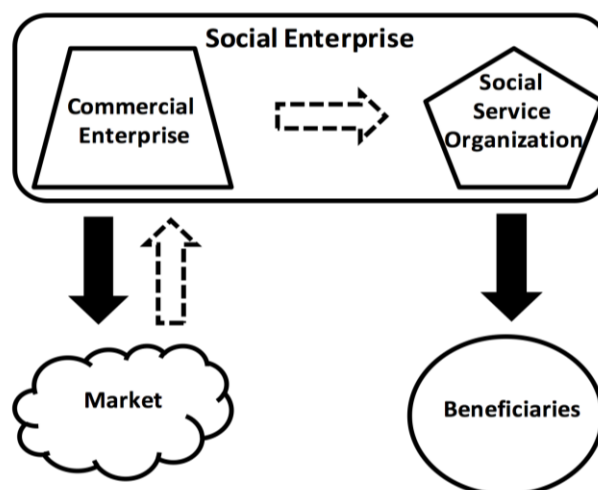


In this model, the social enterprise sells products or services to customers at the base of the pyramid, while setting aside a percentage of the income for social programs. In this way, it makes a product or service accessible for its customers/beneficiaries and generates value with

its social program. On occasion, the customers/beneficiaries may also be the beneficiaries of the social program.

Inppares is an organization that provides low-cost sexual and reproductive healthcare services to low-income individuals. Moreover, it promotes social development through sex education programs, as well as comprehensive support with an emphasis on sexual and reproductive health. Inppares generates income through the healthcare services it provides. Its income covers operating costs and funds its social programs. In addition, it receives funds from international cooperation and other donors that is use exclusively to strengthen its social programs.

Model 6 C: Cross-subsidization between Commercial Enterprise and related NGO

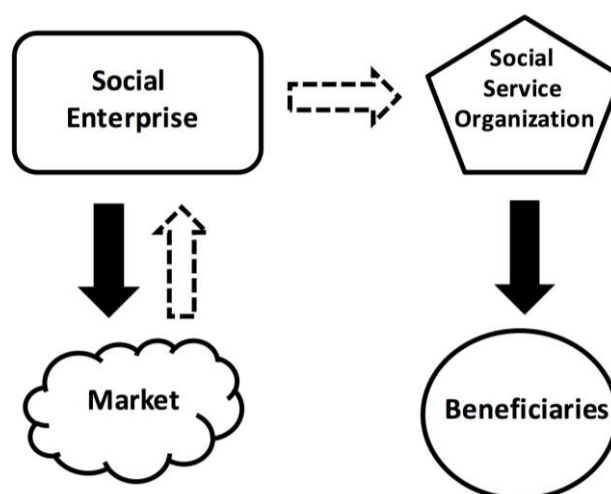


In this model, the social enterprise is a product of the dynamic between two organizations acting together: a commercial enterprise and a nonprofit organization. The former generates economic resources through the sale of products or services, which it uses to sustain itself and finance the

nonprofit organization, while the latter creates the social value. Even though both organizations have different legal structures, they are led (and, in some cases, managed) by the same person and share infrastructure, basic services, etc. The business activity may or may not be related to the activities carried out by the nonprofit organization. This model seeks to generate efficiency in the use of resources by separating the business activity from the social activity.

One such case is the D1 Cultural Association, an organization engaged in “social transformation and cultural promotion through its three axes: the D1 dance company, the D1 dance school, and Ángeles D1” (Asociación cultural D1, n.d.). The first undertakes comprehensive artistic development and the production of shows internationally. It has 26 members who specialize primarily in disciplines such as hip hop, jazz, break dance, ballet, funk, street jazz, zapateo, and Peruvian folk. The school provides paid dance classes that cater for those with high socio-economic status. Ángeles D1, the central axis of the association, pursues social transformation and cultural promotion through the artistic and human education of youth leaders. The company and the school are self-sustainable and finance the Ángeles D1 program. The youths on the program are in situations of risk, living in areas characterized by high rates of crime, violence, drug use, etc. D1 Angeles develops its human capital, through the development of their artistic and leadership skills, gives them the opportunity to work as teachers in the school or as dancers in the production company, and develops social capital among youth in the program.

Model 6 D: Cross-subsidization between social enterprise and unrelated NGO



In this case, the social enterprise results from the aim of tackling a social problem, but in alliance with an external organization. The social enterprise and the nonprofit organization are

independent (they have different legal structures and different leaders), but work together to tackle a social or environmental problem. Under this arrangement, the social enterprise sells products or services on the market and assigns a portion of its income to the nonprofit organization, which is used for work with beneficiaries.

This is the case of Yaqua, a social enterprise whose purpose is to provide clean water to millions of Peruvians who do not have access. To this end, 100% of its profits are used to finance projects that provide clean water to the poorest parts of the country. These projects are led and managed by a number of NGOs specializing in the area. Thus, Yaqua provides the financing and the NGOs do the fieldwork and report on progress (Yaqua ¿Cómo funciona? 2014).

6. Discussion

6.1 The concept of social enterprise

In general, the field of social enterprises is not well known, though trends clearly shows that this situation is changing, with an increasing number of people showing interest. The concept itself is not clear to most people, but its essence is: the social purpose and the self-sustainability of the organization. This corresponds to the definition identified in the literature. The confusion arises when the legal aspect and the dividend policies enter the equation. The ambiguity around these aspects looks set to remain, as there are no specific initiatives to establish an ad hoc legal framework.

The first hypothesis, "the concept of social enterprise is not well-known in Lima", is confirmed by everything that the interviewees have said. As has been mentioned, those who manage the concept are academics, third-sector representatives, multilateral agencies, and social entrepreneurs themselves. It is only now that the government and other private spheres are becoming aware of the social enterprise movement, while it is new to the general public. As such, the first priority for the sector to grow and establish itself has to be the dissemination of information on social enterprises and, as some interviewees pointed out, the positioning of certain social enterprises as exemplars to inspire others.

The second hypothesis that "the group of individuals that manages the concept of social enterprise believes this connotes organizations that pursue a social or environmental mission that are economically self-sustainable. Aspects relating to the legal structure and dividends

policy are unclear" is also confirmed. The fieldwork showed the consensus on the social purpose and the self-sustainability of social enterprises to be key aspects. Differences of opinion center on the choice of legal structure, with some believing that social enterprises should register as nonprofit organizations and others favoring company status. Moreover, some feel that dividends could be distributed, others that profits should be wholly reinvested, while the remainder were unconcerned so long as the two key aspects - social purpose and economic self-sustainability - are realized.

On the other hand, the concept faces a cultural barrier that prevents many from conceiving of a hybrid between a company and a nonprofit organization as a sustainable and successful endeavor. Both organizations are practically seen as polar opposites in Peruvian society, so for social enterprises to gain acceptance it will first be necessary to break out of paradigms that are somewhat deep-rooted. As one interviewer stated, "for some people it does not compute: [they see] the public and the corporate, with nothing in between." Moreover, as one interviewer pointed out, the promotion of the concept of social enterprise might have the effect of discrediting some commercial companies, which society would probably start to see differently.

To compound this situation, there are other terms that, despite being essentially different, the public tends to confuse; these include social responsibility, inclusive businesses, non-profit organizations, and B corporations. The extent to which these concepts are similar or different is set out below.

Inclusive Businesses. Inclusive businesses and social enterprises are not one and the same; nonetheless, the term "inclusive business" is more widespread in Peruvian society and gives rise to confusion. They are set apart by three basic differences. The first is that an Inclusive Business is not necessarily an organization; it may be a project or program implemented by a company and its suppliers. That is, it may not have an independent legal structure, as a social enterprise should. As a result, a company cannot be said to be a social enterprise just because it executes an inclusive program or project. The second is that the beneficiaries of inclusive businesses are the company and a group of low-income individuals. Social enterprises aim to tackle problems faced by anyone in society, whether poor or not, given that social or environmental problems do not respect class barriers. To be sure, in some cases these affect the poorer sectors of society more acutely, but they are not restricted to them. For instance, pollution, a poor-quality public transport system, crime, etc. are problems that affect everyone. In summary, while inclusive businesses target the poor, social enterprises focus on people of all socioeconomic statuses. The third reason is that an inclusive business seeks to maximize both

social and economic value, while a social enterprise has the purpose of achieving its social or environmental objectives and the economic aspect serves as means of sustaining this rather than as an end in its own right. That is, for an inclusive business, the social and economic value are equal, while in the case of a social enterprise the social value takes precedence over the economic.

Social Responsibility. Though a company can operate in a socially responsible manner (if it chooses to do so), its purpose will always be to maximize profits. A social enterprise, on the other hand, incorporates the concept of social responsibility into its core business from the outset by seeking to address a social or environmental problem.

Nonprofit organizations. Many nonprofit organizations are maintained via the traditional donation-receipt model. However, others have made the transition to the social enterprise form out of the need to generate their own funds in order not to depend entirely on donations to continue operating. This transition became more pronounced from 2008, when Peru was reclassified as an upper-middle income country and thus lost its priority status for international cooperation. Added to this is the economic crisis in the United States and Europe, which also reduced the funds available for this area (COEECI 2013). Accordingly, there are many organizations operating as social enterprises that continue to define themselves as foundations or NGOs.

B corporations. In this study, B corporations are regarded as a subgroup of social enterprises. That is, B corporations are all social enterprises legally constituted under the General Corporation Law, which regulates companies. The difference is that the B corporation movement was started by entrepreneurs, while the social enterprise movement was a third-sector initiative. Nonetheless, in practice both have corporate dynamics that enable self-sustainability to fulfill a social or environmental purpose.

6.2 Operating models of social enterprises

Of the eleven operating models proposed by Alter (2003), five coincide with those identified in Lima. Alter's (2003) employment model coincides with the work integration model; the fee-for-service model has the same name in both cases; Alter's (2003) service subsidization model corresponds to that of simple cross-subsidization; Alter's (2003) market linkage model

resembles the bridge model except for the fact that the latter provides training to suppliers (beneficiaries) instead of selling market information; and Alter's (2003) organizational support model corresponds to that of cross subsidization between commercial enterprise and related NGO.

Those that are endemic to Lima are the partnership, delegated social responsibility, simple cross subsidization with customers at the base of the pyramid, and cross subsidization between social enterprise and non-related NGO models. The first reflects the cooperative model that has a long tradition in Peru. The second is a product of how social responsibility has developed in Peru: organizations, primarily companies, have small in-house teams, while specialized nonprofit organizations carry out the fieldwork. In this way, the company saves on full-time staff costs and takes advantage of the positioning and know-how of non-profit organizations. The third model is based on Alter's (2003) service subsidization model, and the fourth on Alter's (2003) organizational support model. Thus, the latter two models are not all that far removed from those mapped out by Alter (2003).

In view of the above, the third hypothesis, that "the operational models proposed by Alter (2003) correspond to the circumstances of social enterprises in Lima" is rejected, as not all of the models put forward by Alter (2003) are reflected in the social enterprises of Lima. Alter's more complex models are not employed here, perhaps because the social enterprise sector is only beginning to take off, and as yet not many organizations of this kind are in positions of strength.

7. Conclusions

This research shows the perspectives of actors related to social enterprises in Peru. With respect to the concept, it is concluded that a social enterprise is considered an organization with an entrepreneurial dynamic whose aim is to tackle a social or environmental problem and is capable of economic self-sustainability through the sale of a product or service. The questions of legal structure and dividend policy result in multiple viewpoints, which suggests that these are the areas most in need of clarification in order to lay the foundations of the sector.

Meanwhile, it was found that five of the models identified by Alter (2003) in Latin America coincide with those found in Lima. The other four models utilized in Lima are products of the peculiarities of local history and context.

Finally, the wide variety of actors with initiatives involving social enterprises denotes growing interest in this sector. The fact that most of these initiatives are not interlinked stands as evidence of the need to provide meeting spaces between the different actors so as to create the synergies needed to consolidate the sector.

8. Limitations

There are two limitations that impede the existence of a complete sample to identify all operating models for social enterprises. First, there is no official database of social enterprises, only one that has been created on the basis of references from experts and a number of social entrepreneurs already identified. Second, some entrepreneurs are disinclined to call their organization a "social enterprise" (despite qualifying as such due to the way they operate) because of a lack of knowledge of the concept or rejection of the notion of enterprise (traditionally associated with profits at all costs). Both factors may have resulted in leaving aside some social enterprises that represent new operating models.

9. Future research

Unquestionably, the first future research proposal is to extend this study to the entire country. Because Peru is a diverse country in terms of culture, natural resources, and many other aspects, it is highly likely that social enterprises in other parts of the country have their own peculiarities.

Another important aspect for study is the impact of social enterprises. In order to publicize and raise the profile of the sector, there is a need to select exemplar social enterprises accompanied by sound information on their positive social, environmental and economic impact.

Finally, an analysis of the internal management of the different operating models would be a valuable means of identifying the strengths and weaknesses of each one. This could be used to prepare a guide of good practices in social enterprise management.

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How Lyon lost its textile design sector:

A case study about unsustainable entrepreneurship

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Abstract

Objectives: Innovation is the key driving factor for economic growth and social wealth. Already Joseph Schumpeter emphasized the importance of innovation for entrepreneurial activities by incessantly revolutionizing economic structures in order to get better or more effective processes and products. So a lack of innovation may quickly lead into business failure or – even on a sectorial level – loss of market positions. An actual example is the textile design sector located in the city of Lyon, which collapsed and nearly disappeared, although it occupied the world leader position up into the 1970ies.

Theoretical Background/Previous Practice: Innovation in SMEs is a strongly discussed topic, under various aspects, in academic literature. Drucker (1985) stresses innovation as special tool for entrepreneurs to exploit business opportunities whereas Porter (1998) emphasizes the role of innovation in regional networks and cluster development. Zhao (2005) investigated the relationship between entrepreneurship, innovation and business culture and their influence to organizational success and sustainability. In more recent studies Classen et al. (2013) focus on differences of attitudes towards innovation investment in family and non-family SMEs, or Rauch et al. (2013) analyses the attitudes towards innovation linked to national cultures of business owners.

Approach/Methods: The paper is based on literature review, secondary data analysis and expert interviews of former actors and still active participants in the Lyon textile-design market. Additional documents are used to locate this activity within the network of the silk production, the so-called “Fabrique”.

Results/Insights: The paper gives an insight view to the evolution of decline of the textile design sector (last quarter of the 20th century) with focus on Lyon in France. It helps to understand why the Lyon textile design sector lost its leading position and how an underestimation of innovation leads to the current neglectable market-position. Furthermore it describes how innovative competitors benefited from alternative innovation strategies in order to boost their textile design entrepreneurship sector.

Implications: Innovation and change-management are rather located on the level of structured medium-sized or big enterprises. The case study not only shows, that innovation is crucial as well for small SMEs but may very well be used by these enterprises as a tool to improve the

pro-active and resistance capacities to face in a successful manner increasing market competition. Lack of attention for this future orientated activity, instead, may mean quick exclusion from the market. Due to the rising level of competition, SMEs of various activities need to take into account this fact and need to understand that constant attention and search for possibilities of improvement of their products and services as well as their inner structures and focus on the customer have to be considered to be priority goals.

Keywords: Innovation, entrepreneurship, sustainability, textile-design.

Abstract

Innovation is the specific tool for entrepreneurs to exploit business opportunities and innovation the key driving factor for the economic growth and social wealth. Innovative products and services emerge more often as a result of cross-sectorial combination of technologies, design and business models (Drucker, 1985). Already Joseph Schumpeter emphasized the importance of innovation for entrepreneurial activities by incessantly revolutionizing economic structures in order to get better or more effective processes and products. His famous words concerning “creative destruction” stressed already the close links between entrepreneurship, innovation and design (Schumpeter, 1911).

Zhao (2005) confirmed that entrepreneurship and innovation are positively related to each other and interact to help an organization to flourish, i.e. entrepreneurship and innovation are complementary, and a combination of the two is vital to organizational success and sustainability. He also pointed out that the organizational culture and the management style are crucial factors affecting the development of entrepreneurial and innovation behavior in organizations.

Numerous articles of scholars discuss how innovation procures substantial income on the international markets and allow benefiting from competitive advantages. This paper will focus on the fact how lacking investment in innovation and specific business culture lead to situations where disadvantages take a cumulative character which strengthens the process of decline of economic competitiveness and loss of market shares. In the case study about the entrepreneurial activities of the textile design sector in the city of Lyon, France, it is illustrated

how a lack of innovation related with a specific entrepreneurial behavior is leading to a collapse of the whole sector, which, until the 1970ies occupied a world leading position in this field.

The case study is based on interviews of experts and actors involved in this business, witnesses to the activity's collapse, and on the study of documents which analyze the evolution to the currently existing situation. Currently, only isolated persons continue on a free-lance basis the traditional activity, most of them close to retiring age. A few companies, with significantly reorganized activities do as well continue their activity.

1. Introduction

Hayek (2002) stresses that innovation and research in the 21st century are increasingly becoming international endeavors and most innovations originate from multiple sources, with many drawing in components or technologies developed in multiple locations. Foray et al. (2011) explain that, the potential evolutionary pathway of this innovation system is dependent on inherent structures and existing dynamics that have to do with the adaptation of radical transformation.

So today, innovation is increasingly complex, fast, interactive, and requires the connection of external and internal knowledge bases (Chesbrough, 2003). Companies acquire knowledge from a variety of different sources and actors and combining it with internal and localized knowledge and expertise since which is crucial for competitiveness as innovation processes in the interplay between local and complementary global knowledge (Porter, 2000; Gertler and Levitte, 2005; Boschma and Ter Wal, 2007). Despite the multitude of insights into technology transfer, remarkably little is known about how transfer processes are shaped by the underlying industry and its technical regimes (Breschi et al. 2000; Marsili 2001; Gilsing et al. 2011).

Zhao (2005) studied the relationship and interaction between entrepreneurship and innovation and pointed out that the organizational culture and the management style are crucial factors affecting the development of entrepreneurial and innovation behavior in organizations. In recent studies Classen et al. (2013) focus on differences of attitudes towards innovation investment in family and non-family SMEs, or Rauch et al. (2013) analyses the attitudes towards innovation linked to national cultures of business owners.

This is of special interest for the understanding why the textile design sector in the city of Lyon, France, which, until the 1970ies occupied a world leading position in this field, collapsed due to

a lack of innovation and its special entrepreneurial culture. Currently, only a few textile design entrepreneurs and design companies continue the traditional activity, most of them close to retiring age.

This case study witnesses an important example of “unsustainable entrepreneurship” which represents a counterexample for the Lisbon strategy, formulated in 2000 by the European Union in order “*to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*”. This commitment is renewed under the EU 2014-2020 budget framework. National governments and subnational territorial structures backed these goals including France and the French Rhône-Alpes Region, which has voted in 2013 its SRI-SI plan (Regional innovation strategy – intelligent specialization).

The insights of this paper express the fact that a closed innovation understanding and lacking investment in innovation together with an auto centric business culture lead to strategic disadvantages, a decline of competitiveness and loss of market shares. As a consequence in the Lyon situation of Schumpeter’s “creative destruction” process the textile design entrepreneurship sector moved from France *to other destinations*.

2. Literature Review

Following Wernerfelt, the *resource-based view* provides the perception of corporates as a broader set of resources from a strategic perspective, i.e. a basis to address key issues when generating the corporation’s strategy. Regarding the specification of the resource itself, Wernerfelt understands by a resource anything that can contribute to a strength or weakness of a given corporation (Wernerfelt, 1984: 172). Barney takes this a step further and provides a more detailed notion of the resources of a firm. Accordingly, to the potential resources of a particular firm he allocates all assets, capabilities, organizational processes, firm attributes, information, knowledge etc., i. e. all potential that, in turn, when controlled by this firm allows it to recognize and implement strategies that improve the firm’s efficiency and efficacy (Barney, 1991: 101). A clearer notion of resources can be generated by confronting the perceptions of resources and capabilities, as outlined by Amit and Schoemaker. By drawing on their observations, capabilities refer to a firm’s capacity to deploy resources by incorporating organizational processes and are generated by a firm to provide enhanced productivity of its resources as well as a strategic flexibility and protection for its final product or service.

Moreover, in contrast to resources, capabilities are based on developing, carrying, and exchanging information through the firm's human capital (Amit and Schoemaker, 1993: 35). Regarding differentiation of resources, academic research has provided with diverse classifications of resources. The paper builds upon the classification shown in figure 1. Capabilities, like resources, can be differentiated as well.

As emphasized by Wernerfelt, resources can generate profits to a specific firm (Wernerfelt, 1984: 172). With regard to competitive advantage, Barney differentiates between competitive advantage and sustained competitive advantage, where the former emerges when a firm is implementing a value leading towards a strategy that cannot simultaneously be implemented by any current or potential competitor. The latter one implies the same attributes as the former one, but in contrast to this presupposes that a particular current or potential competitor is unable to duplicate the benefits of this particular strategy implemented by a firm (Barney, 1991: 102). What is of essential importance in this context is the identification of resources that carry with them potential to generate competitive and sustained competitive advantage. Following Barney, the focus should be laid on strategically crucial resources that are valuable, rare, imperfectly imitable and non-substitutable. Provided that a given firm possesses such resources, it is therefore able to develop resource-based advantages that can be sustained over time (Barney, 1991: 105-106).

Innovation management is usually associated with processes. As coined by Schmitt-Grohe (1972), these processes incorporate three key phases: idea generation (1), idea analysis (2) and idea implementation (3) (1972: 52). On the basis of these observations, Benkenstein (1998) has proposed the following innovation management concept, so-called innovation funnel. By drawing in his observations, the innovation management model includes four stages: idea generation (1), research, development and conception (2), product and market test (3) and implementation (4).

Following Bartl (2008), *open innovation* is referred to the concept, which underscores the way of going beyond the corporate boundaries, i.e. an active strategic deployment of environmental clout or external factors of influence to increase its own innovation potential. Crucial determinants of such concept are the shift from the industrial society to the network-based knowledge and communication society. As a result, innovation occurs and ideas are generated in such a society through the interactive creation of value. Additionally, open innovation encompasses such manifestations as to be open for the knowledge of the other, generation of the knowledge as a joint action as well as the share of the knowledge with the other. Besides,

an important role for the phenomenon open innovations plays the customer. In the course of innovation management, there was generated a new role model of the customer when developing new products or offering new services. In this sense, open innovation emerges also when the customer is involved into the process of generation. Therefore, it is vital to adapt to customer's needs and requirements as well as wishes in the customer goods markets. Furthermore, it is essential to integrate the customer into the entrepreneurship innovation-related activities as a new external knowledge and ideas source (2008: 3-4).

Sustainable entrepreneurship is a relative new concept, which can be distinguished from economic and social entrepreneurship by stressing the efficiency and effectiveness in an inter-generational economic consideration for the future (Young and Tilley, 2006: 402). Thus, sustainable entrepreneurship is in line with entrepreneurs heading for profit and improving environmental sustainability and social conditions, i.e. considering the long-term economic and business consequences of new venture opportunities (Cohen and Winn, 2007: 35). One important problem of the on-going discussions about sustainable entrepreneurship is that the existing concepts are rather oriented on the needs and the situation of larger companies than on reality of the SME sector. When it comes to the implementation of sustainable entrepreneurship concepts, Gerlach (2003) proposes three strategies to reach sustainability in the context of entrepreneurship based on sufficiency, efficiency and consistency.

Taking a closer look at theoretical concepts and approaches under scrutiny, these tend to interface at the respective points or to address same or similar questions from the corporates perspective. For instance, interdisciplinary nature, idea generation and implementation (Brown, 2008; Benkenstein, 1998), a broader view on the enterprise (internal and external factors), needs for solving problems, intertwined and on-going process from the fields of design, technology or innovation, and business, the sustainability factor etc. have been located in particular discourses regarding these concepts.

Pascual et al. (2011) point out that process of designing, developing and implementing solutions should follow some of five key points including the observation that (1) sustainable development is a process and not an end, that (2) sustainability requires incremental and continuous improvement, that (3) not always everything can be achieved, that (4) the "Holy Grail" of sustainability does not exist, that (4) individual consumer benefits have to be linked to social and environmental benefits and that (5) functionality equals impact.

3. Methods

The paper describes a case study of the development of the textile-design entrepreneurial activities in Lyon with a focus on the last 50 year. A special focus is laid on organisational, cultural and innovation topics which were related to important stages in the Lyon silk industry. The research process described in the paper has pursued a manifold research path, whereby diverse research methods have been combined with the respective research approach and research tool. Five techniques were employed in exploring the objectives of the present paper:

- Research types: analytical, qualitative, historical, empirical, practice-based
- Research approach: qualitative
- Research methods: descriptive and qualitative – case studies, semi-structured interviews, expert assessments and observations
- Research scope: different research activities between spring 2013 and spring 2014.

The reasoning behind the selection of the following techniques in the research process is elaborated in the following.

Regarding the *research types*, the paper has chosen analytical, qualitative, empirical and practice-based way, since during the research process the facts and empirical evidence gathered were appropriately analysed and subject to a critical assessment. The core of the research process is the *qualitative research approach*. Important insight views were given in qualitative experts interviews with still active textile designers in Lyon where the interviews with Pierre Bonetto and Marc Terrier contributed outstandingly to the understanding of the case study about the textile design sector in Lyon.

4. The Case: Textile Design Entrepreneurship in Lyon

Textile industry is a major sector of activity in Lyon since its roots in the 15th century. It developed into a vertical cluster, which reached several times a climax period (late 18th century, second half of the 19th century, between the two world wars under an already strongly adapted structure), including supply of raw material, production and distribution, essentially through export.

At different stages of the existence of this industry, institutional support via tax and production privileges or through support to innovation can be considered to be key factors for the commercial success of Lyon-made textile, especially silk. The very beginning of silk production in Lyon is due to a royal order issued to the local citizens to establish and finance silk weaving workshops in their city (Regulation of 23.11.1466, issued by King Louis XI; Wiederkehr, 1981). The aim is to avoid money transfers out of France to pay imports of essentially Italian made silk products highly appreciated by French aristocrats and negotiated on the important Lyon fare. The failure of this first trial appears to be the lack of size of the activity thereby generated, making it unable to stand price competition.

A renewed attempt in the 1530ies granted tax freedom and privileges to Italian merchants planning to establish workshops in Lyon. In this frame, the city was granted the monopoly of import of raw silk thread. This time the establishment of a structured, competitive activity succeeded, the Italian and French production of low range silk products was gradually replaced by products made in Lyon.

The vertical cluster of a whole, interlinked, production sector appeared after the upheavals of the second half of the 16th century only. Again due to royal desire to master the entire production chain, silk farms were established in the southern part of France, supplying Lyon with raw material. Introduction, from Italy, of adequate knowledge and technology, allowed the Lyon based workshops to increase the sophistication- and quality-level of local production meant essentially to furnish the French Royal House and important aristocrats.

The reputation of French taste, going along with the rank of France as cultural trend setter among the aristocratic societies of Europe allowed the French silk industry to develop into a highly performing, innovative and economically important production sector. The support to innovation grew into institutional forms, granted either by the guild or by the municipal authorities in cooperation with royal representatives and financed on customs levied on textile imports. This structured system of support to improvement of technology and design involved in increasing manner cooperation between both public and professional authorities.

It is interesting to see in the case of the Lyon silk industry, how over a long period a given industry, with the help of professional and public authorities was able to become competitive and further, predominant in Europe. On the foundations of this stronghold the sector throughout the 19th century was able to maintain its place and proofed to be capable to undergo the necessary evolution to cope permanently with market requirements and technological evolution. By the end of the 19th century pure silk lost its importance and was successfully replaced by

mixed products and later artificial fibers, which allowed increasing the number of social groups able to afford products of this industry. About 80 % of the regional production was exported. The USA and Great Britain were by far the most important markets, buying $\frac{3}{4}$ of the production. Only very recently, during the 1970 the final decline process started and led within 30 years to the vanishing of the entire sector in Lyon.

Before the start of the phenomenon of mechanization of this sector, in the 1860ies, Lyon had about 180 000 inhabitants and roughly 30 000 looms. This single figure may provide an impression of the high importance of this sector. Evidently, it was not limited to the municipality of Lyon, but made off an important portion of the regional economy, workshops and direct sector-related activities were exercised within a range of about 60 km of Lyon, not to speak of the silk thread production in the Southern part of France.

The core of the Lyon silk fabric, production and distribution, involved a system of four groups of specialized participants which formed during the prerevolutionary era: Merchants, mastering the supply of raw silk thread and being in contact with the final customer, furnish local merchant-producers with raw material and orders. This group employs the designers, work-shop owners, delivers raw material to the workshops and sells the production to the merchants. Workshop owners produce up to the orders received, without being able to master neither design, nor supply or sale, be it on the level of goods or prices. The fourth group is the most numerous people, the silk workers employed and paid by the workshop owners. The latter two groups were entirely depended on the two groups on top of the pyramid.

Further elements of this vertical cluster organization were floriculturists, color-producers, engravers, printers, and still further specialists, all of them contributing to the functioning of this industrial sector.

An essential piece of the cluster: design studios

The textile design entrepreneurship activities were an integrated part of the Lyon silk fabric, but with a certain independence from its core activities. The designers occupied a status of highly skilled independent workers, rather artists, employed by the merchant-producers, but often held themselves parts of the share capital of these establishments. The designs, once they were accepted by the client, became part of the property of the latter. Insofar, designers were also dependent participants in the system. Nevertheless they insured the success of the entire

sector by delivering designs which with time created an essential part of the reputation of the Lyon fabric system.

The design sector, up to the results of interviews of two of the last still exercising members of this profession, was a very dynamic part of the system. In the 1970 it was itself structured in form of a cluster organization with about 60 studios of which an important proportion was located in a very narrow sector of down-town Lyon.

The studios

Most of the studios were very small entities, headed by the owner – rarely a designer himself, rather a commerce-focused professional. Due to French labor regulations created in 1936, re-established in 1946, an enterprise with more than 10 employees needs to accept the election of personnel's delegate representing the employees in front of the employer and being equipped with granted rights of information and expression of proposals. In order to avoid such forms of rights for the personnel, many employers, not only in the textile sector, voluntarily stopped hiring before their enterprise reached the relevant size. Therefore a lot of studios occupied personal, partly under employee status, partly under independent worker-status.

Under the direction of the owner the head of the workshop, mostly a former designer himself, called “chef d'atelier”, coordinated and managed the work of the designers and they were responsible for the collections of the studios. Even if the textile design was limited by standards forms the driving force in the studios was creativity on a high competitive level and each studio had their own style, brand and market niche and it was possible to differentiate between the studios.

Competition and remuneration

The close neighborhood of many of these design studios allowed a very fluid functioning of this particular labor market. Designers easily quit one studio to be hired directly by another one. Most of the studios had their particular style or sectorial specialization and even though competition existed, the market was large enough for successful doing business of all of them. The high level of labor fluidity insured mutual inspiration. Nevertheless the level of individualism and competition between the designers of a studio was high, due to the sales-related model of remuneration. An employed designer received a part of his salary as a determined, fix amount,

generally close to the minimum wage. As a counterpart he had to successfully produce a given number of designs over a month. Any sold design above this minimum level reported to him 1/3 of a determined value. Freelance designers received no fix remuneration but 50% of a determined value per design they produced. The designers ignored the sales price of their works.

This model contributed to the absence of organization of the work-force under the roof of trade-unions, which would have been unacceptable to the studio-owners who believed in a highly patriarchic form of management.

Sales and sales methods

The standing and the dynamics of the Lyon market was as strong as to attract customers from all over the world, especially United Kingdom, United States, Japan and Italy to make their commercial visits directly in the studios. Several visits in one studio per day were not exceptional. Customers took advantage from the proximity of the studios by scheduling a series of contacts and purchase meetings. Furthermore sales trips were regularly made by the studio-owners to visited customers abroad.

Presentations in high class hotels in Paris and participation in trade fairs became additional occasions for sales once the process of decline had already set in.

Training of young designers

Together with the municipal administration the professional sector had set up a structured three-year training curriculum for future designers. A special "Textile High-School" (Lycée Didérot) functioned in Lyon in order to enable the sector to cope with demand. The curriculum was organized such that 50% of a pupil's time was dedicated to theoretical training in the school and 50% of the time was practical on-the-spot learning in a design studio.

Decline

The era of success finished in the 1970ies, when economic fundamentals changed and made clearly appear the need for reorganization and restructuring of a series of mature sectors in the developed countries, among them as one of the first the textile sector. During the early half of the 20th century, the design sector had already known a very strong evolution, leaving the

initial dedication to the silk production by designing essentially for the current production of various textiles.

The starting point of the changes of the late 20th century which underwent the textile design sector was described by the interviewed designers to be the period of the petrol-shocks, symbols for the end of a 30-year-long period of growth since 1945. In parallel, several evolutions were on their way: delocalization for low-cost countries like Morocco and Turkey in the textile producing sector took place. They took off the market part of the demand for design. Changes in the manner of marketing design samples appeared: British designers, often trained as interns in the Lyon studios, offer showroom presentations instead of the traditional catalogues and paper-samples, Italian design studios use modern technology to offer a high quantity of design samples at lower prices.

Lack of recognition of the new trends and incapacity to adopt to the new evolutions, in parallel to the shrinking market lead to price competition which attacked traditional Lyon based design studios, first those which were the most fragile ones, but more and more also the core segment of the formerly dominating Lyon cluster.

A smaller and smaller number of players left over led to a less and less fluid situation also for the designer labor market. Employment opportunities for young designers start to lack, numbers of applicants for the training center at Lycée Diderot decrease, until the decision is taken in the 1980 to stop the training curriculum. A last effort to revitalize a modernized curriculum was undertaken between 1990 and 1993 before the final abandon.

5. Findings

Currently, up to one of the interviewed persons, only three textile design-studios are left over in Lyon, all of them exercising in niche markets, waiting for the time to come, when retirement of the owner will definitely close the chapter of Lyon based textile design. Today, adapted to the new situation on the textile markets, these studios stripped themselves off, as far as possible, of their cost-generating structures: rather the use of free-lance cooperation than traditional employment, use of modern design technology for small, specialized market segments, as competition against larger design studios from abroad appears to be out of reach.

An expressed regret is the lack of structured and durable public support for this activity; especially as far as the efforts of making the products known through participation in fairs and

presentations is concerned. This lacking support is described to be an additional obstacle for the surviving firms, fragile on the financial level, which can only afford with difficulties the communication and promotion costs needed to be invested to get known by potential customers.

This case study, as described in a congruent manner by two textile designers which still do exercise their profession, makes appear structures which are close to the descriptions given by Alfred Marshall on “industrial districts” (Marshall, 1920). The Lyon textile sector during the era of its apogee was maybe even closer to the Italian version of the industrial districts as put into the light by Giacomo Becattini (Becattini, 2002). When writing “However, one thing should be quite clear: the notion of the division of labor is here not referred to a single company, as in Smith’s example of the needle factory, nor to the market in its abstract totality, as in Young’s model, but to an intermediate, meso-economic entity that perhaps lacks a legally recognized status and aggregates and disaggregates in its different manifestations — territorial and otherwise — in response to overall long run changes in socio-economic relationships at both the local and global level.”, the author seems to underline what happened to the former Lyon based textile design activity, organically appeared on the market together with the silk and textile cluster : the structures of this industry became global, they lost their identification with a given territory, but still do exist, elsewhere, differently structured and organized, but still capable to deliver a given product : textiles in various forms and qualities, for various uses.

Anne-Marie Wiederkehr (1981) showed in her analysis of the manual for silk designers “Le dessinateur pour les fabriques d’étoffes d’or, d’argent et de soie” of Nicolas Joubert de l’Hiberderie (published in 1765), that already during the 18th century clear and precise knowledge and recognition existed about the interaction of markets and competitors on these markets (Miller, 2004). People, 250 years ago were precisely aware about the risks and opportunities of internationalization of economic activities and the issues of communication or secrecy on data and information about activities. The question of innovation opportunities through open information in the sense of open innovation started just to enter the scientific discussion as it represents a contemporary issue of the early 21st century.

Anne Marie Wiederkehr further points out in her analysis that “... les tenants de l’ordre établi qui veulent le maintien de leurs privilèges (Noblesse, Haut-Clergé) ou de leurs monopoles (Corporations), jugent les diffusions des idées nouvelles et des progress technologiques dangereuses”. (*the defenders of the established order aiming at the preservation of their*

privileges (nobility, high clergy) or their monopolies (guilds) consider spread of new ideas and technological progress to be dangerous).

So also cultural and social attitudes of the stakeholders of the textile design sector led to a lack of attention for future orientated activity, which accelerated the decline of the studios due to loosing competitiveness compared to other textile design destinations. Consequently, even in creative SME sector it must be understood that constant attention and search for possibilities of improvement of products and services as well as inner structures combined with a focus on customer needs have to be considered to be priority goals for sustainable entrepreneurship.

6. Conclusion

According to Pascual et al. (2011) sustainable development is a process that requires incremental and continuous improvement in order to fulfil the needs of current and future generations and to ensure that future generations will have the capability to enjoy a quality of life. Over centuries the Lyon silk industry was an economic, sustainable endeavor for the Lyon region generating wealth and prosperity for several generations of workers.

An important business sector within the Lyon silk industry was related to textile design entrepreneurship which represented one of the cornerstones of the outstanding global position of the Lyon silk industry for a long period. And the textile design sector itself became a world leading place in creative business over the time. The case study shows how the Lyon silk industry declined and which reasons led to the collapse of the textile design sector.

The main reasons for the decline of the textile design sector can be found in cultural specifics, the entrepreneurial environment, the refuse to respond to technological and organizational innovations. Especially the indifference towards open innovation models and the existence of complacency in large parts of the owners of the textile design studios avoided necessary future investments in innovations and educational institutions so that the development of the whole sector became unsustainable so that the textile design moved to other destinations and marginalized the Lyon textile design sector to an unimportant size.

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Intellectual property rights in user-driven innovation processes

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Abstract

Objectives: Innovation is the key driving factor for economic growth and social wealth. In recent times more and more companies are using user-driven and open innovation approaches in order to improve their products. These innovation concepts raise numerous questions concerning intellectual property right (IPR) aspects – in both national and international contexts. The paper aims to discuss important aspects of IPR in user-driven innovation processes.

Theoretical Background/Previous Practice: Today, innovation is increasingly complex, fast, inter-active and relies on connecting external and internal knowledge bases (Pavitt, 1984; Chesbrough, 2003; Asheim & Gertler, 2005; Malerba, 2005). Firms acquire knowledge from a variety of sources and actors at various spatial scales (Smith, 2000; Tödtling et al., 2006), combining it with internal knowledge and competences through different transfer channels (Gilsing et al. 2011). The data provided by users in virtual communities in form of comments, feedbacks, recommendations on the web are touching various intellectual property issues, and their unauthorized use eventually infringes protected rights.

Approach/Methods: The paper is based on literature review, secondary data analysis and interdisciplinary studies of user-driven and open innovation approaches of companies which are analyzed with a special focus on IPR aspects.

Results/Insights: The paper gives an insight view to the interface between IT law and user-driven and open innovation approaches in an international entrepreneurial environment. Since until now the phenomenon of innovation stemming from web-based user communities is not sufficiently regulated in many legal regimes, the paper calls a public debate of this issue in order to find a balance between the user's interest and the company's quest for innovation.

Implications: In user-driven innovation approaches the customer takes over the role of an active co-designer in the creation of value. A classical academic approach focuses often on user-producer interaction in the context of technological development by neglecting those who contributed to a company's profit. Just as in the field of employee's inventions in companies, legal aspects related to IPR in the context of user-driven innovations have to be discussed more deeply in order to find an appropriate balance between the interests of the companies and the innovators in virtual communities.

Keywords: user-driven innovation, virtual communities, entrepreneurship, intellectual property rights.

Abstract

The idea of inclusive entrepreneurship does not only have economic, social and political dimensions, but evokes as well the question in how far the exponentially increasing significance of user-driven innovation calls for closer look from an intellectual property law perspective: Inclusive entrepreneurship in this context aims at economically taking into account those non-company contributors who triggered e.g. the improvement of an individual product or effected the extension of a company's product portfolio. Compensating those who – with or without intent – contributed to a company's profit has as recently been a major issue in the field of employee's inventions, but the share of non-affiliated "innovators" is even larger: The abundant product-related data provided by users in virtual communities in form of comments, feedbacks, recommendations is already today an essential source of innovation for the goods-producing, but also the tertiary sector. While these data are basically freely accessible on the web, there are various intellectual property issues protecting the user's contribution (see e.g. copyrights, patents, utility- and design models) which are often not taken into account by companies making use of the respective data, causing an eventual infringement of protected rights. Still, as many other fields in IT law, the phenomenon of user-driven innovation is at present not yet sufficiently regulated in many legal regimes, which does not only call for a public debate of this issue, but eventually also for a reform of domestic and international IP law in order to find a balance between the user's interest in appropriate compensation and the company's quest for innovation.

1. Introduction

Innovation is the key driving factor for economic growth and social wealth. Cooper and Kaplan (1999) considered life-cycle costs of products according to their phases and differentiated between committed costs and costs incidence. In a more recent paper Specht et al. (2002) were able to give a more detailed view of committed and realized success dimensions of products during their life cycle. The considered success dimension were costs, quality, time lines, flexibility and differentiation and the phases of life-cycle consisted of product development, procurement, production, sales and distribution, usage and MRO, and finally return. Both

scholars see the highest part of the committed costs in the product and process planning and design phase with up to 80%. Improvements and innovation in product and process development phase significantly contribute to company success and profit.

Traditionally, innovation management and product development were driven by internal company forces, but in recent times more and more companies are using open innovation approaches to improve their products. In a survey comprising 2840 large companies in the USA and Europe Chesbrough and Brunswicker (2013) conducted a large sample survey about open innovation in large firms with an annual sale exceeding US\$ 250 million. The survey revealed that 78% of the large firms are practicing open innovation – and this more intensively than three years ago. Customer co-creation, informal networking, and university grants were the three leading practices in 2011 whereas crowdsourcing and open innovation intermediary services enjoyed the lowest rates of importance. The typical large firm in the survey spent in 2011 US\$ 2 million on open innovation which is equivalent to 20 company employees doing the same work.

There always has been also a focus on consumers as valuable knowledge sources since future buyers could best judge what would lead to commercial success and what not (Jaworski and Kohli, 1993). Hence, more and more firms engaged in customer involvement for new product ideas which would easily be implemented and highly appreciated by customers (Kristensson et al., 2004).

Originally, user innovators were defined as those individuals who develop new products and services based on their own perceived needs without the assistance and involvement of producers (von Hippel, 1988). In his recent research, von Hippel introduces some measures to quantify the importance of users in the innovation process and suggests that billions of dollars are spent annually by users to improve products and make them better suited to their needs (von Hippel et al., 2011; 2012). With respect to scale, von Hippel's surveys found that millions of users collectively spend billions of dollars every year on developing and modifying consumer products.

Since valuable consumer-related knowledge is widely dispersed, recent solutions for the integration of large numbers of consumers into the innovation process are mainly based on information technology (web 2). These online communities contribute to company's profit, and related topics like the protection of intellectual property rights (IPRs) and the participation of user innovators in additionally generated company profits have recently been a major issue in the field of employee's inventions and non-affiliated private innovation contributions of any kind.

Most the abundant product-related data provided by users in virtual communities, appearing in form of comments, feedbacks or recommendations, are basically freely accessible on the web, although the “authors” of these innovations generally have various protected intellectual property rights. Unfortunately these IPR issues are often not taken into account by companies making use of the respective data, causing an eventual infringement of IP rights.

Still, as many other fields in IT law, the phenomenon of user-driven innovation is at present not yet sufficiently regulated in many legal regimes, which does not only call for a public debate of this issue, but eventually also for a reform of domestic and international IP law in order to find a balance between the user’s interest in appropriate compensation and the company’s quest for innovation.

2. Literature review

Innovation becomes more and more complex, fast, interactive, and requires the connection of external and internal knowledge bases (Chesbrough, 2003). Companies acquire knowledge from a variety of different sources and actors, and combining these with internal and localized knowledge and expertise is crucial for competitiveness, as innovation processes in the interplay between local and complementary global knowledge (Porter, 2000; Gertler and Levitte, 2005; Boschma and Ter Wal, 2007). Despite the multitude of insights into technology transfer, remarkably little is known about how transfer processes are shaped by the underlying industry and its technical regimes (Breschi et al. 2000; Marsili 2001; Gilsing et al. 2011).

User driven innovation in form of online communities can be considered, by following Bartl (2008), as an open innovation approach, which underscores the way of going beyond the corporate boundaries, i.e. an active strategic deployment of environmental clout or external factors of influence to increase its own innovation potential. Crucial determinants of such concepts are the shift from an industrial society to a network-based knowledge and communication society.

Additionally, open innovation encompasses such manifestations as to be open for the knowledge of the other, generation of the knowledge as a joint action as well as the share of the knowledge with the other. Besides, an important role for the phenomenon of open innovations

plays the customer. In the course of innovation management, a new role model of the customer was generated when developing new products or offering new services, opening a new field of management (Gibbert et al, 2002). In this sense, open innovation emerges also when the customer is involved into the process of generation. Therefore, it is vital to adapt to customer's needs and requirements as well as wishes in the customer goods markets. Furthermore, it is essential to integrate the customer into the entrepreneurship innovation-related activities as a new external knowledge and ideas source (Bartl 2008: 3-4).

Zhao (2005) confirmed that entrepreneurship and innovation are positively related to each other and interact to help an organization to flourish, i.e. entrepreneurship and innovation are complementary, and a combination of the two is vital to organizational success and sustainability. He also pointed out that the organizational culture and the management style are crucial factors affecting the development of entrepreneurial and innovation behavior in organizations.

Comparing user-driven innovation with other innovation models, the private-collective innovation model (Gächter et al, 2010) has been analyzed and juxtaposed against the private investment model. Taking a legal perspective on user-driven innovation, the research for this paper focused on employee's invention law, protecting the non-profit inventor in a very similar way (Bales 2013), and took the regulation of the issue as developed by German law (Schwab 2014) as model regulation for user driven innovation.

User communities in innovation have been mainly investigated with a focus on new product development. Prandelli et al. (2008) analyzed and developed a classification system for new product development (NPD) of user communities, which also considered the start of the life-cycle supply chain, i.e. the development of new products. In order to cover the full life-cycle oriented supply chain by user driven innovations it is necessary to look for different portals of user communities. After product development the next stage in product life-cycle is related to production or operation. The dominating questions in recent manufacturing are related to how to tackle mass customization and how to construct and integrate performant supply chains (Simchi-Levi et al., 2010; Heizer and Render, 2013). In both cases the postponement concept describes the crucial question, i.e. where exists the freezing or postponement point between the push and the pull part in the supply chain (Boone et al., 2007).

The benefits of the involvement of user innovation communities for companies can be estimated from the life-cycle supply chain model of Cooper and Kaplan (1999) in a more detailed way from Specht et al. (2002). Both authors estimate the committed costs for product and process

development and design phase up to 80%. But Specht et al. (2002) not only restrict their view on costing and product development; they consider all success dimensions in different life-cycle phases for the product like quality and product differentiation. These figures have to be balanced with the tentative IPR costs for user innovation involvement.

3. Method

The research process described in the paper has pursued a manifold research path, whereby diverse research methods have been combined with the respective research approach and research tool. Five techniques were employed in exploring the objectives of the present paper:

- Research types: analytical, qualitative, historical, empirical, practice-based
- Research approach: qualitative
- Research methods: descriptive and qualitative – case studies, semi-structured interviews, expert assessments and observations
- Research scope: different research activities in 2013 and 2014.

The reasoning behind the selection of the following techniques in the research process is elaborated in the following.

Regarding the research types, the paper has chosen analytical, qualitative, empirical and practice-based way, since during the research process the facts and empirical evidence gathered were appropriately analyzed and subject to a critical assessment. The core of the research process is the qualitative research approach. Important insight views were given in qualitative expert interviews and the analysis of case studies (Prause and Thurner, 2014).

4. IPR protection schemes in user-driven innovation

From an IPR point of view, user-driven innovation can be differentiated on base of the nature of the innovation target:

Either innovators contribute privately and voluntarily to a public good, i.e. to a good or product which is freely available on the market. This model, known as “*private-collective innovation*” (von Hippel and Krogh, 2003), is applied for instance often in the IT branch to develop and

maintain open source software; well-known examples are Linux or Firefox. The model contrasts with the (traditional) private-investment model, where innovation is generated exclusively by the company itself, which – in return – has to amortize its prior investments via granting licenses to users. It therefore is bound to protect the achieved innovations, e.g. via licensable IP rights. In private-collective innovation, the privately generated innovation is not regarded as an “investment”, but rather as a voluntary contribution to a common good, making the innovator waive any copyright and further IP rights as soon as the innovation has been shared with others (Lerner and Tirole, 2002a; 2002b).

But not only the individual innovator refrains from his rights, also firms waive their IPRs extensively, realizing that making their technical state-of-the-art freely available to the public generates a much higher return in terms of innovation than the private-investment model (Henkel et al, 2013). Although innovators “invest” considerably time, energy, knowledge and other resources without any expectancy of financial gratification, the private-collective innovation model proved to be very successful in practice (Gächter et al, 2010) and gave grounds to extensive research recently, especially concerning the contributor’s intrinsic motivation for their free commitment (see e.g. Alexy and Reitzig 2013).

From a legal point of view, there is little demand for a balance of interest to be achieved by instruments of intellectual property law, as the free use of otherwise protected rights form the essence of the “Open Source Scene’s Spirit”: All parties involved in open source innovation are aware that they – expressly or impliedly – waive their respective IP rights, driven by the awareness that they jointly improve a “common good”.

But not all user-induced innovations contribute to public goods. The innovation beneficiary more and more often happens to be a private and profit-oriented company, making the private user providing innovation not any more to a public good, but to private assets of that company – e.g. sport sailors disclosing improvements they made to sailing equipment on the sailing equipment’s company’s homepage. The value generated by this innovation is not any more freely available on the market, but has to be purchased by each sailor (or other kind of customer) individually.

Form a legal point of view, the exchange of interest in this situation not as balanced as in the Open Source Scene, and correction measures imposed by law may be required. As these contributions are of immaterial character, these correction measures – in other words forms of legal protection – must be sought among the existing intellectual property protection schemes. A central instrument aiming at the protection of technical improvement is the patent, either in

form of national or international/European patents. A patent is basically the right to exclude competitors from the usage of an invention and is effected only upon registration, which will be granted upon application by national or international/European patent offices if evidence has been provided for following criteria: There must be a [patentable subject matter](#) (no patents will generally be granted e.g. on alterations of the human body), the invention must be novel – i.e. non-existent so far world-wide –, the invention must be [non-obvious](#) (in [U.S. law](#)) or must involve an [inventive step](#) (in [European law](#)), and the invention must be useful for a concrete purpose.

A granted patent is a strong and effective right, granting the patent-holder a broad range of rights ranging from monetary compensation for past infringements to injunctions against future infringements – although its role in innovation has recently been a controversial issue, as it is sometimes claimed that innovation virtually cannot be harmed more than by the exclusion of others from knowledge (Hall 2014, at 26).

In fact, every user-generated innovation communicated via virtual communities could generally be patented by the user, if the innovation fulfils the above-mentioned criteria. Returning to the sport sailor's example, the sailor's suggestion to improve e.g. the rope winch for a sailing boat is generally a patentable subject matter, which is – eventually – novel, non-obvious/involving an inventive step and it is quite probably useful as well. In other words, the sport sailor could hand in the same description of this rope winch improvement which he put online at the virtual community (or sailing equipment company's homepage) at his regional – or, if he is seeking for international exclusion rights, at an international – patent office, as far as he extended/supplemented it respectively (the description must meet the formal criteria of the patent office) and is ready to pay the respective fees.

Still, the mere ability to patent an invention does not grant yet a comprehensively protected right: The invention itself – even if communicated to the public – is not yet property-like protected and also does not deserve yet protection, as there is no form of intellectual property in mere ideas (Tönnies, 2013). The inventor will have the exclusive right to use his invention (or to, practically just as important, grant a license to third parties for that patent) once the patent has been granted successfully.

There is a certain debate about the protection of patent applicants between the time of submission of the application to the patent office and the final grant of the patent – which may take years –, as in this case the applicant has already demonstrated to the public that he requests a comprehensive exclusion right in (hopefully) near future; so far, most legal systems

nevertheless would grant a mere compensation to be paid by the infringer to the applicant instead of the full range of patent defense rights mentioned above (see e.g. for German law Pahlow, 2008).

5. Findings: Low IPR protection level

Returning to the typical situation in which user communicate their inventions online, on first sight the protection of users by these classical IPR protection mechanisms seems far-fetched, as in case of the average user, even this basic step of an application has not been reached yet (and is also not endeavored by him). Before application, there is generally no active right on base of which the inventor may prevent the usage of his patent by others: The sport sailor may, e.g., not seek a court injunction against the sailing equipment company which produced an improved rope winch modelled after the sailor's descriptions on a virtual community or the company's website. Patent law in so far does not directly protect the user's invention from the "exploitation" of the invention by private companies.

If the rope winch did not involve an essential inventive step, but merely a minor improvement, many States provide protection for these improvements in forms of the protection as a utility model, which can be seen as a "small patent". The procedure to protection a technical improvement in form of a utility model is generally comparable to the patent procedure, but requires less costs, fees and conditions – while respectively the scope of protection will be considerably smaller as well. But also here, protection as a utility model will again be only effected after successful grant of the registration as a utility model, and as users generally will not have applied for this kind of protection either, their legal position remains generally defenseless in this context.

In conclusion, a user communicating an invention online does not have the right to prevent other persons to make use of his improvement. But the situation changes if the private company seeks protection of its legal position from the usage of that improvement against other third persons: The sailing equipment company may eventually intend to hand in itself a patent for that rope winch development by that sport sailor, based on the descriptions put on the internet by the sport sailor.

6. Implications: A new approach for protecting innovating users

When the sailing equipment company will hand in a respective application for a patent or a utility model at the competent office, the office will check – among other conditions – the novelty of the invention/improvement. If the company did not even disclose itself the origin of the invention, a thorough research by the office may reveal the sport sailor as inventor, who, in this case, also made his invention publically available – depriving it from its novelty. Although details are controversial in national patent law systems (they essentially differ whether they provide a grace period for filing an invention – e.g. U.S. law – or follow a “file first, publish later doctrine – e.g. Germany; Klett, 2008, p. 4), the lack of novelty will considerably weaken the company’s legal position: Depending on the respective legal regime (national or international law, depending on the function of the patent/utility model office), the sport sailor could file a notice of opposition within a special opposition period (e.g. nine months for a European patent, three months for a German patent; for background see Klett, 2008, p. 12).

But also if no notice of opposition was filed/the office did not find the actual source of the invention and the patent was successfully granted to the company, the company remains endangered that the user will later hand in an action for nullification of the patent, as the conditions for its grant had not been met: If the patent holder was not entitled to hold the patent, the patent will be revoked – e.g. European patents acc. to art. 139 European Patent Convention (for European patents), national patents according to respective national patent acts (for e.g. German law acc. to act. 81 Patent act).

In other words: If a company endeavors the complete exploitation of a patent or a utility design – and the more useful the invention is, the more probable this endeavor will be –, it has in some way to cooperate with the author of the innovation. Otherwise, it will run the constant risk of a later revocation of the patent – or, although less likely, the application for a respective patent by the inventor itself, which then would exclude the company also from the further usage of the invention in its products.

Although therefore a clear demand for the regulation of these forms of cooperation exists, the legal protection of user’s interest in the context of user-driven innovation has not yet been settled. Still, there is a similar constellation of interests which already has been regulated in detail by law: Just as in user-driven innovation, an employee not holding any personal shares in the profit of a company generates innovation through suggesting improvements he or she invented through the daily use of products or application of production procedures, which lead to the improvement of these products and procedures and increase the profit of the producing

company. These employee's inventions constitute e.g. in Germany about 80 % of all inventions (Schwab, 2014) and have therefore been subject to various acts and statutes.

In fact, employee's inventions may either be owned by employees even if they were created during work, providing to the employer the chance to acquire the invention either by express assignment, by implication if the employee's task included to (eventually) create inventions, or through the "shop-right"-model, if the invention was created during work-time and under use of working equipment provided the employer (Bales 2013), basically having the effect that the inventing employee originally owns the invention, but has to grant the employer the right to acquire the invention, i.e. to apply for a patent in the employer's own name, but based on the employee's invention.

In those countries which apply the shop-right-doctrine – among them Germany, expressed in its Arbeitnehmererfindungsgesetz (ArbNErfG, act on employees' inventions) – this right includes the employee's duty to give notice to the employer about any eventual invention made (see e.g. sec. 5 ArbNErfG) and "offer" it to his employer, after which – after a respective reform of the German employees' invention law – the acceptance of the employer is assumed he does not refuse to make use of the invention on behalf of the company within four months (e.g. sec. 6, 7 ArbNErfG). Does he decide to make use of the invention, the employee is in return entitled to a respective monetary gratification (art. 9-12 ArbNErfG), whose calculation – due to the broad variety of inventions and their eventual economic significance – is a true challenge in practice; the expected profit arising from the invention, the tasks and the position of the employee in the company as well as the company's proper contribution to the invention have to be taken into account (Schwab 2014).

This regulation provides at least a general approach of how interests of inventor and a non-identical patent holder (here the employer) in the situation of "employee-driven innovation" can be balanced. It may be argued that this model cannot be applied directly on the situation of user-driven innovation, as there is an essential difference: While the inventing employee and his employer are bound by a joint employment contract, there is no contractual relationship between the user providing innovative improvements in a virtual community and the innovation-exploiting company. The central element of the employees'-invention-regulation is the company's right to "shop" the (until then foreign) invention, which is directly based on the underlying work- or service contract with the employee. Also the duty to disclose any invention to the company derives directly from the contract employee-employer and cannot be imposed on any classical user in user-driven-innovation situations.

But there is another element in employee's invention law which does not arise from contractual relationships, but serves exclusively that balance of interest also envisaged in user driven innovation: The gratification paid to the employee distributes a respective share of the profit made by the company expected on base of the new patent, and as diverge national regulations of these gratifications may be in practice: The duty to pay a respective gratification – including its calculation methods – can by respectively applied to the favor of users in user-driven innovation as well. As the user does often not know which company may exploit his invention in future – and as there would not be any duty to inform anybody about eventual inventions for users anyway – the information duties would be reversed, i.e. the interested company would be obliged to disclose its intention to patent the invention to its respective author (as far as possible). If the author does not react within a period of time still to be determined, his consent would be assumed – leaving untouched his claim for gratification, if he only finds out about the patent later.

7. Conclusions

The way technical innovation is generated in companies has essentially changed in recent years, and the trend has just started: No internal research department of any company has the resources to compete with the “wisdom of the crowd” provided by millions of private product users every day – in real time, based in real experiences, and – so far – at no costs. User provide these services to company as the “Open Source Spirit” – which is based on an informal understanding of mutual benefit of all actors involved, leaving any claims for monetary compensation aside – is still alive in the internet community, and as many users do not realize that their improvements disclosed on the web have indeed an – eventually considerably high – market value at all: For estimating these benefits of user innovation communities for companies as a starting point can be taken the approach of Cooper and Kaplan as well as the more complex and detailed proposal of Specht at al. Both authors estimate the committed costs for the first part of the life-cycle supply chain up to 80%, where Specht et al. has a broader view on all success dimensions and all phases of the life-cycle supply chain of the product. Both scholars see large potentials in the usage of innovations from user communities which have to be taken under account be comparing them to tentative IPR payments to users.

While the exploitation of this knowledge is at present basically free for private companies and therefore is becoming more and more essential in the firms' scheme (partly even replacing classical R&D-departments), the Open Source Spirit will sooner or later fade, as users will

realize that there is not much of a mutual benefit left if their inventive contributions do not serve a public good, but the profit of private companies.

This does not mean that the trend to even more user-driven innovation should be stopped or even reverted – on the opposite, the abundant resource of user’s experiences should even be explored further, and the communication between users and private companies should further be intensified. But there should be a legal framework for these considerable transfers of value, providing legal certainty and a minimum of balance of interests of both users and companies. This framework is so far lacking in virtually most legal systems, as the dogmatically closest legal mechanism – employee’s invention law – cannot be directly applied on user driven innovation due to the lack of any legal relationship between the innovating user and the exploiting company. Still, there is one element in employee’s invention law, which is not based on a contract between both parties – the duty to pay a respective gratification to the inventor. This duty should be imposed respectively on companies exploiting user-driven innovation – at least as far they want exclusively exploit the innovation on base of a patent or a utility model.

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Abstract

Las tecnologías de la información y las comunicaciones han adquirido un rol importante en la medida en que son consideradas por buena parte de la sociedad, como instrumentos que facilitan la vida de las personas y fortalecen el aparato productivo de las naciones. Es amplia la literatura alrededor de este tema así como de los mecanismos con los que puede aportar a las tareas cotidianas de la humanidad.

No obstante, la visión con la que se han abordado las TIC se caracteriza por la óptica instrumentalista que no permite evidenciar las imbricaciones que se presentan cuando estas tecnologías entran en la vida de las personas, situación que hace necesaria una reflexión crítica alrededor de las empresas que posibilitan estos servicios para la sociedad y los sectores productivos, dado que, estos agentes cumplen una doble función: por una parte materializan uno de los propósitos esenciales del gobierno cual es promover el emprendimiento y, por otro, son el canal a través del cual las TIC pueden llegar efectivamente y con soluciones a la sociedad y a sectores estratégicos. Con este trabajo de investigación, se realiza un análisis sobre las TIC y el desarrollo desde la óptica de los emprendedores. El título de la propia investigación conjuga una serie de elementos que son necesarios para comprender las dinámicas que este sector tiene en la ciudad y el departamento, e invita a explorar diferentes aspectos en la interacción entre jóvenes, emprendimiento y desarrollo.

Si bien el abordaje de esta temática resulta ambiciosa y retadora desde la perspectiva investigativa, es necesario destacar que los alcances de la misma se han establecido a partir del contraste de casos de emprendimiento en las empresas de tecnología: SERATIC, INPUT y RACORE frente al uso y apropiación de las TIC en Popayán. La primera está posicionada en el mercado de las aplicaciones para dispositivos móviles, la segunda desarrolla software para el sector agropecuario y la tercera realiza procesos de incorporación de las TIC en los procesos pedagógicos. En este orden de ideas, esta investigación se orienta bajo el objeto general de

analizar el impacto y las contribuciones de emprendimientos representativos de base tecnológica al desarrollo local de ciudades con población menor a los 500.000 habitantes como es el caso de Popayán, Cauca, Colombia, llegando finalmente a una propuesta de innovación colectiva para que los emprendimientos tecnológicos impacten positivamente una ciudad.

1. Introducción

Este trabajo comienza con un análisis en relación a las distintas miradas al desarrollo y especialmente a una de las causas del rezago económico y social de América latina: La baja inversión, apropiación y uso de la ciencia y la tecnología.

Se plantean algunas hipótesis y desafíos para fomentar el uso de las denominadas Tecnologías de Información y la Comunicación TIC, a favor del crecimiento económico, el bienestar social y la generación de condiciones de competitividad en el aparato productivo.

Más que obtener resultados concluyentes, se espera generar discusión alrededor de estrategias que puedan propiciar condiciones de desarrollo en el Cauca, al final este escrito se aborda un camino a seguir para el futuro desarrollo de la investigación

En primera instancia, se hace un breve recorrido histórico sobre las revoluciones tecnológicas y su carácter cíclico, las cuales han traído como consecuencia que ciertos países se conviertan en líderes mundiales aumentando la brecha con países pobres. Posteriormente se abordan algunos obstáculos estructurales al desarrollo y sus principales características y referentes teóricos.

Finalmente se presenta la perspectiva de las empresas de base tecnológica TIC con relación al desarrollo local, logrando una primera versión de una estrategia de trabajo colectiva que aporta desde el sector empresarial al desarrollo en la ciudad.

2. Objetivos

Desde estas consideraciones esta investigación pretende esbozar los elementos necesarios y desafíos que implica la construcción de una propuesta para el desarrollo y competitividad de Popayán a partir del uso y apropiación de las TIC. Si bien el abordaje de esta temática resulta ambiciosa y retadora desde la perspectiva investigativa, es necesario destacar que los alcances de la misma se han establecido a partir del contraste de casos de emprendimiento en

las empresas de tecnología: SERATIC, INPUT y RACORE frente al uso y apropiación de las TIC en Popayán. En este orden de ideas, esta investigación se orienta bajo el análisis del impacto y las contribuciones de emprendimientos representativos de base tecnológica al desarrollo local de la ciudad de Popayán.

3. Revisión Literaria

3.1 La Sociedad Posindustrial. Conceptos y Características para explicar una nueva sociedad.

La tesis propuesta por Daniel Bell a principios de los años noventa, consistía en que en los próximos treinta o cincuenta años se verá la emergencia de lo que denominó la “sociedad post-industrial”. Tal como se indica, ésta representa primeramente un cambio en la estructura social, y sus consecuencias variarán según las diferentes consideraciones políticas y culturales de las sociedades. Sin embargo tal forma social será un factor sobresaliente del siglo XXI en la estructura social de los Estados Unidos, Japón, la Unión Soviética y Europa Occidental. El concepto “sociedad post-industrial” se encuentra en el nivel de la abstracción (Bell, 1976).

A Bell se le cuestiona acerca de las razones para denominar a este concepto sociedad “post-industrial”, en vez de sociedad de conocimiento, sociedad profesional, términos todos ellos que describen bastante bien alguno de los aspectos sobresalientes de la sociedad que está emergiendo. Su respuesta cita la influencia de Ralf Dahrendorf, quien en su obra *Class and Class Conflict in an Industrial Society* (1959) había hablado de una sociedad “post-capitalista”, y por W.W. Rostov, que en su *Stage of Economic Growth* se había referido a una economía de “post-madurez”. El término significaba entonces –y todavía hoy- que la sociedad occidental se halla a mitad de camino de un amplio cambio histórico en el que las viejas relaciones sociales (que se asentaban sobre la propiedad), las estructuras de poder existentes (centradas sobre las élites reducidas) y la cultura burguesa (basada en las nociones de represión y renuncia a la gratificación) se estaban desgastando rápidamente. Las fuentes del cataclismo son científicas y tecnológicas, pero son también culturales, puesto que la cultura según Bell, ha obtenido autonomía en la sociedad occidental. No está completamente claro a qué se asemejarán esas nuevas formas sociales. No es probable que consigan la unidad del sistema económico y la estructura del carácter, característica de la civilización capitalista desde mediados del siglo

XVIII a mediados del XX. El prefijo post indicaba así, que estamos viviendo en una época intersticial (Bell, 1976)

Las tesis de Daniel Bell, permiten la comprensión de la existencia de sociedades agrícolas y posindustriales en un mismo territorio, como se ha mencionado al comienzo de esta propuesta, la sociedad payanesa no tiene la misma forma de pensamiento ni expectativas frente a los cambios tecnológicos que los jóvenes que egresan de las universidades de la ciudad y que incorporan en sus planes de vida el hecho de constituir empresas de base tecnológica. Lo anterior genera dificultades no solo en el ámbito comercial y de mercados, sino también en el apoyo hacia este tipo de iniciativas.

3.2 Las Tecnologías De La Información y La Comunicación. ¿Desarrollo de las TIC, o TIC Para el Desarrollo?

La visión social de las TIC como apoyo a las comunidades y a las organizaciones comunitarias en sus tareas en favor del desarrollo social y económico la podemos ubicar en lo que se ha denominado como informática comunitaria –IC- (Fienqueliévich, 2000), que combina tecnología y organización social, y que pone en red los esfuerzos comunitarios por el desarrollo socioeconómico en áreas como las redes comunitarias y cívicas, los telecentros, la democracia electrónica, la participación comunitaria en la gestión de la ciudad, el comercio electrónico, los grupos virtuales de ayuda mutua, el desarrollo de la cultura, y otras. La IC puede definirse como los estudios sobre las aplicaciones de TIC y sus logros en las comunidades para alcanzar objetivos sociales, políticos, económicos y culturales (Fienqueliévich, 2000).

En la medida que el acceso a Internet se ha extendido, aparecen las comunidades virtuales consideradas como el conjunto de relaciones sociales unidas por un interés común o circunstancias compartidas, mantenidas por un tiempo prolongado y conformadoras de redes de amigos personales y profesionales en el ciberespacio. Las comunidades electrónicas propician varias clases de productos y bienes colectivos: capital social en la red, referido a la red de contactos de los participantes; el capital de conocimientos apoyado en sistemas *online* que permiten incrementar, agudizar y difundir informaciones y conocimientos; y la comunión o capital emocional, que implica fuertes sentimientos personales de confianza y compromiso (Fienqueliévich, 2000)

Se destaca que en América Latina existen algunas experiencias interesantes sobre incorporación social de TIC en la escuela primaria y secundaria. En Brasil, el Programa Nacional de Informática en Educación (ProInfo); en Costa Rica, el Programa de Informática Educativa (PIE MEP-FOD), desarrollado desde 1988 por el Ministerio de Educación Pública y la Fundación Omar Dengo; en Chile, el proyecto Red Enlaces, desarrollado por el Ministerio de Educación; en Colombia el proyecto Conexiones –par del proyecto Enlaces desde la Universidad Eafit y ahora también desde el Ministerio de Educación-; En México, destacan los proyectos Telesecundaria y Red Satelital de Televisión Educativa (EDUSAT), desarrollados ambos por la Secretaría de Educación Pública; en Argentina, el programa educ.ar desde el 2000, como compromiso del gobierno para que la totalidad del sistema educativo ingrese a Internet y acceda a los desarrollos tecnológicos más recientes (Jara Schnettler y Pávez, 2001, Rueda, Rocío, 2000). Entre otras, las lecciones aprendidas de América Latina, se destaca que si bien hay ciertas experiencias exitosas, no se vislumbra un claro desenlace en la interacción y tensión de la lógica de la red y la pedagogía masiva. Hay temor y entusiasmo, inseguridad y curiosidad, resistencia y apertura (Hoyos, 1996). Investigaciones realizadas por FLACSO en Latinoamérica sugieren que uno de los problemas respecto del impacto social de Internet en la cultura escolar, es la tendencia a una implementación meramente instrumental o técnica que malogra su potencial como lenguaje y sistema de representaciones en el que los jóvenes crean y recrean relatos, visiones de sí mismos y de la sociedad (Ramírez, 2009). Otras críticas se refieren a la deficiente capacitación docente que no logra incorporar las TIC en los procesos formativos ni en los currículos y prácticas pedagógicas (Micheli, 2005).

3.3 Emprendimiento. Entre el espíritu emprendedor y el espíritu empresarial.

La proliferación de términos como emprendimiento, emprendedurismo, empresarismo, adicionales a espíritu emprendedor exige hacer explícito que se entiende por espíritu emprendedor y que representa la comprensión que, en el marco de este trabajo de investigación, se ha construido a partir de una amplia revisión bibliográfica. Esto es especialmente importante pues se toma distancia de la propuesta de Jaime Veciana (1996, 2005), quien afirma:

“Como persona que desde hace años vengo dedicándome a la investigación del empresario, la función empresarial y la creación de empresas, oír hablar de los “emprendedores” me resulta extraño, y me pregunto el porqué de este cambio lingüístico” (Veciana, 2005, pág. 34).

“Pero quisiera subrayar que no hay que pensar que la labor de las personas que se deciden a crear una empresa en la actualidad y la función socioeconómica que con ello cumplen en la sociedad creando nuevos puestos de trabajo, son distintas de las del empresario en el pasado” (Veciana, 2005, p. 34).

Es claro que esta concepción se basa en la “labor” y la creación de nuevos puestos de trabajo, en otras palabras, La Empresa. Esta base conceptual de partida explica las limitaciones que adelante se explicitan y las bondades del concepto de “emprendedor”.

Inicialmente se retoman los aportes literarios y de diccionarios para la comprensión y discutir posteriormente desde el campo del emprendimiento. El sentido del término espíritu emprendedor se toma del término inglés de *entrepreneurship* que tiene su origen en el término francés *entrepreneur*. En la búsqueda de los primeros rastros semánticos del concepto emprendedor, es importante retomar el trabajo presentado por Verin (1982) en su tesis doctoral en literatura, quien encontró el origen histórico del término a finales del siglo XVII y comienzos del XVIII. Este se asociaba con dos usos iniciales.

- La persona que asumía una construcción civil, cuyo diseño es acordado previamente lo mismo que el pago.
- El guerrero que emprende una conquista, propio del espíritu de las cruzadas de la Edad Media.

Esta diferencia se acentuó con el valioso aporte de Schumpeter (1961; 1965) quien identificó al emprendedor como el “destructor creativo” que rompe los ciclos ajustados del mercado (la competencia ha llevado a reducir los precios de los productos hasta el punto de permitir obtener un pequeño margen suficiente para recuperar los costos y lograr un rendimiento financiero sobre el capital invertido). Mediante la introducción de la innovación, que le brinda una ventana de tiempo monopolística, el emprendedor puede fijar un precio muy superior al costo de los recursos utilizados para la producción. La diferencia entre estos dos valores es el rendimiento del emprendedor que con el tiempo se reduce cuando es copiado por sus

competidores, lo que lleva los precios a niveles bajos ajustados en el mercado. De este modo se reestablece el ciclo que el emprendedor volverá a romper con otra innovación.

Por tanto, lo que realmente diferencia al emprendedor es un proceso de desarrollo caracterizado por el cambio o innovación constante. En otras palabras, para diferenciar el concepto de emprendedor de otros conceptos, es necesario centrarse en el proceso de desarrollo y no en los resultados de la acción. Lo que permite caracterizarlo como tal no es el resultado de la acción del emprendedor, concretada en la creación de una empresa o en una gran acumulación de capital. El aspecto diferenciador del emprendedor es la innovación constante.

Es claro que el concepto de empresario hace énfasis en la empresa que éste toma a su cargo y más específicamente en el resultado de sus acciones. Es interesante pensar si sería válido seguir llamando Empresario o Empresaria a la persona en cuestión en el caso en que la empresa desapareciera, sea por quiebra o porque otra empresa la absorbiera. Si la esencia del objeto que lo caracteriza (la empresa) desaparece, no tendría sentido seguir llamándolo empresario(a). Caso distinto para el concepto de emprendedor porque lo que le da sentido a su nombre es su actitud continua frente al proceso innovador.

En resumen, es posible afirmar que los conceptos de emprendedor y empresario no son equivalentes, dadas las diferencias antes discutidas. Por ello es equivocado utilizar indistintamente los términos Espíritu Emprendedor y Espíritu Empresarial. Este último se entiende a partir de la existencia de una empresa y cuyo fomento ha sido entendido como el fomento de modelos de formación empresarial, tal y como afirma Rusque et al (1998) el desarrollo del espíritu emprendedor está centrado en el individuo, en estudiar sus dimensiones psicológicas, culturales, económicas desde una perspectiva sistémica y evidentemente humanista.

En el ámbito de la ciudad de Popayán, departamento del Cauca, se han utilizado de manera indistinta los conceptos de Emprendedor y Empresarismo, no se ha identificado una construcción local del concepto, sino una adaptación a las escalas y categorías predefinidas que han servido de guía para la formulación de políticas públicas (principalmente el criterio etario propuesto por la UNESCO).

Se hace necesario estudiar las características, motivaciones, expectativas, temores y necesidades de estas personas que han decidido conformar empresa en el ámbito tecnológico, no solo porque sus rasgos los diferencian del resto de la sociedad, sino porque han de desenvolver su actividad productiva y su plan de vida en un contexto con múltiples particularidades como el de la ciudad de Popayán, Cauca.

4. Metodología

Para lograr los propósitos de la investigación, se abordaron los lineamientos epistemológicos del enfoque crítico social en virtud del interés emancipatorio que busca descubrir todas aquellas ataduras o esclavitudes de la realidad y la mejor manera de romper esas cadenas a través de estrategias innovadoras, propias, locales y globales que permitan utilizar las TIC como herramientas para un modelo de desarrollo propio. Asimismo, se usó este enfoque dado que uno de los pilares fundamentales de esta investigación fue el de propiciar discusión entre los distintos actores de las TIC en la ciudad para construir una propuesta que permita usar y apropiarse de estas tecnologías en beneficio de la sociedad. Según los criterios de clasificación de investigación sugeridos por Richardson (1999), esta propuesta se clasifica como Descriptiva en la medida en que pretende comprender y describir las dinámicas de los emprendimientos de base tecnológicas así como sus aportes a la sociedad payanesa.

La metodología utilizada que se tomó como base para este proyecto es denominada investigación – acción o modo 2, que se caracteriza por estimular la participación por parte de las comunidades beneficiadas. En el Modo 2 de hacer ciencia, la comunidad además de ser el objeto de investigación, participa e incide en los resultados de acuerdo a sus necesidades y conveniencias; en contraposición en el Modo 1 o tradicional se usan ambientes de laboratorio para mantener bajo control los agentes externos (Gibbons, 1994).

4.1 Las Unidades de Análisis para el desarrollo de la investigación.

Para el desarrollo de la investigación y el cumplimiento de los objetivos se realizaron conversaciones con tres jóvenes empresas de tecnología creadas e instaladas en la ciudad de Popayán. Estas empresas, como ya se ha mencionado, comparten elementos como:


- Fueron creadas por jóvenes entre 20 y 25 años de edad.


- Sus creadores son egresados de universidades instaladas en Popayán.
- Las empresas pertenecieron a una incubadora de empresas de base tecnológica – Parquesoft-.
- En principio estaban conformadas solo por ingenieros electrónicos y de sistemas.
- En principio contaron con apoyo de la institucionalidad caucana para su fortalecimiento en la fase de creación.
- Todas apuntadas a nichos de mercado aparentemente atractivos y con amplio potencial de crecimiento.
- Sus integrantes contaban con credenciales académicas de muy alto nivel y ampliamente reconocidos por sus cualidades personales y emprendedoras.

No obstante los caminos que tomaron estas empresas fueron muy distintos: la primera empresa se denomina SERATIC, es la empresa de base tecnológica más exitosa en Popayán. Recientemente fue galardonada en el “Global Forum on Innovation & Technology Entrepreneurship 2011” por el Gobierno Finlandés, Nokia y el Banco Mundial como una de las 50 mejores PYMES de países en desarrollo por crear tecnología innovadora o utilizar la tecnología con fines de transformación.

La segunda empresa a analizar es IKERNELL Aplicaciones Software, empresa que actúa en el mercado pero que ha sufrido la desintegración de los emprendedores (18 en principio, 4 en la actualidad), encuentra dificultades para seguir en el mercado pero ha logrado reconocimiento y generar estrategias para encontrar nichos de mercado específicos. Esta empresa presta sus servicios para el sector agropecuario, un sector que compone el 63% del departamento del Cauca.

La tercera empresa es RACORE Ingeniería divertida. Empresa que se dedica a la prestación de servicios que involucran TIC y elementos pedagógicos con un alto componente innovador. A continuación una breve ficha descriptiva de cada una de las empresas tomadas como unidad de análisis:

| | |
|---|---|
| <p>Empresa: SERATIC Ltda. Producto: Aplicaciones para dispositivos móviles. Area: dispositivos móviles.</p> |  |
| <p>Descripción. SERATIC ofrece soluciones tecnológicas concebida para organizaciones que buscan manejar eficientemente sus procesos desde cualquier lugar, permitiendo el ahorro de tiempo en el manejo de la información, ya que se hace en tiempo real logrando eficacia en el manejo de los recursos, a través de dispositivos móviles¹ que permiten la visualización gráfica y clara de la información, integrándose directamente a los sistemas que se manejan en la empresa.</p> | |

| | |
|---|--|
| <p>Empresa: IKERNELL Aplicaciones Software. Producto: Sistema Agropecuario Integrado Área: Software para el sector agropecuario</p> |  |
| <p>Descripción. La Cooperativa de Trabajo Asociado Ikernel Aplicaciones Software, es una empresa de base tecnológica perteneciente al sector solidario que se especializa en el análisis, diseño y desarrollo de sistemas de información, para satisfacer las necesidades tecnológicas de sus clientes en el sector agropecuario.</p> | |

| | |
|--|--|
| <p>Empresa: RACORE- INGENIERÍA DIVERTIDA Producto: Talleres en tecnología para niños y jóvenes Área: Semilleros para la industria del conocimiento</p> |  |
| <p>Descripción. RACORE ofrecía espacios para crear una comunidad de aprendizaje en el área del conocimiento que involucra la tecnología como herramienta fundamental y la solución de problemas a través del auto-aprendizaje, generando competencias y espacios para la investigación en ciencia y tecnología, y en prácticas emprendedoras que estimulan a los jóvenes hacia la Industria del Conocimiento. Este servicio permitía que niños y jóvenes entre 6 y 16 años interactúen, observen y experimenten actividades de investigación y construcción de conocimiento. Los talleres se realizaban en temas como: Animación con Plastilina, Modelado 3D y Robótica Beam.</p> | |

Tabla 1: Ficha técnica de las Unidades de Análisis Consultadas

A partir de conversaciones y sesiones de trabajo con los empresarios se identificaron variables que permiten un buen desempeño de las empresas de base tecnológica y facilitan los aportes al crecimiento de la economía regional y el bienestar de la sociedad.

Es claro que las empresas de base tecnológica juegan un papel crucial dentro de las economías del conocimiento. Su principal característica radica en la capacidad que tienen para convertirse en Emprendimientos Dinámicos, es decir aquellos que crecen de manera rentable, rápida y sostenidamente, que son capaces reinvertir y de lograr un nivel de ventas bastante significativo en una década. Con esto se generan externalidades positivas para el sistema económico: Generación de empleo calificado, aumento del PIB, dinamización de la economía local en virtud del mayor flujo de dinero, entre otros.

Sin embargo, el principal aporte que se presenta es el incremento en la productividad y la competitividad del aparato productivo local en virtud del uso y apropiación de soluciones tecnológicas desarrolladas por las empresas de base tecnológica. Se ha detectado en Popayán un potencial enorme en cuanto al desarrollo de aplicaciones para dispositivos móviles (smartphones y tabletas), así como en el desarrollo de sistemas de información para el sector agro industrial.

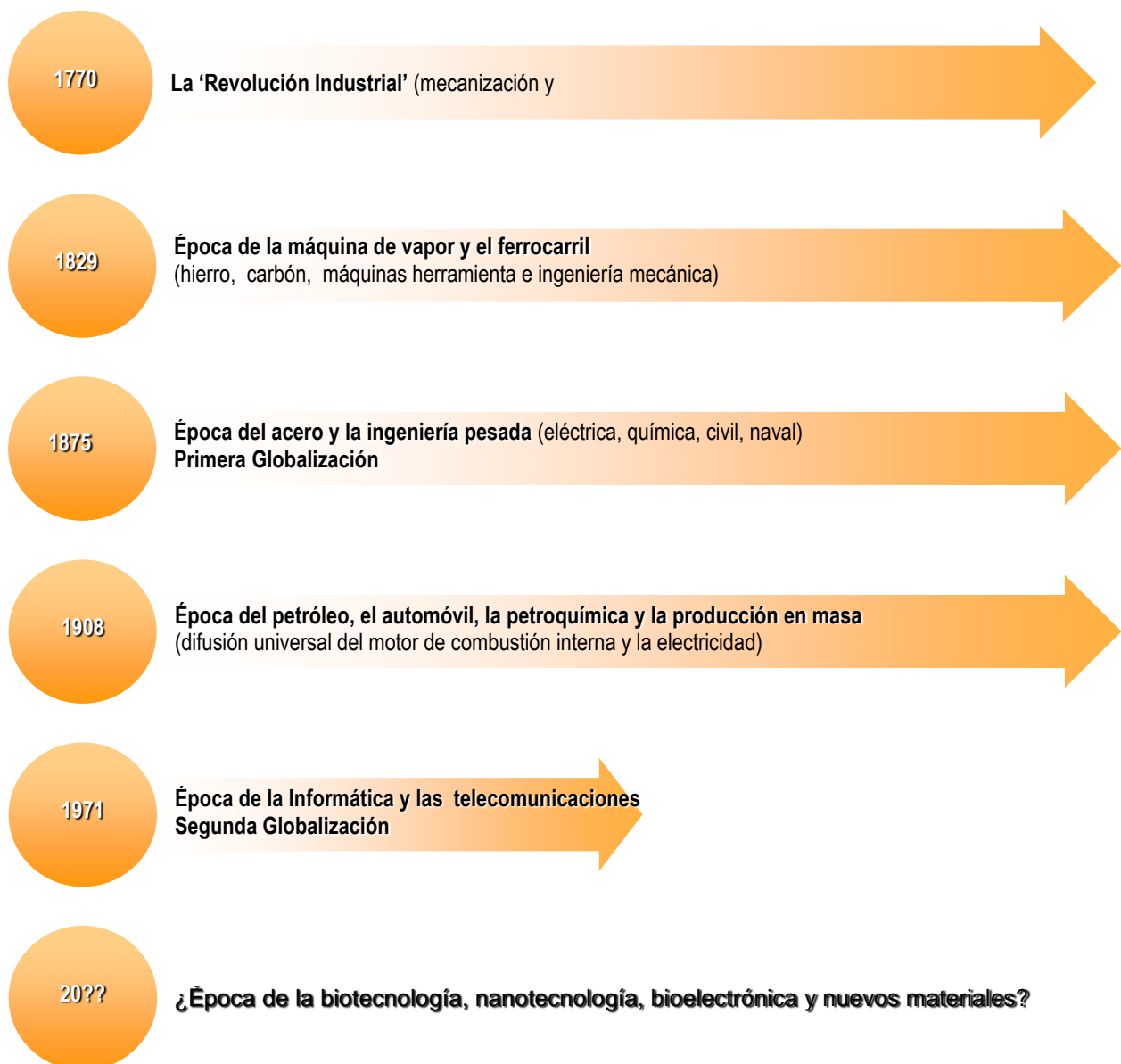
Si bien el tamaño pequeño del tejido empresarial payanes dificulta el acceso a estas tecnologías, se hace necesario el desarrollo de programas de financiación y fortalecimiento productivo que permitan a los pequeños y medianos empresarios (que corresponden al 96% del aparato productivo local) acceder a estas tecnologías, logrando eficiencia en sus procesos, aumentar el capital relacional de sus organizaciones y una diversificación de su oferta.

5. Discusión.

5.1 Las revoluciones tecnológicas en el contexto de la globalización.

La historia ha demostrado que de manera cíclica se presentan rupturas o revoluciones que incorporan nuevas formas de pensar, de producir y de actuar. Cada revolución tecnológica ofrece un enorme potencial de generación de riqueza y bienestar social. Cada una es claramente superior a las anteriores en términos de efectividad y productividad, no solo por las nuevas tecnologías, sino también por el nuevo “paradigma tecno económico y organizativo”

que las acompaña como óptima práctica. En cada oleada sucesiva se articulan un conjunto de principios, métodos, formas organizacionales y criterios nuevos y distintos. Los emprendedores, las empresas, los gobiernos y las sociedades se benefician en mayor o menor medida de ese potencial según su capacidad para adoptar el nuevo paradigma y adaptarlo a sus propósitos específicos (Pérez. 2010). Con la siguiente gráfica, se esquematizan las revoluciones tecnológicas que se han presentado.



Gráfica 1. Las revoluciones tecnológicas en la historia

Fuente: Pérez Carlota. 2010

Como factor característico se resalta que con cada irrupción tecnológica –que se presenta cada 40 - 60 años- viene una oleada de desarrollo que se propaga de manera desigual por todo el mundo. Estos cambios traen consigo varias consecuencias de interés: i) Un relevo en el liderazgo económico sectorial y geográfico, ii) Un cambio en las formas exitosas de competir, iii) Una modificación sustancial del valor relativo, de las ventajas comparativas y las capacidades, iv) Una transformación del ‘sentido común’ de máxima eficacia y v) la consecuente desvalorización de mucha experiencia previa (Pérez. 2010). El elemento a tener en cuenta con estas apreciaciones, es que no es posible evitar estas revoluciones tecnológicas, de hecho, no deberían generar temor por posibles efectos devastadores e inequitativos, el asunto radica en que cada irrupción tecnológica ha traído nuevas oportunidades de crecimiento y los países deben encontrar los mecanismos y herramientas para aprovechar sus ventajas propiciando el crecimiento del aparato productivo y evitando la inequidad en su propagación.

5.2 Los obstáculos al desarrollo.

Para Vázquez (2001) el modelo de desarrollo actual no genera altas tasas de crecimiento, no absorbe el aumento de la fuerza de trabajo en actividades formales, ni propicia la distribución equitativa del ingreso. Lo anterior evidencia dificultades coyunturales entre las que pueden citarse:

Baja Productividad: América Latina y en particular Colombia sufren de un rezago en materia productiva y tecnológica. La poca inversión pública y privada en ciencia, tecnología e innovación –especialmente en el sector agrícola- dan cuenta de una situación desfavorable que quedó al descubierto en la década de los noventa con el advenimiento del proceso globalizador.

Según ejercicios estadísticos recientes (Boisier, 1999), muestran que la evolución de la variable Productividad está fuertemente relacionada con el ciclo del PIB de los países, y confirma que la mayor integración económica y el mejoramiento en los niveles de educación de la fuerza laboral mejoran los niveles de productividad multifactorial de las naciones.

En este sentido, la educación y el conocimiento aparecen como mecanismos para fomentar la competitividad "auténtica" basada en incorporación de progreso técnico más no la

competitividad "espuria" apoyada en la caída del ingreso real de la mano de obra (Fajnzylber, 1989).

Imperfecciones del mercado: El libre juego de los agentes del mercado y la poca intervención estatal en los mismos acentúan la condición de pobreza y miseria latente en América Latina, no obstante, una percepción más profunda de la problemática de la pobreza evidencia que ésta no se presenta a causa de la ausencia de ingresos; Amartya Sen, Premio Nobel de Economía, resalta que la pobreza no sólo está en la falta de renta, sino que está en la ausencia de capacidades. Estas capacidades son de orden técnico, profesional, y directivo. Así pues, la solución no está sólo en trasladar dinero a las regiones y municipios, sino también fortalecer sus competencias cognitivas, de capacitación y capacidad de gestión.

Incremento Poblacional: Esto ha provocado la creación de grandes masas urbanas marginadas provenientes del sector rural que no es posible absorber por el sector empresarial en las ciudades. Al incrementarse el número de habitantes a una escala superior al incremento del aparato productivo se genera como consecuencia una situación de desempleo, falta de ingresos y otras problemáticas sociales –delincuencia, prostitución, conflicto armado- que redundan en un estancamiento de la economía.

Bajo PIB y baja inversión en Ciencia y Tecnología: La poca inversión pública y privada en actividades de ciencia, tecnología e innovación han generado atraso y poca competitividad en América Latina. Más adelante se sustentará esta afirmación con cifras.

Al respecto, en Colombia, durante ya varios años se ha discutido la necesidad de identificar sectores estratégicos o “de talla mundial”, sobre los cuales se deben concentrar los esfuerzos en Ciencia y Tecnología. En 2008, el país convocó a expertos en el tema para construir la Política nacional de fomento a la investigación y la innovación de Colombia, en donde se concluye que la iniciativa de fomentar la ciencia y la tecnología en el país debe partir del estado, con una decisión política que implique diagnósticos certeros, valoraciones realistas de lo existente y lo que se requiere, amplios consensos intersectoriales y decisiones al más alto nivel. En suma, se requiere una profunda transformación productiva en la que la innovación juegue un papel medular. Por lo mismo, el modelo debe estructurarse para satisfacer las eventuales demandas del país, y también dar pasos para identificar nichos de oportunidad estratégica basados en las capacidades, las demandas sociales y del mercado, y en los recursos naturales con que cuenta el país.

5.3 Las TIC Como Herramienta De Desarrollo. Potencialidades y Riesgos.

Combinando algunos de los elementos abordados previamente es posible de esbozar algunas ideas que dan cuenta del potencial que tienen las herramientas TIC como motor de desarrollo en las regiones.

a. Las TIC como herramienta que propicia el crecimiento económico:

El profesor Jorge Sábato con el denominado Triángulo de Sábato (1968) y Henry Etzkowitz (2003) con el modelo de triple hélice planteaban que la interacción entre ciertos actores resulta fundamental para propiciar procesos de innovación y productividad que generen mejores niveles de desarrollo en las naciones. Los actores de este proceso son las empresas, el estado y las universidades. Las universidades como productoras de conocimiento. El estado como oferente de un marco regulador apropiado, generando entornos de crecimiento que, en definitiva, empujarán a un país con una dinámica de crecimiento sustentable y progresiva, y las empresas como generadoras de nuevas oportunidades de negocio, empleo e ingresos. No obstante este relacionamiento demanda intensas relaciones de confianza y un soporte tecnológico que facilite el flujo de información, la identificación de oportunidades y el aprovechamiento de las mismas. Se plantea entonces, que con el uso de estas tecnologías se puede optimizar no solo el trabajo de cada actor sino estimular y aprovechar las interacciones entre los mismos, facilitando la adaptación de productos globales a las condiciones locales, la identificación de productos locales con potencial global, el desarrollo de mercados locales y acceso a nuevos mercados que permitirán un crecimiento de la economía.

b. Las TIC como herramienta para el bienestar y mejoramiento de las condiciones sociales:

Además del soporte que pueden generar estas tecnologías en materia de crecimiento económico, también es posible encontrar aportes que contribuyan al mejoramiento de la calidad de vida de la población. En primera instancia, es claro el rol de las TIC como dinamizador en la generación y difusión del conocimiento y, si la información es un recurso esencial para el desarrollo humano, entonces las TIC tienen el potencial de formar parte del conjunto de herramientas básicas para el desarrollo. Pérez (2010).

Una revisión al trabajo del programa InfoDev del Banco Mundial ayuda a la comprensión de esta dimensión. infoDev (Information for Development program) es un programa enfocado en apoyar procesos en donde las TIC son la herramienta para reducir la pobreza, promover las oportunidades, fortalecer el empoderamiento y el crecimiento en países en vías de desarrollo. En el informe de experiencias exitosas de este programa publicado en 2003: ICT for Development Contributing to the Millennium Development Goals –TIC para el desarrollo, contribuyendo al desarrollo de las metas del milenio-, se presentan los proyectos más representativos del programa así como los impactos logrados en términos de acceso a la educación, servicios de tele-salud, capacitación técnica, nuevos mercados para pequeños productores rurales y empresarios, nuevas oportunidades laborales para población discapacitada, marketing territorial y atracción de inversiones, y entretenimiento. Se percibe luego de estudiar estos ejercicios que el elemento fundamental que aportan las TIC para reducir la pobreza y la desigualdad radica en la posibilidad de acceder a públicos globales con bajos costos de operación y en tiempo inmediato así como la posibilidad de formación y cualificación de las personas a costos más bajos; estas posibilidades, que antes era impensables dados los altos costos de publicidad masiva y desplazamiento que demandaban la presencialidad, actualmente se pueden ofrecer a distintas capas sociales.



Gráfica 2. Aplicaciones de las TIC para el beneficio de la sociedad.

Fuente: Elaboración propia a partir del informe de experiencias exitosas de TIC para el desarrollo. InfoDev 2003.

c. Las TIC como plataforma para la Competitividad.

En países con mayores niveles de industrialización se ha demostrado que una fuerte inversión en infraestructura para la conectividad digital crea las condiciones necesarias para que se desarrollen nuevos negocios y formas más eficientes de interacción. En esta vía, se encuentran básicamente dos elementos constitutivos de esta plataforma: el internet de banda ancha y la telefonía móvil.

Según el informe del Internet World Stats (2011) la penetración en América Latina de telefonía móvil era del 95% y el acceso a internet del 32% del total de la población, mientras que en los Estados Unidos las cifras alcanzaban el 96% y el 77% de la población respectivamente. Los datos anteriores evidencian que en términos de telefonía móvil las plataformas instaladas son relativamente similares en los dos contextos mientras que existe un rezago en cuanto al acceso a Internet debido a las condiciones de accesibilidad, asequibilidad y apropiación que se mencionaron anteriormente.

Sin embargo, otro informe, el Índice de potencial para la conectividad (2010) evalúa las debilidades y fortalezas de las Tecnologías de la Información y la Comunicación de los países, según el ambiente ofrecido por una nación para el desarrollo y la utilización de estas tecnologías; la preparación y disposición de los individuos, empresarios y el Gobierno para aprovecharlas y la efectiva utilización de las TIC por parte de los actores mencionados. Este índice, además de la infraestructura, analiza la calidad y las aplicaciones que se le dan a tal infraestructura. En este reporte la diferencia resulta mucho más grande entre países industrializados y en vías de desarrollo –para citar un ejemplo, en este ranking, los Estados Unidos se ubican en el quinto lugar, mientras que Colombia ocupa el puesto 66-.

Sin duda, las cifras demuestran que la desenfadada carrera por implantar infraestructura que permita el desarrollo de las TIC en el país y en América Latina no se están acompañando con estrategias efectivas que permitan la inserción de nuestros países en la economía global ni realizar aportes sustantivos contra la reducción de la pobreza. El establecimiento de una

plataforma sólida, y eficiente para el desarrollo de las TIC es en consecuencia una condición necesaria más no suficiente para que estas herramientas aporten al desarrollo de la región.

En palabras del profesor Fernando Fajnzylber (1989), cuando se favorece la inserción internacional sobre la base del impulso a la productividad en sectores específicos, se propicia una plataforma que permitirá una región más competitiva. Vale la pena entonces agregar que esta plataforma simplemente brinda las condiciones necesarias, más demanda un ejercicio de planificación estructurado que conlleve a los sectores productivos y a la sociedad a lograr los resultados esperados.

Los Riesgos de las TIC.

Según el Centro Virtual Cervantes, el 84% de las páginas de internet de todo el planeta se generan en los Estados Unidos y solo el 1,5% corresponde a páginas en español, resulta interesante analizar si el hecho de compartir un medio de información y comunicación dominado por unos pocos grupos de poder puede generar una falsa sensación de democracia y pluralidad, cuando en realidad el medio puede estar reproduciendo relaciones de dominación existentes en la sociedad.

A partir de los estudios de Jean Adès y Michel Lejoyeux (2003), se presenta en el siguiente cuadro un resumen de algunos factores de riesgo en una sociedad al implementar TIC sin procesos adecuados de planificación, concertación con la sociedad y monitoreo:

| | |
|--|---|
| Exceso de Información | Gran volumen de información que genera dificultades en el procesamiento. |
| Confiabilidad de la información | Debido al gran volumen de información no es posible asegurar la validez de las fuentes. |
| Facilidad para el Plagio y Fraude | Se puede generar una actitud de facilismo entre la población, especialmente, estudiantil. |
| Alienación | Refiere al traspaso de concepciones, preferencias, mentalidad y enfoques que van en detrimento de la supervivencia de nuestra cultura, minimizando su importancia |
| Desigualdad en el acceso a la información | Además de la clásica diferencia entre ricos y pobres, se puede generar una brecha aun peor: Los que tienen acceso a las TIC y los que no. |
| Abandono | La lectura de un libro o la escritura de un texto, cada vez son menos utilizadas por profesionales de |

| | |
|-----------------------------|--|
| Lectura/Escritura | diferentes áreas. |
| Doble Personalidad.- | Las personas se aferran al Internet para relacionarse con las personas, este factor lleva a que se cree diferentes personalidades de uno mismo. |
| Aislamiento | Al dedicar mucho tiempo a estas tecnologías, se reduce la dedicación a otras manifestaciones culturales y sociales necesarias para un desarrollo equilibrado de la personalidad. |
| Dependencia | Dependencia excesiva de la Internet, de los dispositivos móviles, de los procesos automatizados, etc. |

Tabla 2: Los Riesgos de las Tecnologías de la Información y la Comunicación.

Fuente: Elaboración propia a partir de los estudios de Jean Adès y Michel Lejoyeux.

Como puede apreciarse, son muchos y muy variados los inconvenientes que pueden surgir a partir de la implementación de estas tecnologías. El diseño de un modelo de desarrollo con un componente de TIC va a demandar en consecuencia, de aportes de distintas disciplinas y áreas del conocimiento.

5.4 La perspectiva de los emprendedores.

Una vez comprendidos los aportes y riesgos que las TIC –en general- y las empresas de base tecnológica –en particular- tienen con relación a la sociedad, es importante analizar la mirada de los jóvenes emprendedores en Popayán.

Luego de conversar con los actores del emprendimiento de base tecnológica y estudiar los referentes teóricos que acompañan el tema, se exalta el rol de los jóvenes empresarios como sujetos del desarrollo no desde la retórica motivacional que acompaña los discursos del emprendimiento sino desde la *praxis* que satisface las ganas de transformación y bienestar colectivo que predicán y aplican estos jóvenes. Estos asuntos importan en la configuración de perspectivas de emprendimiento conectadas con la realidad social del departamento y como posibilidades de agenciamiento juvenil de sus dinámicas de desarrollo local.

Si bien los emprendedores resaltan en primera instancia los aportes de sus unidades empresariales en virtud de la posibilidad de coadyuvar en el cumplimiento de ciertas tareas responsabilidad del estado como la generación de ingresos, empleo, divisas, impuestos etc.,

una exploración más profunda permite identificar otros elementos que también constituyen importantes aportes para el desarrollo de la ciudad.

En este orden de ideas, el primer aporte nominado por los emprendedores es la apropiación del territorio, más del 50% de los entrevistados son oriundos de ciudades diferentes a Popayán –lo que puede ser explicado fácilmente dado el orden nacional de la Universidad del Cauca que la hace un destino atractivo para que los jóvenes desarrollen sus carreras profesionales-, en estos emprendedores, se han creado fuertes vínculos con la ciudad bien porque han estudiado, o porque decidieron radicarse o tienen vínculos familiares en este territorio. En palabras de estos jóvenes se ha adquirido una responsabilidad con la ciudad y es necesario regresar a la sociedad los beneficios que se han recibido no solo por la formación profesional sino por la plena consciencia que se tiene de las escasas oportunidades de crecimiento económico y personal disponibles en la ciudad.

En segunda instancia, para estos jóvenes sus empresas constituyen un espacio para el crecimiento y la realización personal y profesional. Aquí se resaltan las sinergias que se generan fruto del trabajo entre ellos mismos, las especializaciones y maestrías que realizan y que están directamente conectadas con las necesidades de sus empresas y los logros alcanzados por cada uno de ellos que simbolizan el esfuerzo y el cumplimiento de metas en esta segunda familia. Esta posibilidad de cristalización de sueños es para los emprendedores un aporte significativo dado que en la región la oferta de empleo es insuficiente y en muchos casos está caracterizada por la rutina, la jerarquización y las pocas posibilidades de crecimiento profesional.

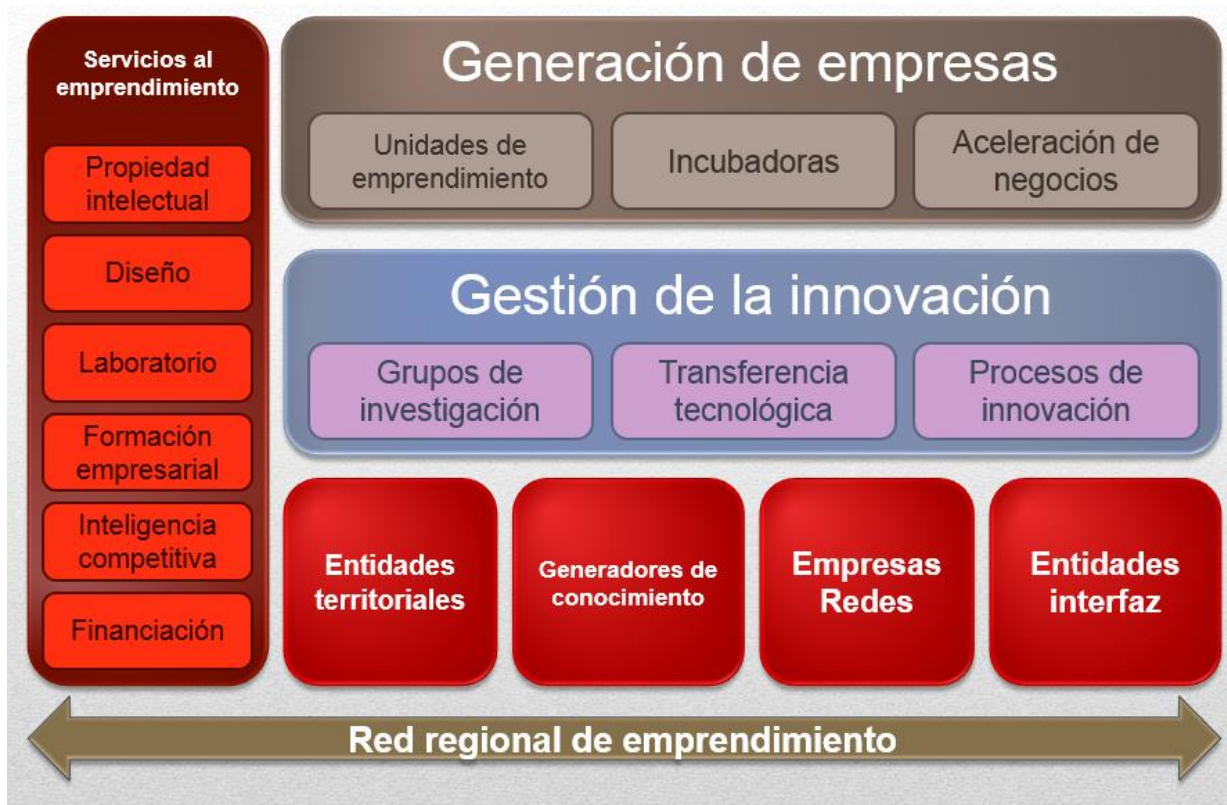
Por otra parte, los emprendedores reconocen que el fomento al emprendimiento obedece a unas lógicas capitalistas que estimulan la creación de riqueza a unos costos sociales altos. Es una responsabilidad para aquellos que se autodenominan emprendedores asumir una postura proactiva, no desde la óptica desesperanzadora y la creencia acerca de cualquier iniciativa empresarial está condenada al fracaso por el simple hecho de estar albergada en un sistema socioeconómico frente al cual cualquier acción es insignificante, sino desde la perspectiva de la esperanza de soñar con una sociedad distinta que tenga al ser humano en su centro y bajo la posibilidad de crear emprendimientos incluyentes y basados en conocimiento cuyo fin último no sea la acumulación sino la distribución equitativa como respuesta a las realidades singulares del territorio y como insumos para el desarrollo local y regional. En este orden de ideas, los modelos y la propia política pública de fomento al emprendimiento debe vincular al emprendedor no como un usuario sino como un agente activo capaz de diseñar un modelo de

desarrollo, garantizar acceso e igualdad de oportunidades frente al fenómeno emprendedor se constituye en el gran desafío para las naciones y las regiones.

Cuando se conversa con los emprendedores y empresarios de base tecnológica ubicándolos como actor clave del modelo y no solo como usuarios del mismo, se evidencian elementos importantes al momento de pensar en una propuesta integral que fortalezca las empresas y conecte sus resultados con el crecimiento económico y el bienestar de la sociedad (ver gráfico 3).

En este orden de ideas, se plantea la necesidad de legitimar los espacios que el estado ha creado, para el caso colombiano aplica la Red Regional de Emprendimiento (instrumento creado a partir de la ley 1014 de 2006) como la instancia en donde confluyen los distintos actores del emprendimiento en las regiones. Esta debe ser la plataforma del proceso y todas las iniciativas deben estar vinculadas, socializarse y compartirse en las sesiones definidas por la Red. Debe evitarse al máximo la dispersión de esfuerzos y la creación de escenarios paralelos o sesgados que no representen las iniciativas de emprendimiento.

Como eje central del modelo de presenta la gestión de la innovación no solo a través de los procesos de innovación liderados por las empresas sino también a partir de los procesos de transferencia de tecnología desde las instituciones generadoras de conocimiento hacia las empresas. Vale la pena destacar que en regiones como el Cauca los procesos de gestión de innovación tecnológica y de producto demandan inversiones considerables que en ocasiones están por fuera del alcance financiero de las pequeñas y medianas empresas TIC. En este orden de ideas es importante recurrir a las alianzas con Universidades y Centros de Desarrollo Tecnológico para propiciar procesos en donde las investigaciones científicas puedan migrar a desarrollos tecnológicos y desemboquen en innovaciones con alto nivel de aceptación en los mercados.



Gráfica 3: Propuesta para el ecosistema de EBT en el Cauca

Fuente: Elaboración propia

Los servicios al emprendimiento han sido consolidados a partir de las opiniones de los empresarios y hacen referencia a los ejes de trabajo que actualmente simbolizan las necesidades de las empresas TIC en Popayán. No se niega la existencia de otras variables de importancia en el tejido empresarial de base tecnológica, sin embargo, se han categorizado aquellas que tendrían un mayor impacto entre los empresarios y que requieren un abordaje en el corto plazo.

Las organizaciones interfaz y los entes territoriales materializan el respaldo y la voluntad política que requiere este tipo de procesos de fortalecimiento empresarial. Es necesario profundizar en la priorización como apuesta regional que se evidencia en los planes de desarrollo –esta debe ser la primera fase-, que si bien es un ejercicio importante no es suficiente dado que el apoyo debe materializarse en programas y proyectos con una asignación presupuestal clara para la cofinanciación de las necesidades del sector.

Como se aprecia en el gráfico 3, la potenciación de las empresas de base tecnológica se ha dividido en las fases de incubación y aceleración dada la necesidad de enfocar los recursos. En

la Incubación se concentra el trabajo de dos organizaciones regionales –Parquesoft y Agroinnova- que acogen las iniciativas de negocio y acompañan el proceso de formulación y materialización de la idea en una empresa. Empero, en la ciudad se encuentran empresas de base tecnológica que cuentan con indicadores comerciales que evidencian su capacidad para avanzar en nuevos mercados. A estas empresas se atenderá con asesoría especializada para la expansión comercial y una estrategia de financiación que les permita acelerarse empresarialmente.

6. Conclusiones.

Los emprendedores de Popayán reconocen la inequidad de este sistema social y económico que brinda condiciones de acceso a políticas de emprendimiento y a herramientas TIC a una pequeña porción de la población, y albergan el sueño de encontrar mecanismos que permitan a todos los jóvenes acceder no solo a las TIC sino a los instrumentos para hacer de ellas herramientas que le aporten a la sociedad en materia de salud, educación e ingreso. Para SERATIC, IKERNELL, RACORE y todos los demás emprendedores de base tecnológica es necesario que el fomento al emprendimiento de base tecnológica se materialice en todas las capas sociales, no solo para reducir los altos índices de desempleo, sino para brindar a las personas la posibilidad de realización, crecimiento y apropiación de este territorio, propósitos que se logran cuando se tiene la oportunidad de crear empresa y asumir riesgos, dificultades y satisfacciones que el proceso emprendedor trae implícitos.

En estos emprendimientos, ellos han encontrado en primera instancia un espacio de realización en donde pueden desplegar con libertad sus conocimientos y sus deseos de crear. En segunda instancia, sus emprendimientos son la fuente de crecimiento personal en la medida en que cada cliente, mercado o negocio trae consigo ciertos niveles de dificultad que generan alta satisfacción una vez logrados y, la tercera cuestión que los emprendedores consideran como aporte a la sociedad, es que estos espacios generan progresivamente altos niveles de apropiación de territorio en virtud de su contacto permanente con la realidad y la responsabilidad adquirida en términos de transformar las deficiencias que tienen una región como el Cauca

Esta investigación partió del hecho de que las TIC son un fenómeno global que ha permeado todas las esferas de la sociedad, identificando los posibles aportes al desarrollo local. Es alentador escuchar como surgen propuestas propias para que se conecte el potencial de las TIC con el talento de los emprendedores mediante la construcción de estrategias que apoyen

la inserción de nuestro aparato productivo en las economías globales y estrategias que coadyuven a reducir la pobreza del departamento. Esta propuesta no puede ser implementada exclusivamente por el mercado, pero tampoco puede ser impuesta por el gobierno, mucho menos en el paradigma actual, que requiere innovación constante y flexibilidad ante los cambios en el contexto. Este esquema solo puede funcionar adecuadamente como resultado de una visión compartida socialmente, donde los diversos agentes de cambio actúen de manera autónoma en las direcciones acordadas, integrados por un gobierno activo con un marco institucional adecuado y efectivo. Su implementación requerirá un proceso de construcción de consensos donde se involucre a las empresas, el gobierno, las universidades, los medios de comunicación y la sociedad en general, seguido por las medidas políticas adecuadas para inducir y facilitar el comportamiento del mercado en las direcciones acordadas.

En este sentido, la difusión de las nuevas tecnologías de la información y la comunicación es sin duda una de las formas de expresión del progreso tecnológico vinculada con la innovación en bienes y servicios que finalmente influye en los procesos de transformación de la sociedad. Esto implica que la construcción de tejido institucional, así como el fortalecimiento de mecanismos de cohesión social y la generación de oportunidades de trabajo y capacidades tecnológicas, son procesos esencialmente endógenos. Esta visión integral del desarrollo va más allá de la complementariedad entre las políticas sociales, económicas, ambientales y la ciudadanía, debe interpretarse, según (Ocampo, 2006) como el sentido mismo del desarrollo.

Los jóvenes emprendedores en Popayán son el resultado de una dinámica que los promociona y exalta, pero que curiosamente espera que por sí solos creen los ecosistemas necesarios para que su accionar redunde en condiciones de bienestar y desarrollo para la sociedad. Es claro que sus aportes en estos términos son aún incipientes y también es innegable su enorme potencial de transformación si se conjugan los factores necesarios para su despliegue. Para estos jóvenes existen aportes a la sociedad independientemente de la proveeduría de servicios que satisfagan una problemática. En estos emprendimientos ellos han encontrado en primera instancia un espacio de realización en donde pueden desplegar con libertad sus conocimientos y sus deseos de crear. En segunda instancia, sus emprendimientos son la fuente de crecimiento personal en la medida en que cada cliente, mercado o negocio trae consigo ciertos niveles de dificultad que generan alta satisfacción una vez logrados y, la tercera cuestión que los emprendedores consideran como aporte a la sociedad, es que estos espacios generan progresivamente altos niveles de apropiación de territorio en virtud de su contacto permanente con la realidad y la responsabilidad adquirida en términos de transformar las deficiencias que tienen una región como el Cauca.

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Methodology for Entrepreneurship education based on “S” model: implementation in a basic school

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Abstract

Entrepreneurship -as an area of applied social sciences- has reached complex postures like the inclusive venture, which is considered as a phenomenon that goes beyond the activity of creating business. Entrepreneurship recent debates and research papers, have described the primary area objective like to train people in entrepreneurial skills looking for their positive contribution to their environment; this topics go beyond the activities focused on ventures promotion. Thus, the paper main objective is to explain a methodology for entrepreneurship education, based on strong theoretical arguments and the “S Model”. The methodology has an innovator curriculum contents, which is different of recent year’s field education contents. With this contribution is solved the theoretical bases failure for entrepreneurship education. This work is presented as a guide for the countries urgency to train young people with vision, motivation, and a compromise with the collective progress in a socially responsible way.

Key Words: Entrepreneurship, education, theory, model.

1. Introduction

In last decades, entrepreneurship has been framed as a key factor to the economic development and employment generation. Consequently, the area encouragement is a main objective in public and private institutions. Schools and universities around the world have incorporated entrepreneurship subject on their curriculums, looking for the students comprehensive training; this posture has source in a government requirement, or –in many times- for own initiative. Entrepreneurship education current approach is focused in the products or services development, business plan making, and business fairs, searching for the products and services commercialization. This model effectiveness hasn’t been checked, however academics and many countries organizations have agreed that entrepreneurship goes beyond mere ventures. It means, entrepreneurship must train individuals with entrepreneurial skills, and create value capabilities.

Academic investigations and dissertations explain the entrepreneurship courses content modification urgency, which one must be built from area theoretical bases, setting the correct activities for desired results or required competences. The paper presents Barrera (2012) theoretical model, which explains the entrepreneurship process and its dependent and independent variables. This model is the foundation to the education area curriculum.

Curricular contents implementation in a Colombian basic and secondary school supplies important findings and conclusions. This qualitative ethnographic investigation lets establish innovative activities and complementary contents. The paper is presented as a fundamental piece to entrepreneurship education advance, and a significant contribution to young people training complement, both required for actual society.

2. Theoretical Revision

Entrepreneurship development as a science have allowed the establishment of diverse strategies looking for the ventures promotion, this conception has promote important changes on public and private institutions, including educative institutions. Nowadays, entrepreneurship education is promoted in many countries around the world (Carsrud 1991; Brockhaus 1991; Castillo 1999; Cope and Watts 2000; Kuratko 2005; Johnson, Craig, and Hildebrand 2006; Fuchs, Werner and Wallau 2008; Rodríguez and Prieto 2009; Komulainen, Korhonen and Rätty 2009; Yusof 2009; Asici and Aslan 2010; Toca 2010; Aliaga and Schalk 2010; Salisu 2010; Chen, Wang and Wang 2010; Solomon 2011).

Business plan construction is the principal guide for actual entrepreneurship education. To the plan construction, the “business novices” receive slight knowledge about: marketing, accounting, finances, logistics, human talent management, and legal matters. This approach is complemented with motivational inspiration, interesting entrepreneur histories, and ventures practical suggest. Content described could be appropriated in 80’s, because of area incipient development (Solomon 2007), but latest proposals and investigations evidence an essential need of change on curriculum and pedagogic strategies.

A brief review current entrepreneurship education shows this approach similar to business management course. But recent academic studies prove that business management activities are fundamentally different of business creation activities (Barrera 2011; Gartner and Vesper 1994). So, a principal objective must be creating evidently different contents between entrepreneurship education and management education (Kuratko 2005). However, is important considering that many teachers were found to be hostile to the notion of teaching anything

labelled “entrepreneurship” across the curriculum because of its connotations of capitalism and commercialization (Gibb 2011, p.151).

Council for Industry and Higher Education describes entrepreneurship not solely about business skills or starting new ventures; it is a way of thinking and behaving relevant to all parts of society and the conomy. Entrepreneurship education is a process which develops individuals’ mindsets, behaviours, skills and capabilities and can be applied to create value in a range of contexts and environments from the public sector, charities, universities and social enterprises to corporate organisations and new venture start-ups. Entrepreneurial and enterprising graduates should be equipped to fulfil their potential and to create their own futures (2008, p.12).

While entrepreneurship education may not lead directly to increased start-ups, it may lead to the development of unique life-long learning skills that are at the foundation of the attributes that society expects and increasingly demands of graduates (Jones 2010, p.510). Entrepreneurship education ought to be the conscious behavior of students themselves, which is not only reform of education methods or increase or reduction of education content, but is more a kind of new educational thought which reflects the spirit of the times and takes training of entrepreneurial talents as the orientation of value, and this requires that entrepreneurship education should be a sort of subjective education (Chen, Wang and Wang 2010, p.49).

Volkman et al. (2009), explain promotion entrepreneurship culture like developing skills, attitudes and behaviours to build an entrepreneur society. The target of entrepreneurship education is to let students come to realize that, full play of an individual's potential of creation is the highest demand of human being and is the highest ideal for realization of individual value (Chen, Wang and Wang 2010, p.49). Entrepreneurship education must be based both the action and theory (Castillo 1999), and teachers must be aware about theoretical training guides (Goetz and LeCompte 1988).

Entrepreneurial spirit is actually described as a general attitude useful both every day and work activities. Therefore, entrepreneurship education must develop the entrepreneurial spirit basis personal skills like: creativity, initiative, responsibility, ability to taking risk, independence. These postures can be boost since basic school. Encouraging entrepreneurial poses and skills, the society is benefited, even further enforcement them new ventures (Europe Union 2006 cited in Mizgier 2010; Asici and Aslan 2010)

Appropriate methodology entrepreneur skills and behaviors development needs experiential learning spaces (Gibb 2005 cited in Correa, Conde and Delgado 2011, p.7), like: design, research and development courses (Chen, Wang and Wang 2010), decreasing the “chair” education which distorts students and teachers creativity (Freire 2004). However, creating obedient individuals to contributing social maintenance is the current education main objective - included teaching developed countries-; it could be a dependent and amenable work preparation, this posture both restricts social changes and breaks individuals creative potential (Deval 1989 cited in De Zubiría 2009).

Socialistic pedagogy proposes individual’s both capabilities and interests greatest development. The intimate union of productive work and training, allows to new scientific education tending for the growth of collective spirit and polytechnic knowledge, ensuring society progress (Flórez 1994). Social and productive human being progress is the priority of socialistic pedagogy, Makarenko, Lunacharski, Pistrak, Blonsky, Freined and Freire have been its main representatives. Lunacharski established work as an educational principle –the school life foundation-; if it’s executed with interest and without exerts a violent action on children, and when it’s socially planned and organized, becomes an efficient pedagogic means (Gadotti 1998). Pistrak proposed students would understand the work process attending factories, not necessarily working. Teaching programs must allow students comprehend real world, including school objectives, social plan, and pedagogic plan (1998).

According to Blonsky, if educational sistem wants training on work spirit to children and young people, must disappear:

- (1) class time, with a determined term;
- (2) school subjects, which must be replaced by concrete reality;
- (3) class concept, which groups children by age, forcing them attend to only one objective;
- (4) distrust on children, which mutilates infantile experimentation;
- (5) teachers identification as an employed who educates autorithatively;
- (6) the intelectual work value and manual activities contempt;
- (7) to be sitting in class obligation (1998, p.130).

Educative system modification will contribute hugely with countries entrepreneurship culture, because current education deficiency doesn’t provide development necessary impetus (Salisu 2010); but is esencial the entrepreneurship conceptual and theoretical boundaries definition (Mars and Rios 2010), looking for “entrepreneur individuals” creation (Gibb 2011).

The S entrepreneurship model

Barrera (2011) performed a descriptive qualitative investigation, through case studies, participative observation and documental analysis methods. Case studies is recognized as social sciences essential form investigation, as well as business management investigation (Yin 1989 cited in Martínez 2006, p.167), it was developed studying life of seven entrepreneurs. Partivipative observation was conducted inside an enterprise since the born and during seven years. Documental analysis consisted on lecture of 80 scientific papers approximately. Using the investigation results, Barrera (2012) built a model which explains entrepreneurship process understood as “creation of organizations” proposed by Gartner (1989a) like entrepreneurship definition. After a new bibliographic revision and a deap analysis to the model, Barrera (2013) showed an improved model with variables new relationship, sorting and definition (Figure 1).

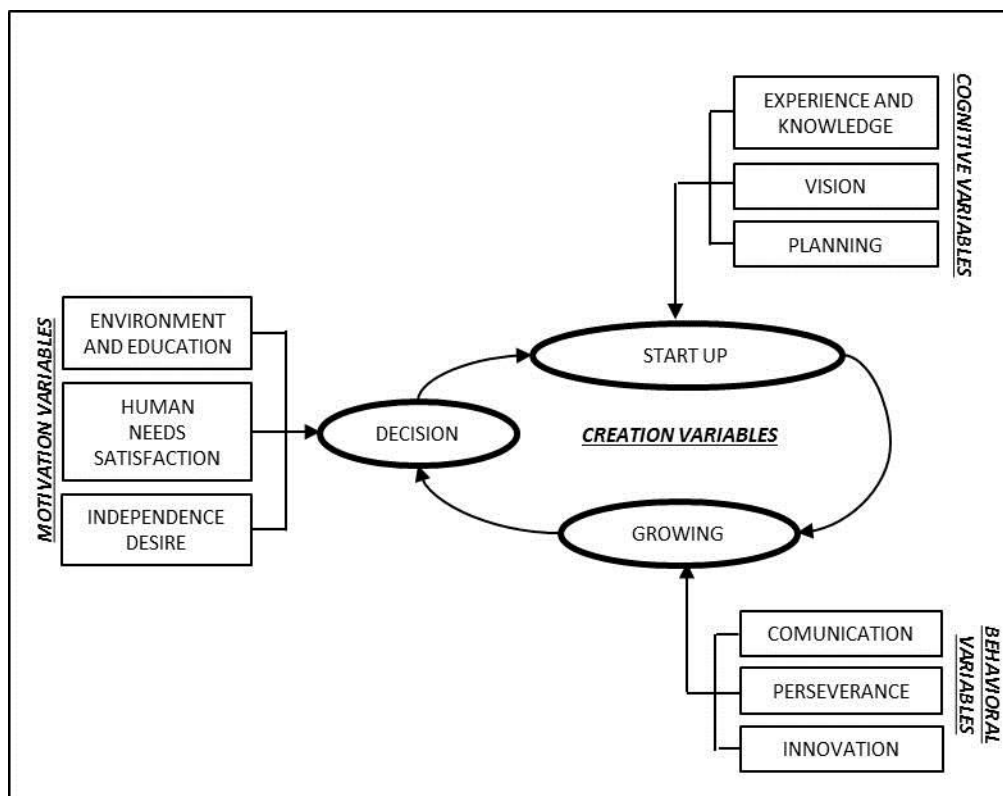


Figure 1. Model S (Barrera 2013).

The S model is an entrepreneurship strong theoretical proposal; it accomplished Gartner (1989b, p.29) theoretical characteristics:

- (1) a theory explains by giving reasons for why specific variables influence, or are influenced by, other variables;
- (2) a theory predicts by suggesting causality, that is, a theory indicates which variables influence other variables;
- (3) a theory offers a model of the phenomenon as well as definitions of all of the variables.

Three groups of independent variables composed the S Model: (1) motivation variables, (2) cognitive variables, and (3) behavioural variables; and one group of dependent variables: (4) creation variables. Variables relationships and definitions are explained next.

(1) Motivation Variables

Motivation is a key factor to creation of organizations (Shapero 1984; Gibbs 1988; Gibb and Dyer 1999, cited in Varela 2001), that reasons could be internal or external. This factor must be in the process beginning, but it must be always present, for this reason the entrepreneurship process is continuous. Motivation is influenced by (a) environment and education, which is an external factor; (b) human needs satisfaction and (c) independence desire, are individual internal factors.

(a) Environment and education

Creation of organizations motivation is strongly influenced by environment (Moore 1986 cited in Bygrave 1989, p.9). Individual formation, family influence, schools, role models, geographical culture affect entrepreneurial motivation and activities.

(b) Human needs satisfaction

Maslow's hierarchy of needs is a motivational theory in psychology that argues that while people aim to meet basic needs, they seek to meet successively higher needs in the form a pyramid (1970). In this way, if an individual determines entrepreneurship as the mechanism to reach his goals, it will be him motivation to the entrepreneurial journey.

(c) Independence desire

Independence need or independence desire have been exposed by some authors (Quintero 2007; Varela 2001; Scheiberg and MacMillan 1988 cited in Castillo 1999). To be an

autogenerator of own incomes and take decisions autonomy are fundamental factors which gives motivation to be entrepreneur.

(2) Cognitive Variables

Personality traits or physical features don't determine entrepreneurial postures (Gartner, 1989a), but knowledge and skills both promote entrepreneurship in fact. If an individual takes the venture decision, but him doesn't have specific area knowledge, the start up probability is very low. Cognitive variables are: (a) experience and knowledge; (b) vision; and (c) planning.

(a) Experience and knowledge

According to Barrera (2011), ventures and creation of organizations area are influenced by childhood and youth experience acquired. Prior experiences, business familiar exposing, and level exposition influence individuals to be entrepreneurs, and promote the start ups (Ahmed et al. 2010).

(b) Vision

Vision is an entrepreneurship fundamental aspect (Gibb 2002; Moore 1986 cited in Bygrave 1989). Both individual's vision and organization's vision are entrepreneur cognitive capabilities susceptible to be developed (Barrera 2011). After an individual has a vision about his enterprise, the start up probabilities are bigger.

(c) Planning

Planning is an entrepreneurship essential cognitive competence, this activity allows to entrepreneur establish goals and the strategies to reach them. Business plan is a widely used tool to promote the start ups. But according to Vincett and Farlow (2008), a formal business plan is not required, although planning itself is important; it may even be counterproductive, time consuming and perhaps psychologically diminishing flexibility in the early state of the operations (cited in Salisu 2010, p.147). So, business plan is only a entrepreneurship process piece, but planning is the fundamental activity.

(3) Behavioral variables

In 80's decade, entrepreneurs description was focused on their personality, but the entrepreneurship key factor is the activities that an individual execute (Gartner 1989a). The activities to create an organization are determined by the behaviors (Barrera 2012). The behaviors that determine the enterprise growing are: (a) communication, (b) perseverance, and (c) innovation.

(a) Communication

Enterprise growing fundamental factor is the communication, this skill allows to entrepreneur getting resources. Effective and emphatic communication is essential to: suppliers negotiation, finding of financial leverage, human talent linking, family support (Barrera 2012).

(b) Perseverance

Perserverance implies to act facing a great challenge, acting repetitively, overcoming obstacles (Pulgarín and Cardona 2011). Perseverance is an organization continuity key piece, because it allows to entrepreneur keeps on market despite crisis, insolvency or difficult moments (Gómez, et. al. 2010).

(c) Innovation

Innovation is fundamental for organizations growing. Schumpeter (1912) tells us that innovations, -he calls them "the carrying out of new combinations"-, take various forms besides mere improvements in technology: (1) the introduction of a new good; (2) the introduction of a new method of production; (3) the opening of a new market; (4) the conquest of a new source of supply of raw materials or half- manufactured goods; (5) the carrying out of the new organization of any industry, (cited in Baumol 1990, p.5). Innovation is the differentiator between small business and large companies (Carland et al. 1984 cited in Solomon 2011, p.170).

(4) Creation Variables

Entrepreneurship process is a continuous cycle, this promotion contitutes with the economic development (Low and MacMillan 1988; Rodríguez and Jimenez 2005). According to Barrera (2013), S model's creation variables are: (a) decision, (b) strat up, and (c) growing; this variables are influenced by motivation variables, cognitive variables, and behavioral variables.

Creation variables correspond to dependent variables, other variables correspond to independent variables.

(a) Decision

Decision making is on the entrepreneurship bottom (Campbell 1992; Shapero 1980 cited in Varela 2001). The S model begins on decision, but in the end, it comes back to the decision, carrying on with the same enterprise or with new ventures. A growing body of evidence is emerging that indicates entrepreneurship is a process where multiple ventures are the rule more than the exception (Ronstadt 1987, p.44).

(b) Start Up

Start up represents the combined efforts materialization, it involves the searching of: financial leverage, human and technical resources, and assets for the organization operations beginning. Start up is the previous variables summation.

(c) Growing

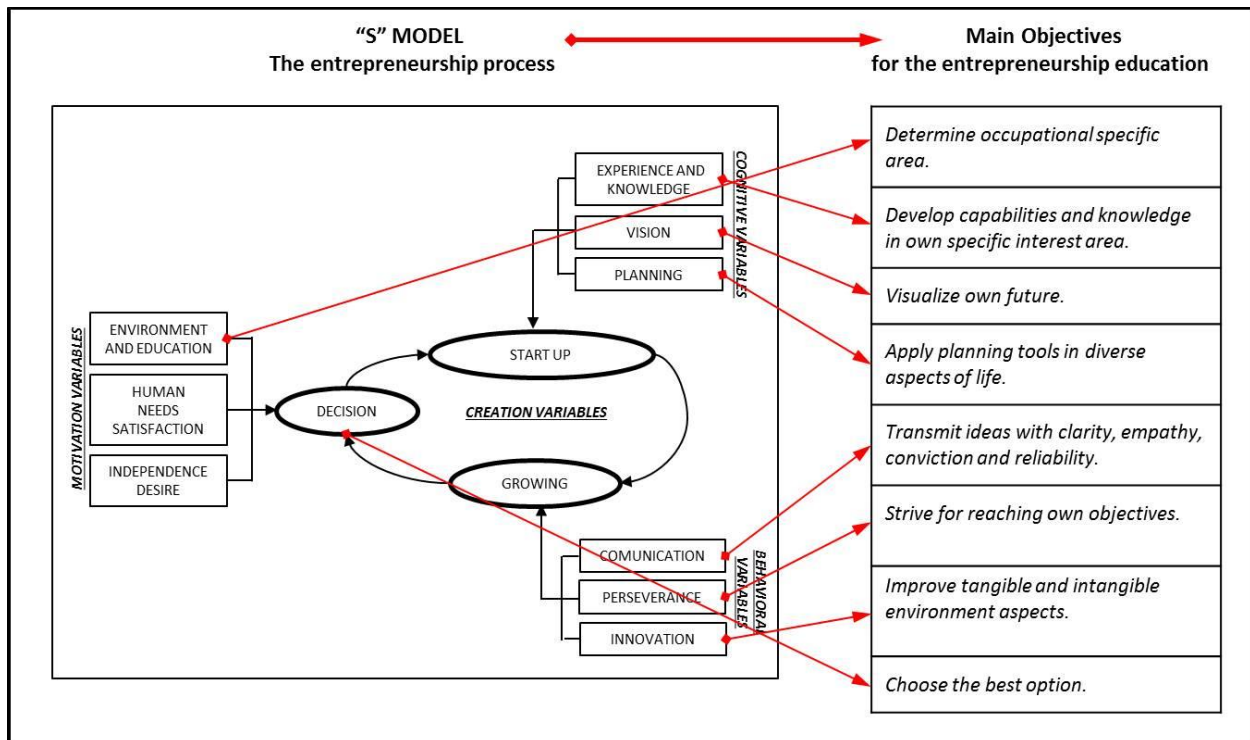
The creation and development of one or more new enterprises is a passage, a field of pursuit, a calling, a way of life that fits the basic notion of a career (Ronstadt 1987, p.42). Business growing is an entrepreneurship important feature, is entrepreneurship evidence. Standardization and formalization are growing evidence (Daft, 2000).

3. Methodology

Methodology applied is the ethnographic research; this strategy research reveals the implicit theories and routines that support the practice of educators, besides it helps to suggest theoretical and practical alternatives, involving a better pedagogical intervention. Ethnography educative is applied on theoretical research, and its objective is provides valuable data describing the contexts, activities and beliefs of participants in educational settings, as them naturally occur (Goetz and LeCompte 1988).

This research was developed in San Mateo Apostol School, this is an Colombian private sector educative institution, with 130 students currently. The S model is the theoretical guide to the curriculum design. According to the model's variables, main objectives by learning levels were established (Figure 2).

There are some variables in the model which may be capable of being developed on human being, and they could be included on entrepreneurship curriculum: (1) environment and education, (2) experience and knowledge, (3) vision, (4) planning, (5) communication, (6) perseverance, (7) innovation, (8) decision.



1. Variable: Environment and Education

Main Objective: Determine occupational specific area.

Specific factors:

1. Recognize own kills.
2. Recognize family's main labour activities.
3. Involve on family's labour activities.
4. Recognize leaders in own specific interest area.
5. The family recognizes student's skills.
6. Realize activities in own specific interest area.
7. Visit organizations in own specific interest area
8. Receive information about specific interest area.
9. Receive advices by an expert specific interest area.

2. Variable: Experience and knowledge

Main objective: Develop capabilities and knowledge in own specific interest area.

Specific factors:

1. Understand raw material and final products differences.
2. Understand the input-process-output applied to mass production.
3. Recognize the industrial, commerce and services enterprises differences.
4. Develop activities on parent's labour area.
5. Develop activities in own specific interest area.
6. Get reward by specific area performance.
7. Research about production process and machinery in own specific area.
8. Recognize the region and country productive strength.

Variable: Vision

Main Objective: Visualize own future.

Specific factors:

1. Create alternative ends to popular histories.
2. Draw desired goods to the future.
3. Describe desired places to go in the future.
4. Realize transpose reality exercises.
5. Determine specific achievement in five, ten and fifteen years.
6. Imagine own life in several years.
7. Write own success in diverse aspects of life.

Variable: Planning

Main objective: Apply planning tools in diverse aspects of life.

Specific factors:

1. Understand thinking importance before to act.
2. Understand planning importance.
3. Establish goals to own interest area.
4. Write own life objectives.
5. Determine strategies to reach own objectives.
6. Elaborate activities schedules to reach own objectives.
7. Determine indicators to monitor own objectives reaching.
8. Write own life plan.
9. Write own business plan in specific interest area.

10. Learn financial tools and strategies.
11. Realize financial planning exercises.

Variable: Innovation

Main objective: Improve tangible and intangible environment aspects.

Specific factors:

1. Develop own creativity.
2. Propose own toys design and functionality improvements.
3. Propose everyday objects design and functionality improvements.
4. Research own interest area latest technological and scientific advancement.
5. Design own interest area products, process or services improvements.
6. Formulate ideas to region productive and sustainable exploitation.
7. Present an innovative social responsibility program.
8. Create an innovative project in the interest area.

Variable: Communication

Main Objective: Transmit ideas with clarity, empathy, conviction and reliability.

Specific factors:

1. Tell own authorship short stories.
2. Hand different voice tones to express ideas.
3. Listen empathetically.
4. Realize dialogue exercises.
5. Realize conflict management exercises.
6. Learn customer service strategies.
7. Realize products and services selling exercises.
8. Get support to projects communicating own ideas.
9. Realize negotiation exercises.

Variable: Perseverance

Main objective: Strive for reaching own objectives.

Specific factors:

1. Practise strategy games.
2. Understand positive perseverance.
3. Research people perseverance examples.
4. Determine how to react in front of obstacles.

Variable: Decision

Main Objective: Choose the best option.

Specific factors:

1. Understand the making decisions importance.
2. Elaborate decision tables, analysing alternatives, risks, and consequences.
3. Practise making decision games.
4. Analyse ethical dilemma examples.
5. Comprehend social welfare in front of particular welfare.
6. Analyse possible results of wrong decisions.

4. Findings

In last years, looking for entrepreneurship promotion since childhood, many proposals and contributions have been made about the proper entrepreneurship education contents, the right pedagogy and methodology, and the accurate activities to develop in class. These proposals are only guidelines to the camp, and them don't present the curriculum programs which allow the area's teachers -suffering of training in the camp-, develop an organized program with objectives, goals, competences, and activities.

In the Colombian current entrepreneurship school classes, the students create a product, -a handicraft, commonly-, or a service, but they never learned about mass production, machinery, design, advanced technology, so, most of the times their ideas are basic, out of the context, and faraway of the market needs. Another current entrepreneurship focus is the business plan development, but its construction not assures a success venture. These efforts for entrepreneurship promotion are not entirely wrong; but entrepreneurship goes beyond, because recent approaches suggest that the subject must train in entrepreneurship competences guided by the area theory.

The S model has been developed after a deep research, and applying diverse investigation methodologies. It explains the entrepreneurship process and its variables, becoming in a strong theory proposal capable of been a theoretical guide to the area curriculum, and the foundation for an entrepreneurship education program. This ethnographic research is developing an entrepreneurship curriculum and implementing it with excellent results.

Current year is the first of the implementation. Classes have been supported on the socialistic pedagogy model, and they were implemented from second grade until seventh grade. Process implementation has allowed improve the initial curriculum content, as well as the inclusion of complementary topics. Teacher has discovered the great capacity and creativity of children; their accurate reality comprehension; a great desire of out of a rut, doing different activities.

Curricular organization divides the subject by levels, it means all students take “Entrepreneurship I” no matter their grade, second year the students take “Entrepreneurship II” no matter their grade, and successively. Thematic content is the same, but level of exigency varies on each group according with the age. This strategy can be applied when the implementation is performed in all grades at the same time, but in the future, students of first grade will take “Entrepreneurship I”. It’s important to maintain the grades organization by ages; teacher found out similar understanding levels, but interests of students varies according the age, and this factor modifies the relationships and the atmosphere class.

Subject scoring method consisted of remunerating the students with didactic bills; final grade were represented by the amount of money earned by each child. This remuneration becomes in a motivation to children and allows learning basic concepts about finance. Looking for students maintain the love by learning, have been provided about values as well as market economy and market society. Probably it will be implemented the self-assessment with arguments, because some parents don’t understand the reason of why their children lost the subject.

The report cards are submitted bimonthly on school. So, taking main objectives and the specific factors, teacher redacted goals and its achievement indicators. This activity has complemented favourably the curriculum construction. The diverse activities realized with the children in entrepreneurship subject, have been positively accepted by the most of community school: students, parents, directives.

5. Concluding Observations

Implementation of the methodology entrepreneurship education described in this paper, has allowed began the subject curriculum design, which is a requirement for the promotion of entrepreneurship from early ages. The “S” model as theoretical guide and the socialist model as

pedagogic guideline, both are the foundation for development of this area, which applies entrepreneurship education recent academic approaches.

Process research and the implementation of this methodology have been highly satisfactory, and it let determine some conclusions about the training in this area:

- Student's family must be involved in all the learning process. Parents shouldn't do children homework, but they must monitor the tasks development, support children ideas, and be aware of the class's content supplied by the school.
- Apparently student's creativity decreases as the years pass, because second grade children show a greater motivation and creativity than seventh grade teenagers. In addition to growing children changes, this factor may be exacerbated by the current education system.
- Entrepreneurship content subject is wider than the business plan construction, or the products invention. Students can develop skills and behaviours relevant for all the society, not only with the ventures.
- Schools directives do the first step forward to the entrepreneurship education programs implementation.

This investigation will continue on San Mateo Apostol School, and the researcher's vision is implementing the program on other educative institutions, and training teachers in the area.

Entrepreneurship education must be imparted with similar intensity and rigor like mathematics; the student's take mathematic classes since basic school, they learn skills which may apply in all aspects of their life, but they won't be professionals in this area. Then, entrepreneurship subject will train individuals: innovative, persevering, effective for planning and communicating, and expertise in an area of interest taking advantage of their environment. This formation will end eventually with entrepreneurial and intra-entrepreneurial postures; thus, sustainable economic development, business growth with social responsibility, and inclusive entrepreneurship, will be effective education consequences.

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El Estado como emprendedor social: el impulso del turismo en el sureste mexicano

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Resumen

El trabajo analiza el caso del desarrollo turístico de Cancún, México, como un proyecto turístico que surge como iniciativa del Estado mexicano en los años setenta. El trabajo discute el papel

del Estado⁹ como emprendedor social al promover e impulsar actividades productivas. En la literatura el papel del Estado en la actividad productiva se enfoca desde una perspectiva del capital monopolista de Estado y como Estado empresario. En este trabajo argumentamos que ambas categorías son inadecuadas para generalizarlas al papel productivo del Estado ya que está ausente el enfoque del emprendedor. Pretendemos aportar en las explicaciones acerca del fenómeno del emprendedurismo por parte del Estado, incorporando en la discusión aspectos relacionados con las capacidades emprendedoras del Estado como agente de desarrollo productivo y creador de empleos y nuevos negocios en una localidad.

El estudio se basa en las capacidades emprendedoras del Estado mexicano al idear y crear un importante polo turístico de alcance mundial¹⁰, a partir de las instituciones promotoras del fomento y del financiamiento. En esta perspectiva destacamos el papel de los directivos estatales que tienen características de emprendedores. Las fuentes de información incluyen documentos de la época, estudios sobre la historia del polo turístico y fuentes estadísticas oficiales. La principal conclusión es que en la creación del polo turístico de Cancún el Estado mexicano asumió un perfil de Estado emprendedor que se distanció de otras formas de participación y control como empresario o como capital monopolista de Estado. El trabajo se estructura en tres apartados. En el primero se plantea el problema a partir de discutir el concepto del emprendedor. En el segundo apartado se incluye el marco analítico del trabajo en el que se identifican diversas funciones emprendedoras como elemento guía del estudio del caso analizado en el apartado tres y finaliza con las conclusiones.

Palabras claves: emprendimiento, Estado emprendedor, incertidumbre, innovación, coordinación.

1. Introducción

El Estado abarca el territorio el gobierno y la población. En este trabajo seguimos el concepto propuesto por Weber y que retoma O'Donnell para definirlo como un conjunto de instituciones y de relaciones sociales (la mayor parte de estas sancionadas por el sistema legal de ese estado) que normalmente penetra y controla el territorio y los habitantes que ese conjunto pretende delimitar geográficamente. Esas instituciones tienen último recurso, para efectivizar

⁹ En este trabajo se utiliza la palabra *Estado* con mayúscula cuando se hace referencia a la institución y *estado* con minúscula cuando se hace referencia un territorio o entidad federativa.

¹⁰ En la actualidad el Banco de México (banco central del país) lo denomina Centro Integralmente Planeado.

las decisiones que toman, a la supremacía en el control de medios de coerción física que algunas agencias especializadas del mismo estado normalmente ejercen sobre aquél territorio.

Es decir, que el Estado se conforma de instituciones que actúan para organizar, dirigir y controlar recursos y capacidades en un territorio con la población que ahí habita. El Estado desde una perspectiva productiva puede al llevar a cabo nuevos proyectos realiza diversas tareas simples y complejas que involucran diversas tareas y actividades que combinan habilidades, recursos y conocimientos de las personas que forman parte de las diversas instituciones que lo conforman. Es decir, realiza actividades rutinarias y otras que son nuevas y por lo tanto emprendedoras para llevar a cabo su función directiva, reguladora y productiva, lo que implica contar con capacidades emprendedoras.

El contexto socioeconómico del sureste mexicano en los años sesenta y setenta

En 1960 la población de Yucatán era de 614,000 habitantes, y la del territorio de Quintana Roo era de 50,000 habitantes. La Población Económicamente Activa (PEA) se distribuía de la siguiente forma: 60% sector agropecuario, 15% sector industria y 25% servicios.

Con base en las matrices de insumo-producto del Banco de México del año 1963, se estimó un ingreso per cápita anual de \$ 4,128 pesos en Estado de Yucatán, \$ 6,167 en el territorio de Quintana Roo, \$ 8,830 en la región de Cozumel-Isla Mujeres y de \$ 2,681 en la región henequenera de Yucatán.

Se estimó también que en 1963 vivían y dependían directamente del henequén 238,00 personas, es decir que prácticamente una tercera parte de la población del estado vivía de subsidios de organismos del gobierno federal, ya que su actividad económica preponderante generaba ingresos muy reducidos¹¹.

En esos años Isla Mujeres contaba con 3,000 habitantes y 200 cuartos de hotel que recibían unos 20,000 visitantes anuales, de los cuales el 30% eran extranjeros. Por su parte, Cozumel tenía 4,850 habitantes y 430 cuartos hoteleros, pero recibía ya 40,000 visitantes anuales de los cuales el 60% eran extranjeros (Dondé Escalante & Turrent y Díaz, 2009).

¹¹ Para mayor detalle véase Dondé y Turrent (2009).

También conocemos los conteos de población que se realizaron en la zona de Cancún en la época en la cual INFRATUR lo construyó (véase Tabla 2).

Tabla 2. México, habitantes por localidades seleccionados en el Quintana Roo, 1970-1974 (número)

| | 1970 | 1971 (Julio) | 1973 (Abril) | 1974 |
|---------------------------|-------------|---------------------|---------------------|---------------|
| Puerto Juárez | 95 | 135 | 219 | n/d |
| Colonia Pto. Juárez | 22 | 710 | 1,426 | n/d |
| Cancún | - | - | 1,135 | n/d |
| Total (habitantes) | 117 | 845 | 2,780 | 15,122 |

Se justifica el crecimiento en el año 1973 por la migración yucateca y el inicio de la formación del campamento de trabajadores para el inicio de la construcción de la infraestructura. En 1974 el crecimiento poblacional está dado por el auge de la construcción de la infraestructura y los primeros hoteles.

2. El emprendedor y el empresario. El debate teórico

El fenómeno del emprendimiento y de quien lo lleva a cabo que es el emprendedor como persona, empresa u organización, ha abarcado las tareas de la administración en las organizaciones y también ha sido abordado por otras disciplinas como la psicología, la economía, la sociología o la historia desde hace ya más de dos siglos. Sin embargo es paradójico esta figura del emprendedor esté prácticamente ausente en la teoría de la empresa o en la teorías de las organizaciones que son la base de la enseñanza de la administración en la actualidad y menos aún al considerar al Estado como emprendedor.

La palabra emprendedor proviene del francés *entrepreneur* que a su vez lo adopta el idioma inglés *entrepreneurship*. La palabra *entrepreneur* surge en el siglo XVIII en el capitalismo, en particular en el mercantilismo y se le atribuye al economista fisiócrata francés R. Cantillón (1755) para referirse a la persona que emprende una actividad mercantil asumiendo riesgos al comprar y vender productos a un precio que fuese demandado.¹²

Cuando se hace referencia a los “emprendimientos” se alude a actividades de una persona que tiene una iniciativa que traduce en un proyecto a realizar. Es decir, se trata del emprendedor que lleva a cabo esa idea en acciones y tareas que se materializan en bienes o servicios tangibles o intangibles. (Jasso, 2012).

El emprendedor realiza en forma continua tareas que repercuten en el resultado de su proyecto que puede tratarse de crear una empresa, pero también el cómo mejorarla en sus procesos productivos, o de cómo crear un nuevo producto o sistema, o incluso cómo y en qué nuevo mercado incurrir. Es decir, el emprendedor es innovador como lo ha señalado Schumpeter (1911 y 1939). El emprendedor es uno de los factores de producción que impulsa el proceso innovador, creando valor al crear mejores empresas, nuevos productos y nuevos o mejores métodos y procesos, que sustituyen a los anteriores menos eficientes. Es decir, el emprendedor es la personificación de la innovación, esto es, el individuo que lleva a cabo “nuevas combinaciones”, es un agente que crea capacidades al cambiar las rutinas existentes.

Entre las características del emprendedor están las de ser constantes incluso llegando a ser obsesivos. Identificar oportunidades que otros no ven, intuición, diferentes en sus escrúpulos, optimista y realista. Entre sus hábitos están los de la observación y visión, curiosidad, cómo hacen las cosas los demás, experimentar, asumir riesgos, flexibilidad; saber tomar una decisión y adaptabilidad a los cambios que vienen.

Ya que no cuenta con todos los conocimientos y habilidades, requiere de la habilidad para convencer a otros acerca de su proyecto, ya sea para que sean parte o asimile el conocimiento existente en otras personas, o bien las convenza para apoyarlo en el financiamiento del mismo. Se combina la inteligencia con el trabajo cotidiano y con ello con el aprendizaje, con las habilidades y con el conocimiento existente para coordinar, supervisar, dirigir, ser un líder, un visionario, en síntesis llevar a cabo su visión innovando, liderando y siendo un estratega.

Los conceptos de emprendedor y empresario no son equivalentes. El concepto de

¹² Barreto (1989) retoma las ideas de Cantillón para enfatizar la figura del emprendedor

emprendedor se adscribe al individuo abarcando los aspectos culturales, psicológicos y socioeconómicos. Emprender a diferencia del empresario no necesariamente se asocia con crear empresas y por ende empleos. El emprendedor impulsa el desarrollo económico en un ambiente discontinuo que rompe con el equilibrio existente. En contraste el empresario es la persona que es poseedor de una empresa y para impulsar su desempeño aplica técnicas y herramientas de la administración. Por ello, desde nuestra perspectiva los enfoques asociados con la idea de un *Estado Empresario*¹³ o con el *Capital Monopolista de Estado*¹⁴ no son las más pertinentes para explicar el papel del Estado como desarrollador de actividades productivas, como lo detallamos más adelante.

2. El Estado emprendedor: la propuesta analítica

Las *capacidades emprendedoras* se refieren a la habilidad, experiencia y conocimiento para elegir y mejorar mercados, productos, tecnologías y la estructura organizacional requerida para aprovechar oportunidades de negocios, es decir relacionadas con el quehacer de las empresas o la actividad mercantil (Torres *et al*, 2011).

Las capacidades emprendedoras surgen en un ambiente sociocultural, económico y político en el que conviven emprendedores solitarios y también grupos de emprendedores ya consolidados en empresas de tamaño diverso, muchas grandes y globales que tienen, desarrollan y usan habilidades y conocimientos diversos.

El emprendedor individual y el equipo emprendedor requieren conocer o saber dónde encontrar las personas que le ayuden a llevar a cabo su proyecto, para lo que requieren de que las capacidades emprendedoras se transformen en capacidades empresariales una vez que el proyecto se materializa en una empresa o producto en el mercado. Esas capacidades son el impulso en la función emprendedora. Dichas capacidades han desempeñado un rol relevante para que una empresa pueda competir y crecer, a partir de construir, integrar y re-configurar sus mecanismos y rutinas para generar innovaciones tecnológicas y organizacionales.

Por lo tanto, se trata de una persona o de un equipo con múltiples habilidades, capacidades y conocimientos que es capaz de *coordinar, organizar y dirigir* en su proyecto un conocimiento

¹³ Entre otros véase Camp R. (1985).

¹⁴ Entre otros véase Sweezy P. (1969).

colectivo que se materialice en su proyecto (Say, 1845; Barreto, 1989; Chandler, 1962, 1992; Baumol, 1993; Kirnzer, 1973). Las capacidades directivas y técnicas inmersas en las instituciones involucradas a partir de rutinas, fortalecieron la disciplina de la innovación, tal como lo sostiene Drucker (1993) a través de un emprendimiento estatal. Estas dos categorías, jerarquía comprometida y certidumbre del plan estratégico están resaltadas en la literatura acerca de las empresas y se materializaron de una forma poco común considerando el papel del estado como emprendedor.

Estas capacidades emprendedoras son realizadas por el emprendedor como individuo o en equipo y no sólo asume riesgos sino que a diferencia del inversionista basan su actividad no sólo en los posibles beneficios económicos o la rentabilidad de la inversión en tiempo y recursos que realiza, sino en el resultado que obtengan al llevar a cabo su idea o proyecto innovador resolviendo la *incertidumbre* del proyecto que se está llevando a cabo (Knight, 1921). Es decir, estas tareas las realizan evaluando y percibiendo en un ambiente de entropía las condiciones económicas, políticas y culturales.

Dadas las condiciones de mercado que impone criterios de valor a los bienes y servicios que se ofertan y demandan, la oportunidad, la *innovación* y la regulación se convierten en aspectos fundamentales para que esa idea se materialice (Schumpeter, 1911, Drucker, 1993). Llevar a cabo ideas innovadoras requiere de un conjunto de capacidades relacionadas con la inteligencia, el talento y sobre todo con la disciplina y constancia para llevar a cabo la tarea.

Argumentamos que el Estado al estar conformado por personas en los ámbitos de dirección y regulación de un país, conforma en esos dos niveles (dirección y regulación) ese ambiente en el que surgen y conviven los emprendedores, pero que en muchas ocasiones el Estado puede ser uno de los agentes, como emprendedor, participante al impulsar y desarrollar actividades productivas.

Proponemos como marco analítico los tipos de capacidades y habilidades emprendedoras en el Estado, como las de coordinación, de organización y dirección, de innovación y de soporte de la incertidumbre (véase Tabla 1).

Tabla 1. Las capacidades emprendedoras del Estado

| | |
|---|---|
| <i>Coordinación</i> | Contrata y combina factores de producción (tierra, trabajo y capital) Nodo de comunicación entre los diversos operadores y usuarios |
| <i>Organización y dirección</i> | Identificar y seleccionar personal clave Adquirir recursos clave Integrar actividades de producción, finanzas, investigación y desarrollo y mercadeo Coordinar los distintos niveles de gestión y administración |
| <i>Innovación</i> | Nuevas combinaciones de medios de producción y nuevos productos, métodos de producción, mercados, fuentes de aprovisionamiento o modalidades de organización. El Estado asume el riesgo |
| <i>Percepción y soporte de la incertidumbre</i> | Riesgo debido a la incertidumbre entre los costos de adquisición o producción y el precio de venta, dado los cambios en la oferta y demanda del mercado, <i>incertidumbre</i> . |

3. El Estado Emprendedor en México. El caso del Banco de México – Proyecto Cancún

En este trabajo analizamos el caso del Banco de México que es el banco central. Según la teoría moderna, un banco central tiene por objetivo preservar el valor de la moneda y mantener la estabilidad de precios y del sistema financiero, a través del manejo de las tasas de interés, durante la dirección del Banco de México por parte de Rodrigo Gómez, “hay que agregar que también tuvo como objetivo el desarrollo económico y la preocupación por el prosperidad de la población: buscó el desarrollo con estabilidad” (Romero Sotelo, 2014).

El Estado como emprendedor social: los fideicomisos y el desarrollo del turismo

Durante los años 1952-1970, bajo la dirección de Rodrigo Gómez el Banco de México imbuido por un espíritu desarrollista emprendió el fomento de diversas actividades de impulso a la economía. Esto lo realizó creando fideicomisos cuyo objetivo fue dar sustento a ciertas actividades prioritarias con el fin de que contaran con crédito suficiente.

El Banco del México reglamentó las reformas legales que permitieron a las instituciones bancarias mexicanas, en condiciones razonables de tasas de interés, conceder créditos al consumo de bienes durables.

Los fideicomisos creados han sido el Fondo de Garantía y Fomento a la Agricultura, Ganadería y Avicultura (FIRA) para canalizar crédito al campo y la exportación de productos agropecuarios. El crédito a la industria, al canalizar recursos a través del Fondo a la Mediana y Pequeña Industria (FOGAIN), con la idea de favorecer cada vez más a la industria de provincia y, la transformación primaria de bienes agropecuarios en las propias regiones productoras. El Fondo de Operación Bancaria para la Vivienda (FOVI - FOGA) que perseguía impulsar la construcción y garantía de pago de vivienda de interés social. El Fondo para el Fomento de las Exportaciones (FOMEX) para apoyar la introducción de productos manufacturados en el mercado exterior. El Fondo para el Desarrollo Comercial (FIDEC) para favorecer el establecimiento de centros comerciales.

El Fondo de promoción a la infraestructura turística (INFRATUR) dirigido a un aprovechamiento de los lugares potenciales del país en la actividad económica. El Fondo de equipamiento Industrial (FONEI).

De todos los fondos creados el que presenta una particularidad digna de resaltar fue el INFRATUR, pues en la historia económica encontramos emprendedores jugando diversos papeles pero por lo general son individuos visionarios o empresas privadas con un claro propósito de innovar. Emprendedor es quien asume el riesgo asociado a la incertidumbre, el emprendedor es un innovador, el emprendedor es quien toma decisiones, el emprendedor es un organizador y coordinador de recursos económicos, el emprendedor es un empleador de los factores de producción, el emprendedor es un árbitro, y el emprendedor es quien asigna recursos entre usos alternativos.

Estos roles no son mutuamente excluyentes, pero cada uno de ellos han sido subrayados por

los académicos más prestigiosos del emprendedurismo en un entorno de mercado. Las acciones de gobierno, que son el tema de este artículo, no se basan por lo general en el mercado. Los mercados operan a través de las leyes de la oferta y la demanda, y los precios se fijan por consentimiento entre compradores y vendedores. Esto por general no ocurre cuando participa el Estado como agente económico.

Se entiende que el Estado cumple la función de emprendedor cuando participa en la actividad de mercado proveyendo infraestructura y en particular elimina las barreras a la innovación que provocan las fallas del mercado. El beneficio social marginal de la participación del Estado es mayor que los costos sociales, asumiendo que la participación del gobierno sea eficiente (Link & Link, 2009)

No toda participación empresarial del gobierno es emprendedora. Es necesario para ello que se encuadre en las doctrinas teóricas más recibidas sobre quién es un emprendedor y qué hace un emprendedor. Desde esta perspectiva el Estado actúa como un emprendedor cuando, por ejemplo, proveyendo infraestructura se involucra de forma innovadora asumiendo un riesgo. Este involucramiento ejecutado a través de un mecanismo programático y una estructura organizativa debe ser mediante una asociación con el sector privado (Link & Link, 2009).

El INFRATUR se caracterizó por ser un brazo ejecutor del Banco de México, mediante el cual se implementaban las prácticas necesarias para obtener los objetivos macroeconómicos mediante operaciones emprendedoras. El fideicomiso creado por orden del presidente Gustavo Díaz Ordaz en 1968, debía ser exitoso para garantizar los pagos de los créditos ya obtenidos del Banco Interamericano de Desarrollo y crear las condiciones adecuadas para disparar las oportunidades de negocios para la inversión privada. También se le solicitaba que creara nuevos empleos e impulsara una nueva industria de servicios turísticos.

Al respecto, Tello, recuerda que fue invitado por Antonio Enríquez Savignac, que dirigía el INFRATUR, a visitar el proyecto Cancún, una iniciativa en la cual sólo trabajaba él, y vió una costa en la que tan sólo había una vivienda propiedad de la familia Zuno; del estado de Jalisco. Estaba todo por hacer y Antonio Enríquez Savignac preparaba el proyecto (Tello Macías, 2013). Pero Antonio Enríquez Savignac no trabajaba solo, seguía las órdenes del director general de Baco de México, que seguía el encargo del presidente de la república. Es verdad que no contaba con una estructura autorizada, ni con un espacio físico para dichas labores, pero pronto se le facilitaron unas oficinas en el edificio Guardiola, en donde por primera vez se

reunió un pequeño grupo de trabajo (Dondé Escalante & Turrent y Díaz, 2009).

Este pequeño grupo de trabajo se comenzó a formar con la inclusión de Pedro Dondé Escalante, un joven que a mediados de 1968 se reintegraba al área de Estudios Turísticos del Banco de México luego de haber cursado un posgrado de economía en la Universidad de Harvard. Su perfil se reforzaba pues adquirió en especial conocimientos sobre el Banco Interamericano de Desarrollo (BID) que luego sería importante para obtener el financiamiento del Proyecto Cancún. Incorporado Dondé Escalante recibe el encargo del Enríquez Savignac de:

- a) Recabar información sobre los flujos de turismo y gasto por turista hacia México y las corrientes de viajeros norteamericanos hacia el resto del mundo,
- b) Profundizar el conocimiento sobre Acapulco como propuesta turística y sus variables socioeconómicas, como el empleo, la vivienda, los servicios públicos y las comunicaciones,
- c) También se le encomendó el estudio de otros centros turísticos incipientes como Puerto Vallarta, Manzanillo, Cozumel y destinos internacionales en el Caribe (Bahamas, Puerto Rico, Jamaica), en el Pacífico e internos de los Estados Unidos (Hawái, Florida y California)
- d) Y en México, estudios de mercado sobre destinos de playas, ciudades históricas y coloniales y sitios arqueológicos (Dondé Escalante & Turrent y Díaz, 2009)

Todas estas actividades descritas fueron respaldadas por el Departamento de Estudios Económicos, a cargo del economista Leopoldo Solís. Muy útiles fueron las investigaciones sobre gasto por turista extranjero y sobre demanda de servicios turísticos. Las herramientas utilizadas para procesar la información fueron la matriz de insumo – producto y el multiplicador del gasto aplicados por el Departamento de Estudios Económicos Regionales (Dondé Escalante & Turrent y Díaz, 2009). Estos estudios reflejan la intención de involucrar el aspecto de los beneficios sociales marginales que se obtendrían sobre los costos suponiendo la eficiencia de la ejecución en los proyectos turístico integralmente planeado.

Partiendo de análisis de las cuentas nacionales, con los focos rojos de un modelo de sustitución de importaciones estancado, que no crecía a la misma velocidad de la demanda laboral, y problemas en la cuenta corriente derivados de un tipo de cambio fijo que facilitaba ciertas importaciones por el incremento del consumo, el banco central concluye que debe instrumentar políticas que capten divisas, y con su perfil desarrollista intentar instrumentar

condiciones para el desarrollo regional creando empleos y consolidando una industria turística.

Las capacidades emprendedoras del Estado

Como hemos señalado para que un agente sea considerado como emprendedor requiere de un conjunto de capacidades emprendedoras para que lleve a cabo diversas actividades productivas. En el caso del Estado mexicano, consideramos que el desarrollo del turismo en Cancún, fueron realizadas a través de sus instituciones medulares como es el banco central y que para ello tuvo que crear, desarrollar y realizar diversas capacidades y funciones emprendedoras. Enseguida caracterizamos cada una con la finalidad de completar nuestro marco teórico a partir del enfoque analítico propuesto antes en el apartado 2.

Coordinación

En cuanto a su función de coordinación el Estado toma un papel preponderante combinando y obteniendo los factores de producción. La tierra en la cual se construirá el proyecto Cancún fue primero seleccionada meticulosamente para luego ser adquirida. El Estado dirige, poniendo solventes equipos gerenciales formados en importantes universidades nacionales y extranjeras, y contratando a todos los equipos técnicos y operativos para ejecutar el proyecto. Por último, pone capital propio y consigue capital adicional para financiar todo el proyecto.

El Banco de México actuó como un importante nodo de comunicación entre varias dependencias gubernamentales como Presidencia y Secretaría de Hacienda, y a través de sus fideicomisos (primero INFRATUR, luego FONATUR) con los constructores e inversionistas.

Organización y dirección

El Banco de México primero seleccionó el personal clave dentro de su organización, y posteriormente al estar constituido el INFRATUR comenzó a seleccionar personal específico para las nuevas tareas definidas creando una estructura acorde con el plan estratégico.

Adquirió el recurso necesario, el terreno para construir la infraestructura planeada. Por otra parte capacitó a su personal propio y contrató otras empresas y expertos para operar actividades específicas.

Todo fue coordinado en su primera etapa por INFRATUR, contando con áreas de operaciones, construcción; negoció y obtuvo los primeros créditos para lanzar el proyecto, realizó importantes

labores de investigación y desarrollo de mercados, y posteriormente inició una labor muy profesional de mercadeo.

Todo fue gestionado y coordinado por el Banco de México y sus fideicomisos, fundamentalmente INFRATUR.

Innovación

Visualizar al Estado como un agente innovador, es difícil de concebir, pero en este caso saltan a la vista las actividades del Estado como innovador schumpeteriano Mark II. Logró contar con una nueva fuente de recursos que nadie había realizado previamente, ese recurso escaso y privilegiado fue la tierra seleccionada para el proyecto. Se organizó de una manera novedosa, a través del INFRATUR para planear, coordinar, organizar, y ejecutar de una manera propia de una empresa privada. Sin duda, el proyecto Cancún en específico se puede considerar como un nuevo producto, para México e inclusive para el mundo, y desarrolló nuevos mercados a los cuales enfocó su esfuerzo de comercialización.

El Estado también asumió el riesgo del capital invertido, de la responsabilidad y garantía por el capital obtenido a préstamo, de la operación del proyecto y lanzamiento. Inclusive los primeros hoteles que se construyeron en Cancún fueron construidos por el Estado, pues la iniciativa privada no tenía confianza como para invertir en el proyecto. También debemos recordar, que el éxito no estaba garantizado, pues basta con ver que los otros Centros Integralmente Planeados que se impulsaron demoraron mucho en despegar, e inclusive no han obtenido aún el retorno esperado.

Percepción y soporte de la incertidumbre

La continuidad en la gestión de los altos directivos del Banco de México así como de la Secretaría de Hacienda, teniendo entre tres y dos sexenios de continuidad en funciones, garantizaron y dieron certeza al diseño e implementación de las estrategias seleccionadas. En el Banco de México su director, Rodrigo Gómez estuvo durante tres sexenios presidenciales y en la Secretaría de Hacienda, Antonio Ortiz Mena estuvo dos sexenios consecutivos. Esta época se ha definido como el desarrollo estabilizador.

4. Reflexiones y conclusiones finales

El trabajo analizó a partir de un marco analítico propio el papel del Estado como emprendedor. Para ello se realizó el estudio de caso del Banco de México y su función emprendedora en el surgimiento y desarrollo turístico de Cancún.

En la literatura acerca del emprendedor es escasa la que refiere al papel del Estado en la actividad productiva desde una perspectiva emprendedora.

La principal conclusión es que en la creación del polo turístico de Cancún, el Estado mexicano asumió un perfil de Estado emprendedor que se distanció de otras formas de participación y control como empresario o como capital monopolista de Estado, como se analizó en este trabajo a partir de realizar funciones emprendedoras asociadas con la coordinación, la organización y dirección, la innovación y el soporte de la incertidumbre.

Estas funciones se realizaron utilizando mecanismos públicos asociados con el financiamiento productivo como los fideicomisos y dirigidas por directivos que tienen características del emprendedor y que al mantenerse durante períodos transexenales mantienen el rumbo del proyecto inicial reduciendo la incertidumbre.

Es importante resaltar el compromiso de la jerarquía estatal, desde el Presidente de la República pasando por el Director del Banco de México y el equipo de trabajo del INFRATUR, para dar cohesión y certidumbre al proyecto emprendido.

Por lo tanto el Estado mexicano tuvo el perfil de Estado emprendedor en el desarrollo turístico de Cancún, sin que necesariamente asuma funciones como empresario, lo que limitaría la idea concebida desde otros enfoques y que lo definen como Estado Empresario o como un Capitalismo Monopolista de Estado. Consideramos que este nuevo enfoque podría aportar a la discusión acerca del papel del Estado en la actividad productiva como lo hemos explicado en este trabajo.

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El emprendedor desde la perspectiva pragmática:

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Resumen

El fenómeno del emprendimiento tiene diferentes facetas que van desde aspectos eminentemente prácticos, sencillos, y rutinarios hasta aspectos más pensados y complejos. Estas acciones conforman el ambiente de decisiones de que los emprendedores experimentan realizan cotidianamente en su tarea empresarial. El propósito de este artículo es analizar e interpretar el fenómeno del emprendimiento desde el punto de vista pragmático e interdisciplinario y su rol en la innovación empresarial. La pregunta guía es ¿cómo y qué papel tiene el emprendimiento en la innovación empresarial? El estudio hace una revisión teórica acerca del emprendimiento y la innovación empresarial. Con la finalidad de ilustrar acerca de dicho fenómeno se incluye una caracterización de empresarios innovadores contemporáneos y que han sido impulsores de nuevos paradigmas tecnológicos. El análisis concluye proponiendo incorporar en el análisis de dicho fenómeno otras variables como la cultura, la ideología, la antropología, el psicoanálisis y la teoría del caos, así como pragmáticas de personalidad, informalidad, pasión, flexibilidad, iteración, trabajo en equipo y mejoramiento continuo.

Palabras Claves: Emprendimiento, Pragmatismo, Interdisciplinariedad, Innovación, TIC.

1. Introducción

Estudiar las organizaciones como centros de desarrollo del emprendimiento, exige el análisis de las características de los líderes y dirigentes como emprendedores y sus diversas perspectivas de estudio como fenómeno psicológico, cognitivo, conductual, social, económico y político, para comprender de manera detallada las diversas contribuciones disciplinarias para la interpretación de la innovación empresarial. En la actualidad los empresarios e investigadores de la gestión o *Management* han avanzado en caracterizar las prácticas de gestión directiva efectivas para enfrentar un escenario empresarial cada vez más competitivo y complejo.

Los directivos han aprehendido a partir de la experiencia lo que significa ser gerente, proporcionando un significativo entorno en el cual se puede contemplar la gerencia y la vida, “puesto que la práctica gerencial versa sobre buena parte de la vida” (Mintzberg, 2010, p.7). La práctica de gestión eficaz “depende más del arte y está especialmente arraigada en el oficio que implica aprender de la experiencia, donde el gerente resuelva las cosas sobre la marcha

en un contexto dado”, porque el ejercicio de la gerencia depende de la situación (Drucker, 1964).

En este contexto, las prácticas emprendedoras como fuente de la innovación empresarial identifican el emprendimiento y la innovación como producto de la experiencia y el aprendizaje de los líderes, dirigentes y empresarios. Todo ello está soportado en las prácticas de gestión eficaz como fenómeno emprendedor y desde este punto de vista, la ideología del pragmatismo fundamenta toda la práctica innovadora.

El estudio considera el análisis del fenómeno del emprendimiento como fuente de la innovación empresarial, a través de las acciones, prácticas y conductas de los los emprendedores que han realizado tareas empresariales a partir de un enfoque multidisciplinario, esto es, de manera holística y que abarca la dimensión cultural.

En el trabajo se argumenta que la interpretación del fenómeno del emprendimiento como fuente de la innovación empresarial debe considerar una perspectiva multidisciplinaria que tiene una base muy importante en el estudio del pragmatismo, ya que es en ese actuar cotidiano en donde los emprendedores toman decisiones.

2. Emprendimiento como práctica individual y social

La palabra “emprendimiento” se deriva del término francés “entrepreneur”, que significa estar preparado para tomar decisiones o a iniciar algo. El tema del emprendedurismo alude a entender a la persona que impulsa esa actividad que es el emprendedor (Jasso, 2011). Haciendo una evolución histórica del término emprendedor, Verin (1982) muestra cómo a partir de los siglos XVII y XVIII se calificaba de emprendedor al arquitecto y al maestro de obra. De esta manera se identificaba en ellos características de personas que emprendían la construcción de grandes obras por encargo como edificio y casas. Esta concepción se asocia con el concepto de empresa que se identifica como una actividad económica particular, que requiere de evaluación previa sobre la producción y su equivalente en dinero, que en todo momento de la ejecución los criterios para evaluar la empresa ya están determinados en variables de producto y dinero.

La fisiocracia o teoría económica clásica abarcó el tema del emprendimiento, pero no se observó un consenso generalizado, debido a que algunos lo asimilaban como el individuo que asume el riesgo (Cantillon, Baudeau, Thunen, Bentham), otros como el trabajador superior (Say

y Smith), otros lo relacionaron como el hombre inteligente (Cantillon, Quesnay, Baudeau y Turgot), y otros lo calificaron como el innovador (Smith, Bentham y Mangoldt). Esta diversidad de tendencias para la época se ve reflejada hoy en día, cuando no se vislumbra un tipo homogenizado de emprendimiento. Para generalizar el tema del emprendimiento, se distinguen dos características: una, donde el emprendedor es tomador de riesgo y persona demasiado inteligente (Cantillon, Thunen y Baudeau); y otra, donde el emprendedor toma decisiones con riesgo innovador y como trabajador innovador que hace la diferencia (Bentham y Smith) (Jackson et al., 2001).

Las investigaciones de percepciones de los ejecutivos describen el emprendimiento o espíritu emprendedor con términos como innovador, flexible, dinámico, capaz de asumir riesgos, creativo y orientado al crecimiento (Amit, 1997; Amit & Muller, 1994, Jasso, 2011). Los libros sobre management generalmente definen el término como la capacidad de iniciar y operar nuevas empresas, donde la visión es reforzada por autores como Brook (1968), Bennis & Nanus (1985) y Mintzberg et al (1999) (Rodríguez et al., 2010).

Las definiciones de emprendimiento describen a los ejecutivos que desean tener más emprendimiento, donde todo el mundo desea ser innovador, flexible y creativo. En contraposición, por cada empresa establecida hay miles de nuevos negocios, tiendas de ropa y empresas consultoras, que presumiblemente han tratado de ser innovadoras, de crecer y mostrar otras características que demuestran la existencia de emprendimiento en un sentido dinámico, pero que han fracasado.

La definición de emprendimiento, emprendedor y emprender, está enfocada en preguntar cómo hacer que la innovación, la flexibilidad y la creatividad sean más operacionales (Timmons, 1990, 1998).

3. La interdisciplinariedad en el emprendimiento y la innovación

La relación emprendimiento e innovación hay que interpretarlo desde diversas disciplinas y perspectivas para estudiar su complejidad, construyendo un discurso interdisciplinario que establece nuevas formas para su práctica y estudio. El empresario innovador tiene sentido práctico y su creatividad está en asociar una solución a una necesidad (Drucker, 1986). Tres supuestos sustentan la innovación en el empresario: 1) La creatividad: es la generación de una idea novedosa y útil. 2) La invención: es la capacidad de hacer una realidad física de dicha idea. 3) La innovación: es el proceso en que dicha invención llega al mercado y es adquirida

por los clientes (Varela, 1991). La innovación puede definirse como la capacidad de introducir procesos, productos o ideas nuevas en la organización (Damanpour, 1991; Hurley & Hult, 1998, Jasso 2004a). La capacidad de innovación implica disponer en la empresa de una cultura de apertura a los cambios, es decir, que los miembros de la organización estén dispuestos a aceptar la adopción de una innovación (Hult et al., 2004). La capacidad de innovación en procesos o productos y su introducción temprana en el mercado favorece la consecución de ventajas competitivas para la empresa pionera en orden de entrada (Lieberman & Montgomery, 1988). La tecnología es identificada como la información necesaria para diseñar y producir un bien dado con cualquier número de métodos alternativos, lo que la hace reproducible en forma “codificada” a través de diseños y/o manuales de operación. Esta concepción señala que no es necesario explicar las causas del fenómeno tecnológico porque éste simplemente ocurre (Jasso, 2004b y 2005).

La innovación facilita actividades que contribuyen a generar nuevos conocimientos tecnológicos o a mejorar la utilización de los ya existentes, que son aplicados en nuevos bienes y formas de producción (López, Montes & Vásquez, 2003), estableciendo mecanismos para adquirir conocimientos y convertirlos en activos, identificando tres importantes fuentes de adquisición de información para la innovación¹. El aprendizaje por práctica surge en el departamento de producción de manera espontánea (Arrow, 1962), como repetición en operaciones de producción. El aprendizaje por uso consiste en nutrir el conocimiento de la empresa a partir de la información que proporcionan los usuarios de la tecnología y los clientes (Rosenberg, 1982). El aprendizaje por error surge del análisis de las causas que han originado un fallo o error en el pasado (Maidique & Zirger, 1985).

La innovación debe ser entendida a través de la dimensión de “tecnología blanda” y en general de los intangibles del conocimiento y la creatividad. Esta nueva forma de entender la innovación hace que su contexto de aplicación supere la industria y adquiera importantes impactos en los servicios, donde el emprendimiento tiene efectos sobre la innovación. Esta aproximación de la definición de innovación lleva a considerar dos elementos fundamentales asociados al emprendimiento: conocimiento y creatividad (Gráfico 1).

¹ El desarrollo de la innovación es una de las fuentes principales para que las empresas se posicionen en los mercados. La relación entre la capacidad de innovación y los resultados en empresas ha sido

estudiada (Baker & Sinkula, 1999; Henard & Szymanski, 2001), donde se ha demostrado la importante contribución de la innovación a los resultados de la empresa (Gatignon & Xurueb, 1997; Han et al., 1998). La investigación sobre el tema ha señalado la existencia de ciertos factores moderadores, como los recursos financieros o la capacidad de producción de las empresas (Madhavan & Grover, 1998).

Gráfico 1. Fuentes de innovación: el conocimiento y la creatividad.



Fuente: IMADE

El emprendimiento como fuente de innovación es una suma compleja de éstos, el conocimiento como la base del proceso, y la creatividad como la capacidad para dotar ese conocimiento con valor agregado y de utilidad en la sociedad (IMADE, 2011). El emprendimiento se configura por “interrelaciones complejas” origina el paso del conocimiento a la innovación y al mercado, a través de las capacidades personales y de un entorno favorable.

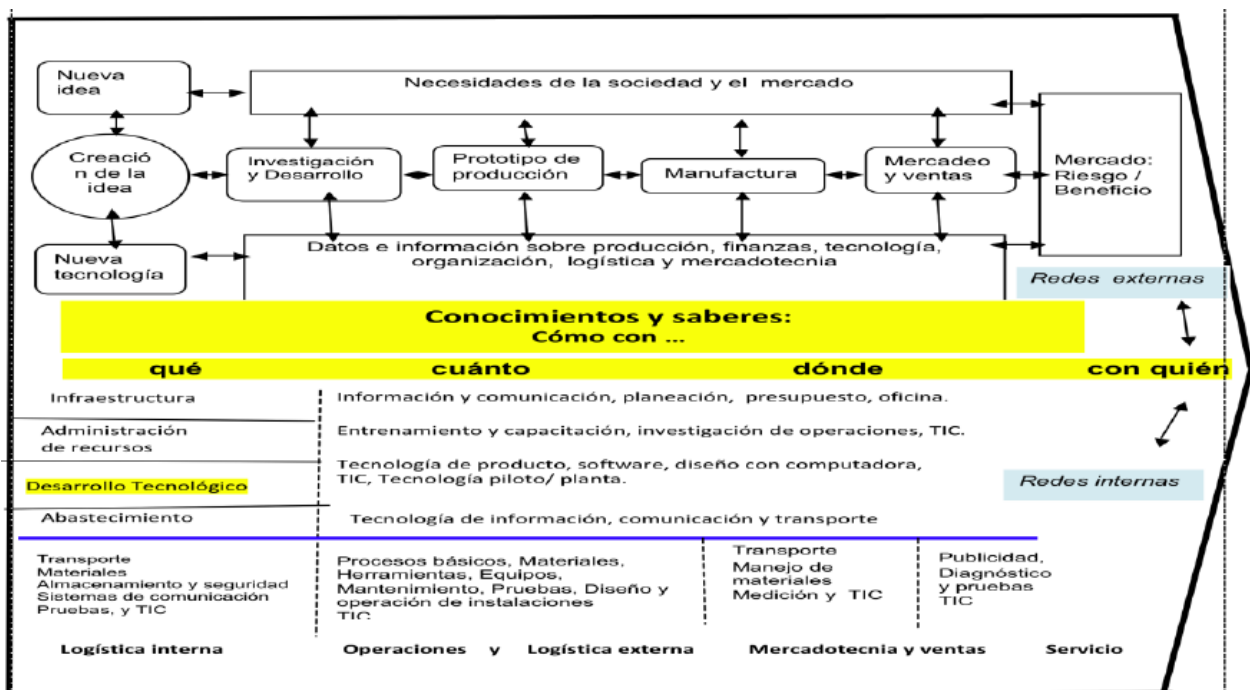
Al emprender las relaciones “complejas” en el contexto se identifica la creatividad, implicando diferentes dimensiones socioeconómicas. Luego, es necesario combinar diferentes dimensiones y disciplinas como única manera de actuar sobre la creatividad, es decir, actuar sobre las capacidades de la persona emprendedora y sobre el entorno en el que se desarrolla personal, profesional y de manera empresarial. En consecuencia se identifican tendencias interdisciplinarias y directrices de emprendimiento como fuente innovación, que se implementan tanto en el ámbito regional, nacional e internacional, que fomentan el conocimiento y la

creatividad como fuente de emprendimiento en las organizaciones, cuyo efecto tiene impacto en la innovación.

El emprendimiento creativo se podría resumir como “*el proceso por el cual se transforman las nuevas ideas en realidad*” (Florida, 2002); se refiere no sólo a la generación de la idea, sino a su puesta en marcha y desarrollo para su efecto socioeconómico. Es aquí donde interviene el emprendimiento como fuente del proceso innovador, para aplicar el conocimiento (experiencia) del empresario como fundamento de sus prácticas de gestión y lograr los resultados de innovación esperados que impacten los mercados. Por tanto, el emprendimiento basado en la creatividad como fuente de innovación contribuye a la mejora de la competitividad, ya que la creatividad influye directamente en las mejoras que incrementan la eficiencia de los procesos productivos y de servicios (innovación en procesos) y el desarrollo de nuevos productos (innovación de producto y servicio). Lo anterior relaciona directamente el emprendimiento creativo con la innovación de manera pertinente, desencadenando finalmente en la generación de valor agregado (Figura 1).

Adicionalmente se ha establecido la alta permeabilidad en el tema del emprendimiento con autores de otras disciplinas, donde según Harrison & Leitch (1996) se introduce la “especialización acumulada” de conocimientos al posibilitar la aplicación de conocimientos disciplinares a situaciones de emprendimiento, que a la vez son la semilla sobre la que se construye un nuevo campo de conocimiento del fenómeno emprendedor (Bygrave, 1989) que requiere la elaboración en aproximaciones multidisciplinarias para el enriquecimiento del emprendimiento, como fuente de innovación.

Figura 1. La empresa: conocimiento y saberes en el proceso de innovación



Fuente: Jasso (2012).

De esta manera, el emprendimiento como fuente de innovación se concibe desde condiciones de oportunidad, de los rasgos del individuo, y de sus capacidades. Gyskiewics & Shields (1991) elaboraron el proceso de “innovación con dirección” para conciliar la creatividad con la obtención de resultados concretos y controlados, desarrollados para los gerentes que debían enfrentar la innovación y no sabían hacerlo. El proceso plantea toma de decisiones innovadoras y planes para su implantación. La innovación en la gestión se define como un “marco de alejamiento de los principios, procesos y prácticas tradicionales de gestión o como un alejamiento de las formas organizacionales acostumbradas que alteran significativamente la forma en que se realiza el trabajo de gestión” (Hamel, 2006, p.5). Así como la innovación operacional se refiere a los procesos de negocio de la empresa (servicio al cliente, logística y suministro), la innovación de gestión se enfoca a los procesos de gestión la empresa.² El término de innovación de gestión o *Management Innovation* como Birkinshaw, Hamel & Mol (2008, 825-826) lo denominan, se refiere a “la invención y la aplicación de una práctica de gestión, procesos, estructura, o la técnica que es nueva en el estado del arte y destinada a promover los objetivos de la organización”.

4. El pragmatismo en el emprendimiento y la innovación

Basado en la experiencia natural, vivida, real, verificada y sistemática que reúne los anteriores enfoques, como efecto de su fundamentación práctica mediante la interdisciplinariedad en el conocimiento y en la acción a través de las ciencias de la vida y la gestión, y de la filosofía para analizar la innovación de gestión mediante el pragmatismo como cuestión práctica sustancial para obtener resultados. De esta forma Peirce (1903, 2012) dice que el pragmatismo es ejecutado generalmente por hombres eficaces; de hecho, eso es precisamente lo que distingue a los hombres eficientes de los ineficientes.

Peirce (1903, 2012) formula su máxima pragmática “Considérese qué efectos, que pudieran concebiblemente tener repercusiones prácticas, concebimos que tiene el objeto de nuestra concepción. Entonces, nuestra concepción de esos efectos constituye la totalidad de nuestra

concepción del objeto” (Peirce, 2012, p.195), como la definición de la relación causa efecto del pragmatismo desde la totalidad de la concepción del objeto, que constituye la acción eficiente

² En este contexto, Whirlpool en 1999 se transformó en una innovadora de gestión en serie, planteándose el desafío a su equipo de liderazgo: convertirla en fuente de innovaciones que rompieran las reglas y complacieran a los clientes. De esta manera, desde el principio quedó claro la meta “innovación de parte de todos en todas partes”, que requería “de grandes cambios en los procesos de gestión de la empresa, que habían sido diseñados para impulsar la eficiencia operacional” (Hamel, 2006, p.5).

del sujeto para tener posibles consecuencias prácticas. El argumento original en que descansó su máxima, “era que la *creencia* consiste principalmente en estar deliberadamente preparado para adoptar la fórmula en la que se cree como guía para la acción” (Peirce, 2012, p.200). De esta manera hay que basarse en la creencia, donde “si la naturaleza de la creencia es en verdad esa, no cabe duda que la proposición en la que se cree no puede ser en sí misma sino una máxima de conducta”, que es bastante evidente. Para ello el pragmatismo se fundamenta en la lógica (representaciones de la verdad), la ética (esfuerzos de la voluntad) y la estética (objetos considerados en su presentación), para estudiar la fenomenología social y sus categorías de sensación, reacción y representación. Se evidenció en el trabajo de campo, filosófico y analítico con los empresarios Edison, Jobs y Rincón, la existencia de categorías propias del pragmatismo como modo de ser pragmático (Bedard, 1995, 2003, 2008) entre las cuales podemos mencionar algunas dimensiones filosóficas.

Prácticas y conductas enfocadas a la acción: Resolución de problemas, mejoramiento continuo e innovación, realizaciones y obras, aplicación de herramientas y técnicas, ejecución de proyectos. **Criterios de validez o métodos objetivos:** Exploración de alternativas, observación de hechos al detalle, ejecución de experimentos para validar ideas, realización por ensayo y error, aplicación de simulaciones a escenarios posibles, ejecución de pruebas para verificar, aplicación del espíritu de innovación. **Valores fundamentales enfocados a la productividad:** Utilidad, iniciativa, rendimiento, cambio, nuevas formas de trabajo, ingenio. **Principios fundadores enfocados a los resultados:** Gente de acción, trabajo en red, energía, progreso. Por ejemplo, en las prácticas y conductas enfocadas a la acción los empresarios tuvieron que resolver problemas.

En el caso de Edison, cuando le resultó el problema del filamento adecuado para la bombilla, ordenó la búsqueda del filamento por Asia y América con todos los gastos pagos. En el caso

de Jobs cuando nombró a John Sculley como alternativa de control administrativo, que le salió caro por cuanto tuvo que renunciar a Apple antes de ser destituido. En el caso de Rincón con el problema legal que le salió en los últimos años con el Municipio, tuvo que tener paciencia y persistencia para al final salir favorecido en la demanda; los problemas surgidos con los mismos diseñadores y programadores de software, donde les daba autonomía para negociar con los clientes, que a la postre no sabían negociar, para al final salir negociando él con los clientes, trayendo beneficios para la organización.

En lo que se refiere a los criterios de validez o métodos objetivos, los empresarios aplicaron realización por ensayo y error, los hechos al detalle y exploración de alternativas. En el caso de Edison, aplicó el ensayo y el error para probar los diversos materiales para probar la resistencia del filamento de la bombilla de manera continua. En el caso de Jobs, aplicó la observación de hechos al detalle en el diseño, fabricación, empaque y estética de sus productos (perfeccionismo) en el caso del iPhone con el propósito de que le gustara al consumidor. Y en el caso de Rincón, utilizó la exploración de alternativas en la toma de decisiones para crear nuevos productos y servicios, de tal manera que le resultaron diferenciadores en el mercado.

Como estas hay muchas evidencias en los empresarios analizados, que no se dispone de espacio para su descripción, donde se demuestra que la aplicación del pragmatismo directivo o modo de ser pragmático del dirigente es una constante prueba para evidenciar y verificar el desarrollo de la innovación de gestión en las empresas.

Los líderes de las empresas más innovadoras del mundo, pertenecientes al sector de las TIC, como APPLE (Jobs en su momento), Google (sus fundadores Page y Brin), Facebook (con Zuckerberg, su director ejecutivo y fundador), Microsoft (con Gates su cofundador y presidente), y Yahoo (con Meyer, su directora ejecutiva), caracterizadas por la innovación y la perseverancia en gestión, tienen las siguientes especificidades respecto a la innovación:

Para Steve Jobs, una de las claves para tener buenos resultados en la innovación de gestión es la perseverancia, decía que estaba convencido de que la mitad de lo que separa a los emprendedores exitosos de los que no triunfan es la perseverancia. La perseverancia es un valor fundamental, ya que si la persona se derrumba por un fracaso puede correr el riesgo de no llegar a lograr buenos resultados. Otro aspecto a tener en cuenta es que los productos que se realicen deben ser innovadores, que permite crear valores diferenciales que le den a una empresa la posibilidad de subsistir en el mercado y de mantenerse competitiva.

Se observa que la innovación en gestión genera diferencias entre las empresas. Como Steve

Jobs, para el cofundador y presidente de Microsoft, Bill Gates, cuando se cometen errores y te das cuenta de manera inmediata o se asume una equivocación se puede volver a desarrollar la idea de una mejor manera, donde si metes la pata, no es culpa de tus padres. Así que hay que aprender de los errores. Asumir las responsabilidades es un concepto que se debe de aceptar en todos los ámbitos. Si se logra manejar y tener concreto cuál es la responsabilidad y aceptarla se pueden hacer las cosas mejor. La responsabilidad es lo que nos lleva a hacer las cosas en un grado superior a lo que se espera de nosotros. De igual manera, para Bill Gates la mejor fuente de aprendizaje para un empresario es mantener a los clientes satisfechos, ya que este es el que genera nuevos usuarios. El cliente es la esencia de las empresas, es fundamental trabajar siempre en función de la calidad y en cómo empresa lo respalda. Mark Zuckerberg, cofundador y director ejecutivo de Facebook, aconseja que es de vital importancia correr riesgos para poder mejorar y avanzar en la idea de negocio que se tenga. En algunos casos en los cuales el empresario se mantiene en un nivel de satisfacción o confort se le impide buscar nuevas posibilidades de negocio y puede suceder que la competencia lo desplace del mercado. Sólo cuando se actúa se sabe qué cambios son los que se deben hacer, qué no se consideró anteriormente y qué se modificó. Zuckerberg también menciona que hay que darle voz y poder a cada persona, debido a que generalmente el sistema mejora.

Marissa Mayer, directora ejecutiva de Yahoo, dice que una de las claves de los buenos resultados radica en rodearse de personas inteligentes, pues estas pueden exigir mayores retos para así poder lograr mayores niveles de triunfo. De esta forma el ser humano no trabaja solo y es parte de su estrategia rodearse de personas que lo lleven a generar mejores ideas y que les pueda generar diferentes rutas de aprendizaje para el mejoramiento de los productos que se ofrecen. Tener que trabajar con personas inteligentes genera valor a la empresa, optimiza los procesos y permite realmente lograr los objetivos en términos de rentabilidad y crecimiento. Meyer también se refiere a que el esfuerzo y superación de las adversidades hace que las personas progresen.

Sergey Brin y Larry Page, fundadores de Google, señalan que el factor de la competencia es crucial en las organizaciones, ya que si una empresa está pendiente de los movimientos que realiza su competencia puede correr el riesgo de perder la capacidad de innovación y de creatividad. Se dice que no mirar la competencia es sano hasta cierta medida. Se puede mirar la competencia cuando se quiere verificar y medir la empresa a nivel de mercado, pero cuando se va a establecer un planteamiento estratégico es mejor obviar un poco la competencia porque si se observa lo que ésta hace, la empresa se puede convertir en una copia de la competencia. Se refieren también a que es importante seguir metas agresivas que diferencien

los productos y servicios de otras compañías. Para estos directivos y empresas además de una gestión eficaz, se caracterizan por la utilización sistemática de enfoques, métodos y técnicas innovadoras, lo que les permite alimentar el proceso de mejoramiento continuo de la innovación de gestión mediante la generación de ideas, sus ensayos y experimentaciones, que en últimas va a consolidar su diferenciación de la competencia, ya demostrada a nivel global.

5. Reflexiones y propuestas de análisis

Basada en la teoría del comportamiento, donde la persona tiene rasgos de innovador, basada en la experiencia, creencias, prácticas y conductas. Identifica el perfil psicológico que diferencia al innovador con resultados como persona pragmática. Como existen muchos tipos de emprendedores, muchas maneras de ser emprendedor y sus características de empresas son muy variadas como las condiciones del entorno en que se desarrollan, las cuales se manifiestan en las diversas formas de innovación. De ahí que las relaciones complejas entre el emprendimiento creativo y la innovación, hay que interpretarlas mediante la interdisciplinariedad, donde cualquier modelo que trate de interpretar la innovación debe tener características económicas, psicológicas, sociales, y culturales. De ahí que la personalidad innovadora se base en la experiencia, creencias, prácticas y conductas que configuran el comportamiento emprendedor en un determinado contexto, enfoque conductista que considera la innovación como resultado de influencias internas y externas.³ Dependiendo del grado de incertidumbre y riesgo, el innovador busca tomar decisiones para aprovechar oportunidades que existen en el entorno, con base en su pensamiento creativo y emprendedor para elaborar, mejorar y transformar productos, para sacarlos al mercado, decidiendo sobre sus especificaciones y características innovadoras (Schumpeter, 1935). Así, las decisiones desde lo antropológico son producto de los imaginarios, representaciones o mentalidades de la persona emprendedora sobre la forma de concebir las oportunidades de innovación en el desarrollo del negocio, a lo largo de la vida (Rodríguez, 2009).

³ En el caso de Steve Jobs, su “alto ego” que desarrolló a lo largo de su vida, le sirvió para ganarse enemigos, por su personalidad; pero esto no eclipsa la influencia que desarrolló en la innovación tecnológica. Según Kahney (2009) Jobs ha hecho –y rehecho- Apple a su imagen y semejanza, donde los rasgos de focalización, despotismo, perfeccionismo, elitismo, pasión, espíritu inventivo y control integral son sus características de personalidad. Jobs fue un artista de la tecnología más que un hombre de negocios, debido a que democratizó la tecnología. De igual forma Jobs fue un obsesivo constante, con un toque de temperamento obscuro, que ha forjado una asociación productiva con colaboradores creativos de gran nivel. Es un elitista culto; es un autócrata. Jobs ha utilizado su encanto y talento natural para rehacer Apple; ha combinado alta tecnología con diseño, marcas y moda; Apple es una mezcla única de tecnología, diseño y publicidad (Kahney, 2009, p.17). Su visión de controlar las experiencias de los clientes hace que Apple controle el hardware, el software, los servicios *online* y todo lo demás. Se cataloga a Steve Jobs como quien ha transformado sus rasgos de personalidad en una filosofía empresarial, que ha trascendido el mundo de los negocios.

En el caso de Thomas Edison, sus decisiones desde la infancia se caracterizaron por tener el apoyo de la familia. Desde el mismo momento que lo rechazaron en la escuela, su madre se encargó de su educación, consiguiendo inspirar en él aquella curiosidad sin límites que sería la característica más destacable de su vida, sus ideas emprendedoras e innovadoras; convirtiéndose a los 10 años en un autodidacta práctico con la formación de un taller en el sótano de su casa, donde hizo sus primeros acercamientos a la química y la electricidad. Su primera iniciativa independiente fue vender periódicos y chucherías, que luego complementó con la circulación de un periódico en la estación del ferrocarril. Se caracterizó por su mentalidad aventurera y disciplinada que consolidó con el paso de los años, hasta ser el mayor innovador de la historia con 1093 patentes (Lemelson, 2012)⁴.

Todas estas decisiones le llevaron a desarrollar una cultura de la innovación en su empresa, que Hughes (1977) lo establece en 18 características del “método edisoniano”: considerar sistemas con preferencia a partes de sistemas; empezar con condiciones de prueba sencillas y gradualmente ir las complicando hasta llegar a las condiciones de operación requeridas por el uso final; al desarrollar inventos no descuidar los aspectos económicos de sus aplicaciones; seleccionar un equipo de trabajo con personal de las características adecuadas y complementarias; establecer un ambiente de trabajo estimulante y sinérgico; ser obsesivos en la procura de resultados; concebir una idea y ponerla en práctica con todo empeño. Todo ello se expresa en su célebre frase, “la innovación es 1% de inspiración y 99% de transpiración”, para resaltar el emprendimiento en el desarrollo de la innovación.

Basada en un componente de la teoría de sistemas, donde la retroalimentación permanente

con el entorno constituye la piedra angular de la perdurabilidad y sostenibilidad empresarial, disminuyendo la entropía. En este sentido un sistema “an- entrópico” se autoalimenta, se desarrolla bajo una dinámica del funcionamiento de todos los factores de la cadena de valor de manera que impulsan unos a otros, evitando la natural entropía y el agotamiento; en especial los factores relacionados con los clientes, los empleados y los accionistas (López, 2004, p.9).

⁴ Entre las experiencias de su vida que más le impactaron está la negativa en el Congreso de un contador de votos que había inventado, para lo cual tomó la decisión que “jamás inventaría nada que no fuera, además de novedoso, práctico y rentable; por encima de todo, debía ser necesario, de utilidad para la sociedad”. Con el experimento de la bombilla en que realizó 999 intentos, demostró el emprendimiento que tenía hasta que dio con el filamento adecuado, donde desarrolló la persistencia y la disciplina para lograr el objetivo innovador de la bombilla funcionando a largo plazo.

Este conjunto organizado de factores económicos que interactúan en un entorno, utiliza energía para producir resultados mediante un orden; así, el negocio an-entrópico es aquel que consigue el mantenimiento continuo de la energía que lo mueve sin perder el orden de sus elementos, reordenándolos a menudo con innovación. El caso ParqueSoft-Rincón es un modelo de negocio que gira alrededor de empresas que transforman el conocimiento en productos y servicios del sector de Software y Tecnologías de la Información mediante la relación clientes, empleados y accionistas; donde cada empresa colabora, bajo una orientación holística con el propósito de generar sinergias de emprendimiento e innovación por medio de equipos de trabajo preparados, para satisfacer necesidades del cliente. Luego el emprendimiento dinamiza empleados y accionistas para darle al cliente productos y servicios innovadores, como vía para lograr la sostenibilidad.⁵ Basada en la filosofía como ciencia que estudia el pensamiento del hombre, expresado en ideas, legados, creencias, doctrinas y símbolos, que predominan en una persona o colectividad perteneciente a una época determinada o movimiento específico, las cuales tienen características particulares y concretas, fijando una posición de tipo filosófico, antropológico, sociológico o político frente a una variedad de temáticas que han perdurado en el tiempo (Zapata y Rodríguez, 2008). La ideología puede ser necesaria en algunos individuos para consolidar su identidad, en que la continuidad vincula la ideología con la identidad, permitiendo la trascendencia del yo emprendedor. Para la consolidación del sentimiento de identidad es muy importante la claridad entre las semejanzas y las diferencias con uno mismo y con los otros con relación a la ideología. Aunque un individuo pertenezca a un grupo ideológico y comparta su ideología común en función de semejanza

(emprendimiento), necesita poder diferenciarse de los demás (innovación) para no ser tragado por el grupo; pero el tener semejanza respecto al grupo ideológico, le permite diferenciarse del resto de la comunidad (Grinberg, 1994, p.92)⁶.

⁵ Sus prácticas de gestión están soportadas en una cultura “informal” que genera la an-entropía o energía de manera oportuna, haciendo énfasis en la comunicación directa y espontánea de las personas que integran cada empresa, configurando el emprendimiento que permite la generación de prácticas sociales que benefician el contexto de la innovación en ParqueSoft. Su enfoque filosófico está centrado en “la pasión y la acción por la innovación”, principio que le permitió aglomerar más de 500 empresas en la última década, debido al emprendimiento y la innovación que se despliega al interior de cada una como subsistema y alrededor de ParqueSoft como sistema.

Cuando el imaginario logra la salida de lo real, a partir de allí se establece de manera irreversible como determinante de la constitución del individuo y de sus construcciones futuras, es decir, de la personalidad del individuo. En este contexto se podría interpretar que la personalidad emprendedora se establece en la capacidad del individuo para interpretar la realidad a través de imágenes, producto de su experiencia, formación, actitudes y costumbres. Según Lacan el “estadio del espejo” es determinante en las relaciones con los otros y consigo mismo. De esta manera el individuo- empresario interviene en los acontecimientos relacionados con la empresa y su entorno; este fenómeno bio-psíquico se cumple en etapas⁷.

A través del registro de lo simbólico hay una superposición del reino de la naturaleza con el reino de la cultura, de los valores socio-culturales, del respeto a las reglas y las normas de emprendimiento, de negocios, donde lo simbólico libera la percepción de la imagen de espejo ilusorio, y de una identificación con su propia imagen, para decir yo, donde se da una identificación como sujeto de persona emprendedora con todos sus atributos y en la realidad,

⁶ En este contexto, se evidencian muchos empresarios o emprendedores que se diferencian de los demás por la actividad innovadora, caso Jobs, Edison y Rincón, bien sea por su personalidad (rasgos de focalización, despotismo, perfeccionismo, elitismo, pasión, espíritu inventivo y control integral), cultura (pensamiento sistémico; empezar con sencillez; inventos con aplicación económica; equipo de trabajo; ambiente sinérgico; obsesivos con resultados; concebir una idea y ponerla en práctica) o enfoque an-

entropico (energía, autonomía, retroalimentación con clientes, empleados y accionistas; producción de resultados con orden; uso de conocimiento; aplicación de tecnología; orientación holística; cultura “informal”; comunicación *face to face*; pasión y acción) que utilizan, con la distinción de haber alcanzado resultados en innovación.

⁷ Las etapas son: 1) el individuo percibe su imagen como un reflejo del espejo, como un ser real, al que intenta aproximarse, reaccionando como si la imagen fuera la realidad o la imagen de otro. En el empresario esto ocurre cuando la persona percibe la realidad y la interpreta, adoptando una personalidad protagonista, reaccionaria para hacerse notar en el trabajo y adaptándose a las condiciones del ámbito empresarial; en el emprendimiento el individuo construye su imagen cuando reacciona ante los cambios del entorno o mercado, estando alerta a cualquier oportunidad que perciba para innovar en el mercado. 2) el individuo comprende que el otro del espejo no es más que una imagen y no un ser real, dejando de aproximarse o apoderarse del otro que está detrás. En el empresario ocurre cuando observa que la imagen inicial concebida dentro de la empresa va desapareciendo, producto de la adaptación de la empresa a su entorno, dejando de aproximarse a ella; en el contexto del emprendimiento, se observa cuando estando alerta a la oportunidad, no percibe la imagen de oportunidad o comete alguna falta que dificulta aprovechar la oportunidad, dejando de aproximarse al negocio producto de emprendimiento, la cual constituye un “error” que va a servir de experiencia para futuros emprendimientos, pero la imagen de oportunidad permanece en su pensamiento para hacer cosas nuevas, para innovar. y 3) El individuo reconoce al otro como imagen, pero también lo reconoce como su imagen, sabe que su reflejo no es más que una imagen, estableciendo una relación entre su cuerpo y su reflejo, constituyendo su Mí. Para salir de lo real, o sea del Mí, la imagen aliena al individuo en la imagen dada por el otro, de la cual deberá salir para existir como sujeto, como yo. De ahí la frase de Freud “allí donde estaba el ello, debe advenir el yo”, Lacan la transforma en “Allá donde estaba el mí, debe advenir el yo”. Este reconocimiento de la imagen se transforma en símbolo, que luego es expresado a través del lenguaje para entender la relación entre su cuerpo y su reflejo, con significante y significado. En el empresario, el individuo entiende que su imagen, es decir su relación consigo mismo es un reflejo de su relación con los demás, interactuando para construir su imagen consigo

por medio de signos, esquemas y arquetipos (Durand, 1982) de oportunidades de negocio. Esto se refleja cuando la persona emprendedora asume riesgos en la búsqueda nuevos símbolos, de existir y sentir placer, del placer de emprender y de crecer, llegando de esta manera a la innovación, con la construcción de significados de nuevos símbolos.

Las empresas desde la perspectiva del caos, son sistemas flexibles y no lineales, en donde el azar y lo no predecible juegan un papel fundamental.⁸ Hay una conexión estrecha entre el caos, el azar y la creatividad, donde el concepto común y corriente del caos no incluye esa regularidad. El caos se concibe como un desorden absoluto, un modo en que las cosas (las empresas) se transforman, destruyen y cambian (aspectos de la innovación). El caos nunca desaparecerá, es parte integrante de la realidad socioeconómica, por ello, el caos es una fuente de innovación en las organizaciones. Finalmente retomamos la reflexión de Hamel (2012) quien advierte que son los valores, la innovación, la adaptabilidad, la pasión y la ideología, los aspectos más importantes en la Gestión; es necesario que recordemos que le debemos todo a la innovación como práctica de gestión. Le debemos la existencia a la innovación, nuestra prosperidad, es decir, la innovación rescató a la humanidad de la privación. Le debemos nuestra felicidad a la innovación, en la cual somos más felices cuando estamos creando, innovamos para resolver problemas, para trabajar y para mejorar. Le debemos

nuestro futuro a la innovación, donde hoy por hoy tenemos que aprender a resolver problemas multidimensionales, debido a que los problemas no son sólo tecnológicos, también son sociales, culturales, políticos y globales.

mismo y con los demás; en el emprendimiento la persona construye su imagen y su reflejo de sí misma como emprendedor, comunicando, procesando información e interactuando, para construir su imagen de negocio, aprovechando la oportunidad existente en el mercado, para dar sentido a su emprendimiento a través de la innovación como algo simbólico.

⁸ Desde este punto de vista, aplicando la teoría del caos se puede decir que el emprendimiento y la innovación en ParqueSoft son espontáneos e impredecibles, flexibles e informales (aspectos del emprendimiento), es decir, es un fenómeno natural y como tal, no es ni bueno ni malo.

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**THE IMPACT OF ENTREPRENEURIAL ORIENTATION AND NETWORKING CAPABILITIES
ON THE EXPORT PERFORMANCE OF NIGERIAN AGRICULTURAL SMES**

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ABSTRACT

SME internationalisation is growing apace, signifying the global importance of SMEs to local and global economies. A key form of SME internationalisation is export. This article provides an empirical basis to understand how aspects of institutional factors could affect export performance of the Nigerian agricultural sector's SMEs. We empirically assess the relationship between entrepreneurial orientation, networking capability, institutional environment factors and export performance of 235 Nigerian agricultural firms. The result affirms that there is a strong positive relationship between entrepreneurial orientation, network capabilities, institutional environment factors and export performance of agricultural sector SMEs in Nigeria. Our results suggest that the ability of agricultural SMEs to be proactive, innovative, take risks, manage its networking capabilities and institutional environment factors have a direct impact on export performance of Nigeria Agricultural SME's. The institutional environment factors like government policies, procedures and regulations lessen the influence of entrepreneurial orientation and networking capabilities on Nigerian agricultural SMEs' export performance. This research offers guidance for future research on agricultural SMEs' internationalisation.

Keywords: SME internationalisation, entrepreneurial orientation, network capabilities, institutional environment factors and export performance.

1.1 Introduction

Growing businesses are often measured in terms of their ability to operate outside their domestic markets, and in particular the export of their products and services. Agricultural SMEs' resources and capabilities could influence their ability to perform in exporting. A lack of resource and capabilities could affect a firm's ability to meet the requirements of foreign markets and could therefore seriously hamper the export performance of the firm (Arteaga-Ortiz & Fernández-Ortiz, 2010). Research to identify the influence of agricultural SMEs' resources and capabilities on the export performance of this sector is therefore necessary in order to help the sector fulfil its potential.

According to Balabanis and Katsikeas (2003) international trade is associated with a lot of risk, precisely because of the uncertainty inherent in export markets as well as the complexity and hostility that exists in international markets. This volatility may centre on the components of entrepreneurial orientation which are innovativeness, pro-activeness and the capacity or willingness of the firm to take risks (Patel & D'Souza, 2009; Balabanis & Katsikeas, 2003; Lumpkin & Dess, 1996; Miller, 1983).

Recent studies by the Economic Intelligence Unit (The Africa Report, 2012) and the McKinsey reports on Africa (2012) suggests that Africa offers some of the best entrepreneurial opportunities for the future and that growth in Africa now outstrips that of BRICs (Brazil, Russia, India and China) by a number of measures. These new developments justify the context of this research. This paper focuses on how institutional environment factors affect the impact of entrepreneurial orientation (EO) and network capabilities of Nigerian agricultural SMEs and their export performance.

2.0. Literature Review

2.1 Entrepreneurial Orientation

The importance of entrepreneurial orientation to the survival and performance of firms has been acknowledged in the entrepreneurship literature (Lumpkin & Dess, 2001b; Wiklund & Shepherd, 2005; Covin & Slevin, 1991; Smart & Conant, 1994; Tat et al., 2007; Hughes & Morgan, 2007). It has also been extended to SMEs' internationalisation studies in a Nigerian context (Ibeh & Young, 2001; Ibeh 2003a; Okpara & Koumbiadis, 2010). Entrepreneurial orientation is a firm's

ability to engage in innovative activities, undertake somewhat risky ventures and engage in proactive innovations (Fazul et al., 2010). Patel et al. (2009) and Lumpkin and Dess (1996) define entrepreneurial orientation as a set of decision making styles, processes, practices, rules, and norms according to which a firm makes decisions to enhance its innovativeness, pro-activeness and risk-taking propensity. SMEs that have the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technological leadership via R&D are innovative. Some Nigerian SMEs have come up with new products and services, or new ways of packaging the products so that they will be attractive to international buyers.

Risk-taking involves taking bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments (Chandra et al., 2007; Idah & Mahmood, 2011; Fazul et al., 2010; Ilhami, 2011). Risk-taking indicates the will to commit proportionally large amounts of resources despite a high potential for failure (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Sepulveda, 2010). It takes an entrepreneurial-oriented firm in Nigeria to commit a lot of money to exporting without considering the high risk involved in selling abroad. Many exporting SMEs will go to the extent of borrowing from the banks, using their homes as collateral security without considering the end result of losing their houses in order to export into a foreign country.

Pro-activeness is an opportunity-seeking, forward-looking perspective characterised by the introduction of new products and services ahead of the competition and acting in anticipation of future demand (Yoon-joo, Min-jae et al., 2010; Rauch et al., 2004). Ibeh and Young (2001) suggest that exporting is an entrepreneurial act and can be defined as the process by which individuals either on their own or inside organisations pursue export market opportunities without regarding the resources which they currently control or environmental disincentives which they face.

Identifying the influence of entrepreneurial orientation exclusively without considering other internal resources such as networking capabilities may not give the full picture of the influence of a firm's internal resources and capabilities on export performance. It has been acknowledged by Hermansdottir et al. (2007), that entrepreneurial orientation can be valuable in achieving firm performance in a foreign market if the internal and external factors are well-aligned. They observe that variables such as environment, strategy and structure are critical in obtaining optimal performance. This indicates that entrepreneurial orientation may not be entirely relied upon by any firm as an internal resource required to yield high performance in a foreign market.

Therefore this Paper also considered the ability of a firm to network as another internal capability that may translate to high performance in exporting.

2.1 Networking capability

Network capability is the ability of a firm to develop and utilise inter-organisational relationships and to gain access to resources held by other actors (Walter et al., 2006). Firms need this capability to improve performance and be an organisation-wide characteristic (Ibid., 2004). According to Mort and Weerawardena (2006), networking capability is also what enables rapidly internationalising firms to identify and act on market opportunities to speed up their internationalisation process. Network capability is its ability to initiate, maintain and utilise relationships with various external partners (Walter et al., 2006). Networking capabilities are network characteristics, i.e. strong ties, building relationships and trust between partners. It is a synergy between network orientation and network resources. Network orientation is about initiation, coordination and learning, and network resources are about human resources, synergy sensitive and information sharing. Chetty and Agndal (2007) and Jones and Young (2009) feel that although some researchers have focused on the firm's network positions and connections, how these affect internationalisation (Axelsson & Johanson, 1992) has been neglected. Previous research on the relationship between network capabilities and performance (Shrander, 2001; Goerzen, 2007; Bernadino & Jones, 2009; Kenny, 2009) has also been carried out exclusively without considering other available resources and capabilities.

Network theory suggests that the ability of owners to gain access to resources not under their control in a cost-effective way through networking can influence the success of business ventures (Zhao & Aram, 1995). Florin et al. (2003) suggested that networking can provide value to members by allowing them access to the social resources embedded within a network; that is, networking can provide the means by which SME owners in Nigeria can tap into much-needed resources (Jarillo, 1989).

This research focusses on how the entrepreneurial intentions and the networking capabilities for exporting by agricultural SMEs are being affected by the institutional environment. Different research has been carried out on SMEs and international activities. According to Okpara (2009), these studies have been primarily conducted in the West. Specifically, there is paucity of research on this issue in the Nigerian context. Given the structural differences between developed and developing countries and the legal, procedural and government policies in Nigeria, it is possible that SMEs in developing countries like Nigeria may face challenges that are different to those faced by its counterparts in the developed world. This study provides

scope for an important gap within the literature on the need to investigate an appropriate level of analysis at which to measure the contribution of a firm's resource and capabilities to SME performance.

The outcome of previous work on resources, capability and firm performance is that capabilities may operate differently on the resource base of the firm and it may have different implications for competitive advantage and firm performance (Leiblein & Madsen, 2009; Hoopes & Madsen, 2008). Many theoretical and empirical issues on capabilities and firm performance remain a source of debate (Hoopes, Madsen & Walker, 2003; Armstrong & Shimizu, 2007; Newbert, 2007, 2008). Considering the legal, procedural and government policy in an economy like Nigeria, there is a need to carry out further studies to test the relationship between institutional environment and the contribution of entrepreneurial orientation and network capabilities to relative firm performance in a number of geographical areas and environments which have received limited consideration to date, including Nigeria, which represents one of the developing countries.

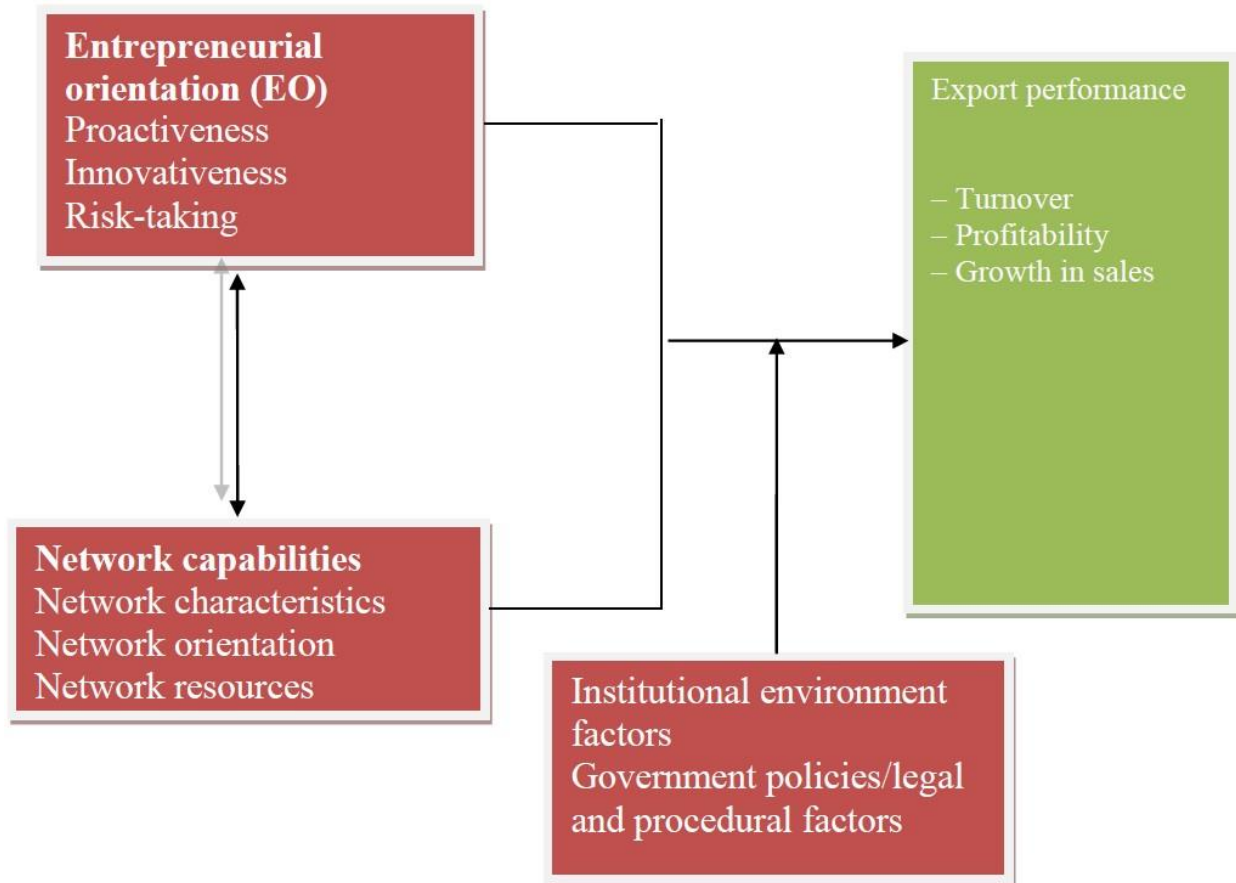
3.0 Conceptual Framework and Hypothesis Development

3.1 Conceptual Framework

The independent variables evaluating the network capabilities are: network characteristics (tie strength, relational capability and trust), network relationship (initiation, co-ordination and learning) and network resources (network human capital resources, synergy sensitive resources and information sharing). Also, the effect of institutional environmental factors is tested on the contribution of EO (entrepreneurial orientation) and network capabilities to Nigerian agricultural SMEs' export performance.

Many studies considered the institutional environment as a key factor that provides the infrastructure of strategy implementation (Taslak, 2004). According to Okumus (2003) institutional environmental issues are cited as a determinant of success or failure of strategy implementation.

Figure 3.1: Conceptual Framework



Source : Author's.

3.2 Hypothesis Development

H1a: The stronger the level of a firm's innovativeness the greater the firm's

H1b: The higher the degree of institutional environmental influence the greater the contribution of innovation to a firm's export performance.

H2a: The stronger the level of a firm's pro-activeness the greater the export performance.

H2b: The higher the degree of institutional environmental influence the greater the contribution of pro-activeness to a firm's export performance.

H3a: The stronger the risk-taking ability of a firm the greater its export performance.

H3b: The higher the degree of institutional environmental influence the greater the contribution of risk-taking to a firm's export performance.

H4a: The stronger the level of a firm's network characteristics the greater the export performance.

H 4b: The higher the degree of institutional environmental influence the greater the contribution of network characteristics to a firm's export performance.

H5a: The stronger the level of a firm's network orientation the greater the export performance.

H5b: The higher the degree of institutional environmental influence the greater the contribution of network orientation to a firm's export performance.

H6a: The greater the use of network resources the greater the effect on a firm's export performance.

H6b: The higher the degree of institutional environmental influence the greater the contribution of network resources to a firm's export performance.

H7: The stronger the influence of environmental factors the greater the effect on Nigerian agricultural SMEs' export performance.

3.0 Research Methodology

Using cross sectional survey, we investigated 500 agriculture SMEs small and medium manufacturing exporters registered with the Nigerian Export Promotion Council (NEPC), a government agency responsible for export development.

We developed a questionnaire based on previous studies on competencies and their moderating effects on export performance, and then modified it to suite the study context through extensive consultations with executives of some firms. We measured firm competencies on the dimensions of entrepreneurial orientation, network capabilities and environmental dynamism using measurement items adapted from Katsikeas, Piercy and Ioannidis (1996) anchored on a 5-point Likert-type scale ranging from (1) much worse, to (5) much better. Respondents were asked to rate the ability of their firms to undertake the suggested activities related to exporting compared to their main competitors. Similarly, export performance (the dependent variable) was measured using scales developed by Zou et al.(1998). Here, respondents were asked to indicate the extent to which exporting had achieved the firm's strategic, financial and management satisfaction rated on a 5-point Likert- type scale ranging from (1) extremely not true, to (5) extremely true.

However, out of a frame of 500 firms provided by NEPC, we established that 380 will be eligible for the study based on the inclusion criteria. Consequently, we personally administered 380 questionnaires to the Chief Executive Officers (CEOs) or those familiar with the exporting activities of these firms as units of enquiry. In order to enhance the response rate and quality of data, we contacted the Executive Director of NEPC for an introductory letter to CEO's of the firms in issue. The letter highlighted the objective of the research, anticipated gains and encouraged firms to participate in the survey. The other set of persons that facilitated the field exercise comprised five well trained field assistants. A total of 235 useable responses, accounting for an effective response rate of 61.84 %. Considering that low response rates are typical in surveys involving top management and that 15-20% response rates are considered adequate (Sousa, 2004), this response rate was considered more than adequate.

4.0 Data Analysis and interpretation

The reliability of each construct to ensure that the items collectively measured the intended construct consistently. Internal consistency reliability was examined using Cronbach's alpha in the SPSS programme. . The results of the analysis revealed a Chronbach's alpha of greater than 0.70 which is considered agreeable value for Cronbach's alpha reliability (Nunnally, 1978)

In order to establish the values of the demographic characteristics of the studied firms, we analyzed the data for descriptive statistics. Table 1 presents the results obtained from the analysis of descriptive statistics through the SPSS statistical package.

4.1 Demographic Characteristics of the Studied Firms

Table 4.1: Frequency Distribution of Demographic Characteristics of the Studied Firms

| | Frequency | Percent |
|-----------------------------|-----------|---------|
| Age of firm | | |
| 1-10 | 114 | 48.8 |
| 11-20 | 52 | 22.1 |
| 21-30 | 34 | 14.5 |
| Above 30 years | 3 | 1.3 |
| No response | 32 | 13.6 |
| Total | 235 | 100.00 |
| Legal status of firm | | |
| Sole trader | 89 | 37.9 |
| Partnership | 85 | 36.2 |
| Public ownership | 32 | 13.6 |
| Private ownership | 22 | 9.4 |
| Other | 7 | 3.0 |
| Total | 235 | 100.00 |
| Number of employees | | |
| 1-50 | 206 | 87.7 |
| 51-100 | 21 | 8.9 |
| ≥ 101≤250 | 8 | 3.5 |
| Total | 235 | 100.00 |

The frequency distribution of the ages of the firms under consideration reveals that 48.8% of the firms fall in the firm age category of 10 years, while those in the age range of 11-20 years, 21-30 years and above 30 years represent 22.1%, 14.5% and 1.3% respectively. 13.6% did not give any response.

The ownership structure proxied as the legal status of the firm was examined and revealed that 37.9% are sole traders, 36.2% fall into partnership, 13.61% fall into the category of public ownership, 9.4% private ownership, while 3.0% fall into the category of other ownership agreement.

The classification of firm size is based on the number of employees. By inspection, 87.7% of firms have employees between 1 and 50, 8.9% have 51-100 employees while 3.5% have employees between 101 and 250. Firms were categorized as exporting and non-exporting. The study revealed that of 235 agricultural firms employed in this research 90.2% are exporting firms while 9.8% are non-exporting. Next we analyzed the descriptive statistics of the independent and dependent variables and these are summarized in table 4.2.

4.1 Descriptive Statistics of Variables

Table 4.2: Descriptive Statistics of Independent and Dependent Variables

| Variable | N | Mean | Std. Dev. |
|---|-----|----------|-----------|
| Dependent Variable | | | |
| Export Performances (average sales growth rate) | 225 | 3.7751 | 1.14084 |
| Export Performances (average profitability) | 226 | 2.3832 | .56716 |
| Export Performances (overall growth) | 231 | 17.0476 | 2.76977 |
| Independent Variable | | | |
| Risk-taking | 235 | 7.0383 | 2.37747 |
| Pro-activeness | 232 | 38.8491 | 11.43620 |
| Innovativeness | 229 | 38.4236 | 11.17601 |
| Network orientation | 232 | 31.1422 | 9.89956 |
| Network characteristics | 234 | 137.0769 | 36.38803 |
| Network resources | 228 | 102.3640 | 24.91402 |
| Institutional environment factors | 232 | 14.6034 | 9.31682 |

By inspection export performance (average sales growth rate) has a mean score 3.78 ± 1.14 , export performance (average profitability) has 2.38 ± 0.57 and export performance (average sales growth rate) has a mean score 17.05 ± 2.77 . Risk-taking has a mean score 7.04 ± 2.38 , pro-activeness has a mean score 38.84 ± 11.44 , innovativeness has a mean score 38.42 ± 11.70 , network orientation has a mean score 31.14 ± 9.9 , network characteristics has a mean score 137.07 ± 36.38 , network resources has a mean score 102.36 ± 24.91 and institutional environment factors a mean score 14.60 ± 9.32 . The correlation matrix in Table 4.3, 4.4 and 4.5 shows the significant correlations between independent and dependent factors as acceptable level among the measures.

4.2 Correlation Analysis

Table 4.3: Correlation Matrix of the Predictors and Export Performance (Average Sales Growth Rate)

| Variable | N | Mean | Std. Dev. |
|---|-----|----------|-----------|
| Dependent Variable | | | |
| Export Performances (average sales growth rate) | 225 | 3.7751 | 1.14084 |
| Export Performances (average profitability) | 226 | 2.3832 | .56716 |
| Export Performances (overall growth) | 231 | 17.0476 | 2.76977 |
| Independent Variable | | | |
| Risk-taking | 235 | 7.0383 | 2.37747 |
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| Innovativeness | 229 | 38.4236 | 11.17601 |
| Network orientation | 232 | 31.1422 | 9.89956 |
| Network characteristics | 234 | 137.0769 | 36.38803 |
| Network resources | 228 | 102.3640 | 24.91402 |
| Institutional environment factors | 232 | 14.6034 | 9.31682 |

NB. *correlation significant at 0.05 (2-tailed)

Table 4.4 : Correlation Matrix of the Predictors and Export Performance (Average Profitability)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---------|--------|---------|---------|---------|---------|---------|-------|
| Export Performances (average profitability) | 1.000 | | | | | | | |
| Risk-taking | 0.158* | 1.000 | | | | | | |
| Pro-activeness | 0.234* | 0.731* | 1.000 | | | | | |
| Innovativeness | 0.237* | 0.707* | 0.921* | 1.000 | | | | |
| Network orientation | 0.167* | 0.504* | 0.592* | 0.369* | 1.000 | | | |
| Network characteristics | 0.232* | 0.766* | 0.897* | 0.911* | 0.780* | 1.000 | | |
| Network resources | 0.232* | 0.617* | 0.759* | 0.775* | 0.726* | 0.835* | 1.000 | |
| Institutional environment factors | -0.272* | -0.505 | -0.634* | -0.625* | -0.499* | -0.665* | -0.674* | 1.000 |

Table 4.5: Correlation Matrix of the Predictors and Export Performance (Overall Growth)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------------------------|---------|--------|---------|---------|---------|---------|---------|-------|
| Export Performances (overall growth) | 1.000 | | | | | | | |
| Risk-taking | 0.242* | 1.000 | | | | | | |
| Pro-activeness | 0.350* | 0.731* | 1.000 | | | | | |
| Innovativeness | 0.375* | 0.707* | 0.921* | 1.000 | | | | |
| Network orientation | 0.306* | 0.504* | 0.592* | 0.369* | 1.000 | | | |
| Network characteristics | 0.366* | 0.766* | 0.897* | 0.911* | 0.780* | 1.000 | | |
| Network resources | 0.413* | 0.617* | 0.759* | 0.775* | 0.726* | 0.835* | 1.000 | |
| Institutional environment | -0.307* | -0.505 | -0.634* | -0.625* | -0.499* | -0.665* | -0.674* | 1.000 |

4.2.1 Innovativeness VS Export Performance

From Table 4.3, innovativeness is significantly and positively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.01 , $r = 0.499$). This implies that the greater the innovativeness characteristics of the SMEs, the greater the SMEs' international performance in exporting in terms of overall growth rate. Thus Hypothesis 1a: The stronger the level of SME innovativeness the greater the SME export performance is supported.

The result supports previous studies which investigated innovation impact on export performance of the firms. They have generally found positive and significant effect of innovation (Wakelin, 1998, Sterlachini, 1999, Greenhalgh, 1990; Verspagen & Wakelin, 1997; Narula & Wakelin, 1998; Leon-Ledesma, 2005, Montobbio & Rampa, 2005; DiPietro & Anoruo, 2006, Özçelik & Taymar, 2004; Pla-Barber & Alegre, 2007). The result also supports the resource base view theory of firm. Innovative firm will be able to use their capability to commit greater resources to international activities and gradually increase their share of sales derived from the international markets. Based on the theories of Vernon (1966) and Krugman (1979) innovation is considered to be a driving force behind the international trade. Recent studies (Damijan & Kostevc, 2008; Anh et al., 2009) even additionally controlled for the endogeneity issue and the results of innovation impact on export performance are similar with the previous ones. Krugman (1979) developed a model of international trade in which patterns of trade are determined by a

continuing process of innovation and technology transfer. Generally, the literature reviewed suggests a positive and significant effect of innovation indicators on export performance, no matter if input or output indicators have been used as innovation measure.

On the other hand, institutional environment factor (government, legal, foreign and procedural) has a negative and significant relationship with innovativeness (P value < 0.05 , $r = - 0.625$). Thus Hypothesis 1b: The stronger the institutional environment factor, the lesser level of SME innovativeness, which would invariably affect the SME export performance, is supported.

This indicates that legal, procedural and government policies impede ability of innovativeness to positively influence agricultural SMEs' export performance. Innovativeness of the SMEs which enhances their export performance is weighed down by the institutional environment factors which are legal, procedural and government policies in Nigeria.

From Table 4.4, innovativeness is significantly and positively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05 , $r = 0.237$). This implies that the greater the innovativeness characteristics of the SMEs, the greater their international performance in exporting in terms of average profitability. Thus Hypothesis 1a: The stronger the level of SME innovativeness the greater the SME export performance is supported. This indicates that agricultural SMEs that are innovative were more successful than their counterparts with less innovative products. This finding supports Miller and Friesen's (1982) which suggest that innovating boldly would enable firms to be more successful. The result also confirms findings in the radical innovation literature that argue that competing with radically innovative products ensures greater firm performance (Tellis, Prabhu & Chandy, 2009; Frishammar & Horte, 2007; Coelho & Augusto, 2009).

On the other hand, institutional environment factor has a negative and significant relationship with innovativeness (P value < 0.05 , $r = - 0.625$). Thus Hypothesis 1b: The stronger the institutional environment factor, the lesser level of SME innovativeness, which would invariably affect the SME export performance, is supported. Innovativeness of the SMEs which enhances their international performance is weighed down by legal, procedural and government policies in Nigeria.

From Table 4.5, innovativeness is significantly and positively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.01 , $r = 0.375$). This implies that the greater the innovativeness characteristics of the SMEs, the greater their international performance in exporting in terms of overall growth rate.

Thus Hypothesis 1a: The stronger the level of SME innovativeness the greater the SME export performance is supported. This lends support to Miller and Friesen's (1982) call for firms to innovate regularly. This indicates that agricultural SMEs that invent new ways of exporting their products, or comes up with novel innovative products perform better in exporting. According to Miller and Friesen's (1982), innovating would enable firms to be more successful. Other studies confirm that unique product development is positively related with international performance (Knight and Cavusgil 2004). Also, arguments by Prabu and Chandy (2009), Frishammar and Horte (2007), Coelho and Augusto (2009) which states that innovative products ensures greater performance conform to this Paper.

On the other hand, institutional environment factor has a negative and significant relationship with innovativeness (P value < 0.05 , $r = - 0.625$). Thus Hypothesis 1b: The stronger the institutional environment factor, the lesser level of SME innovativeness, which would invariably affect the SME export performance, is supported.

Innovativeness of the SMEs which enhances their export performance is hampered by the institutional environment factor in Nigeria. This is supported by Van Waaden (2001) who states that formal legal institutional reduces the competition and freedom of firm, including freedom to innovate. The institutional environment which includes the rules of the game may influence propensity of firms to innovate (North, 1990). The result shows that it impede ability of innovativeness to translate to export performance.

4.2.2 Pro-activeness VS Export Performance

From Table 4.3, pro-activeness is significantly and positively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.01 , $r = 0.482$). This implies that the greater the pro-activeness characteristics of the SMEs, the greater their international performance in exporting in terms of average sales growth rate. Thus Hypothesis 2a: The stronger the level of SME pro-activeness the greater the SME export performance is supported.

On the other hand, institutional environment factor has a negative and significant relationship with pro-activeness (P value < 0.05 , $r = - 0.634$). Thus Hypothesis 2b: The stronger the institutional environment factor, the lesser level of SME pro-activeness, which would invariably affect the SME export performance, is supported. Pro-activeness of the SMEs which enhances their international performance is hampered by institutional environment factor in Nigeria.

From Table 4.4, pro-activeness is significantly and positively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05 , $r = 0.234$). This implies that the greater the pro-activeness characteristics of the SMEs, the greater their international performance in exporting in terms of average profitability. Thus Hypothesis 2a: The stronger the level of SME pro-activeness the greater the SME export performance is supported.

This suggests that agricultural sector SMEs that are proactive will be more successful in export markets than the less proactive SMEs. This corroborates previous finding. For example, Hughes and Morgan (2007) and Morgan and Strong (2003) assert that proactive behaviour is strongly associated with firm success. In addition, Covin, Slevin and Green (2006) report positive relationship between pro-activeness and sales growth

On the other hand, institutional environment factor has a negative and significant relationship with pro-activeness (P value < 0.05 , $r = - 0.634$). Thus Hypothesis 2b: The stronger the institutional environment factor, the lesser level of SME pro-activeness, which would invariably affect the SME export performance, is supported. Pro-activeness of the SMEs which enhances their export performance is hampered by the institutional environment factor in Nigeria.

From Table 4.5, pro-activeness is significantly and positively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.01 , $r = 0.350$). This implies that the greater the pro-activeness of the SMEs, the greater their international performance in exporting in terms of overall growth rate. Thus Hypothesis 2a: The stronger the level of SME pro-activeness the greater the SME export performance is supported.

On the other hand, institutional environment factor has a negative and significant relationship with pro-activeness (P value < 0.05 , $r = - 0.634$). Thus Hypothesis 2b: The stronger the institutional environment factor, the lesser level of the effect of SME pro-activeness, which would invariably affect the SME export performance, is supported. Pro-activeness of the SMEs which enhances their international performance is hampered by the institutional environment factor in Nigeria.

From Table 4.3, risk-taking is significantly and positively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.01 , $r = 0.353$). This implies that the greater the risk-taking ability of the agricultural SMEs, the greater their international performance in exporting in terms of average sales growth rate. Thus Hypothesis 3a: The stronger the level of SME risk-taking the greater the SME export performance is supported.

On the other hand, institutional environment factor has a negative and significant relationship with risk-taking (P value < 0.05 , $r = - 0.505$). Thus Hypothesis 3b: The stronger the institutional environment factor, the lesser level of SME risk-taking, which would invariably affect the SME export performance, is supported. Risk-taking of the SMEs which enhances their export performance is hampered by the institutional environment factor in Nigeria.

From Table 4.4 , risk-taking is significantly and positively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05 , $r = 0.158$). This implies that the greater the risk-taking ability of the SMEs, the greater their international performance in exporting in terms of average profitability. Thus Hypothesis 3a: The stronger the level of SME risk-taking the greater the SME export performance is supported.

This finding suggests that agricultural SMEs that are willing to bear risks in exporting have increased export performance. The result is contrary to previous findings, for example, Frishammar and Horte (2007), who asserted that risk-taking is not related to performance. Hughes and Morgan (2007) report that risk-taking is negatively related to performance. In addition, Pearce, Fritz and Davis (2010) in their Paper of not-for-profit religious organisations also find that risk-taking does not translate to performance. Although Cavusgil (1984) corroborate the research findings which state that a willingness to commit large firm resources to export operations (i.e. export risk-taking) is positively related to successful export.

On the other hand, institutional environment factor has a negative and significant relationship with risk-taking (P value < 0.05 , $r = - 0.505$). Thus Hypothesis 3b: The stronger the institutional environment factor, the lesser level of SME ability to take risk, which would invariably affect the SME export performance, is supported. Risk-taking of the SMEs which enhances their international performance in exporting is hampered by the institutional environment factor in Nigeria.

From Table 4.5, risk-taking is significantly and positively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.01 , $r = 0.242$). This implies that the greater the risk-taking characteristics of the SMEs, the greater their international performance in exporting in terms of overall growth. Thus Hypothesis 3a: The stronger the level of SME risk- taking the greater the SME export performance is supported.

On the other hand, institutional environment factor has a negative and significant relationship with risk-taking (P value < 0.05 , $r = - 0.505$). Thus Hypothesis 3b: The stronger the institutional environment factor, the lesser the effect of SME risk-taking, which would invariably affect the

SME export performance, is supported. Risk-taking of the SMEs which enhances their export performance is negatively affected by the institutional environment factor in Nigeria.

4.2.3 Network Orientation VS Export Performance

Network orientation is significantly and positively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.05, $r = 0.368$). This implies that the more the network orientation of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 6ai which states that the stronger the level of SME network orientation the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network orientation (P value < 0.05, $r = -0.499$). Thus, hypothesis 6bi which states that the higher the degree of institution environment factor the lesser the contribution of network orientation to SME export performance, is supported.

Network orientation is significantly and positively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05, $r = 0.167$). This implies that the more the network orientation of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 6aii which states that the stronger the level of SME network orientation the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network orientation (P value < 0.05, $r = -0.499$). Thus, hypothesis 6bii which states that the higher the degree of institution environment factor the lesser the contribution of network orientation to SME export performance, is supported.

Network orientation is significantly and positively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.05, $r = 0.306$). This implies that the more the network orientation of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 6aiii which states that the stronger the level of SME network orientation the greater the export performance.

However, the correlation between institution environment factor is significantly and negatively related to SMEs' network orientation (P value < 0.05, $r = -0.499$). Thus, hypothesis 6biii which states that the higher the degree of institution environment factor the lesser the contribution of network orientation to SME export performance, is supported.

4.2.4 Network Resources VS Export Performance

Network resources are significantly and positively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.05 , $r = 0.504$). This implies that the more network resources of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 7ai which states that the stronger the level of SME network resources the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network resources (P value < 0.05 , $r = -0.674$). Thus, hypothesis 7bi which states that the higher the degree of institution environment factor the lesser the contribution of network resources to SME export performance, is supported.

Network resources are significantly and positively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05 , $r = 0.232$). This implies that the more network resources of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 7a_{ii} which states that the stronger the level of SME network resources the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network resources (P value < 0.05 , $r = -0.674$). Thus, hypothesis 7b_{ii} which states that the higher the degree of institution environment factor the lesser the contribution of network resources to SME export performance, is supported.

Network resources are significantly and positively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.05 , $r = 0.413$). This implies that the more network resources of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 4a which states that the stronger the level of SME network resources the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network resources (P value < 0.05 , $r = -0.499$). Thus, hypothesis 4b which states that the higher the degree of institution environment factor the lesser the contribution of network resources to SME export performance, is supported.

4.2.5 Network Characteristics VS Export Performance

Network characteristics are significantly and positively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.05 , $r = 0.494$). This

implies that the more network characteristics of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 8ai which states that the stronger the level of SME network characteristics the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network characteristics (P value < 0.05 , $r = -0.665$). Thus, hypothesis 8bi which states that the higher the degree of institution environment factor the lesser the contribution of network characteristics to SME export performance, is supported.

Network characteristics are significantly and positively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05 , $r = 0.232$). This implies that the more network characteristics of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 8aii which states that the stronger the level of SME network characteristics the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network characteristics (P value < 0.05 , $r = -0.665$). Thus, hypothesis 8bii which states that the higher the degree of institution environment factor the lesser the contribution of network characteristics to SME export performance, is supported.

Network characteristics are significantly and positively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.05 , $r = 0.366$). This implies that the more the network characteristics of the SMEs, the greater their international performance in exporting. Thus, this result supports hypothesis 8aiii which states that the stronger the level of SME network characteristics the greater the export performance. However, the correlation between institution environment factor is significantly and negatively related to SMEs' network characteristics (P value < 0.05 , $r = -0.665$). Thus, hypothesis 8biii which states that the higher the degree of institution environment factor the lesser the contribution of network characteristics to SME export performance, is supported.

This result confirms some previous findings presented in the existing literature on export performance. Based on the analysis of survey data from 78 Nigerian-based firms, Ibeh (2003) found that such internal factors influence the export performance of the firms. Wicks and Berman (2004) emphasised the important idea that trust is a costly governance mechanism, to be deployed only when necessary. They suggest that the greater the degree of interdependence between the parties to the exchange, the greater will be the need for trust. Importantly, Wicks & Berman (2004) point to the notion that the extent of trust in inter-organisational relationships is a choice made by firms. They go on to suggest that trust in these

relationships is supported by institutional, socio-cultural, and industry norms, and these 'trust support mechanisms' moderate the relationship between the choice firms make about how much to invest in trust and performance outcomes.

4.2.6 Institutional Environment Factors VS Export Performance

Institutional environment factors are significantly and negatively related to SMEs' export performance (average sales growth rate) between the year 2007 and 2011 (P value < 0.05, $r = -0.458$). This implies that the more the institutional environment factors of the SMEs, the lesser their international performance in exporting. Thus, this result supports hypothesis 9ai which states that the stronger the level of SMEs' institutional environment factors the lesser the export performance.

Institutional environment factors are significantly and negatively related to SMEs' export performance (average profitability) between the year 2007 and 2011 (P value < 0.05, $r = -0.458$). This implies that the more the institutional environment factors of the SMEs, the lesser their international performance in exporting. Thus, this result supports hypothesis 9aai which states that the stronger the level of SMEs' institutional environment factor the lesser the export performance.

Institutional environment factors are significantly and negatively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.05, $r = -0.458$). This implies that the more the institutional environment factors of the SMEs, the lesser the SMEs' international performance in exporting. Thus, this result supports hypothesis 9aiii which states that the stronger the level of SMEs' institutional environment factor the lesser the export performance. The research reported in this Paper shows a significant negative relationship using both bivariate and multivariate analysis techniques. These results confirm previous findings presented in the existing literature on export performance (Walters, 1983; Kaleka & Katsikeas, 1995; Morgan & Katsikeas, 1997; Morgan, 1997; Crick, 1998; Cicic et al., 2002; Ibeh, 2003; Shoobridge, 2004; Alvarez, 2004; Tagoe et al., 2005; Wilkinson & Brouthers, 2006; Tesfom & Lutz, 2006; Koksai, 2006; Arinaitwe, 2006; Korez-Vide, 2007).

4.3 Regression Results

Table 4.6. Regression Analysis Results

| Variable | Average | Average | Overall |
|-----------------------------------|---------|---------------|---------|
| | sale | profitability | growth |
| | | | between |
| Risk-taking. Coefficient | -0.125 | -0.093 | -0.108 |
| P value | 0.203 | 0.401 | 0.293 |
| Pro-activeness P value | 0.084 | 0.183 | 0.131 |
| Innovativeness | 0.224 | 0.036 | 0.075 |
| | 0.261 | 0.871 | 0.693 |
| Network orientation | 0.016 | 0.035 | 0.012 |
| Network characteristics | 0.002 | -0.039 | -0.840 |
| Network resources | 0.223 | -0.014 | 0.360 |
| Institutional environment factors | -0.162 | -0.203 | -0.045 |
| R Squared | .310 | .092 | .187 |
| Adjusted R Squared | .286 | .061 | .159 |
| Statistics | | | |

Risk-taking, pro-activeness, innovativeness, network orientation, network characteristics, network resources and institutional environment factors significantly and jointly predictors of export performance of the SMEs in terms of overall sale growth ($p < 0.01$, $F_{7,207} = 12.818$). All the predictors explained 31% of the variability in the export performance ($R^2 = 31.0\%$). Network resources and institutional environment factors are the independent significant predictors of export performance of the SMEs in terms of overall sales growth at a 0.1 significance level (90% confidence interval).

Risk-taking, pro-activeness, innovativeness, network orientation, network characteristics, network resources and institutional environment factors are significant joint predictors of export performance of the SMEs in terms of profitability ($p < 0.01$, $F_{7,208} = 2.922$). All the predictors explained 6.1% of the variability in the export performance ($R^2 = 6.10\%$). Institutional environment factors are the independent significant predictors of export performance of the SMEs in terms of overall sales growth at a 0.05 significance level (95% confidence interval).

Risk-taking, pro-activeness, innovativeness, network orientation, network characteristics, network resources and institutional environment factors are significant joint predictors of international performance of the SMEs in terms of overall growth ($p < 0.01$, $F_{7,213} = 6.752$). All the predictors explained 18.7% of the variability in the export performance ($R^2 = 18.7\%$). Network resources are the independent significant predictors of export performance of the SMEs in terms of overall sales growth at a 0.05 significance level (95% confidence interval).

5.0 Implications for Theory and Practice

Our findings extend previous research in this area in the following ways

First, we examined the influence of firm capabilities while explicitly establishing their individual effects on export performance of small and medium manufacturing exporters in Nigeria, the findings show that the component of entrepreneurial orientation have a positive relationship with the firm's export performance, especially those variables related to innovativeness, pro-activeness, and ability to take risk.

Second, our study verified that networking is a potential capability of firms which impact on their resource base. It underlies the core concept of the Resource Base View (RBV) about the firm being the primary driving force of its own business behaviour and performance through the utilization of its resources and capability (Penrose 1959).

Finally, Institutional environment factors are significantly and negatively related to SMEs' export performance (overall growth) between the year 2007 and 2011 (P value < 0.05 , $r = -0.458$). This implies that the more the institutional environment factors of the SMEs, the lesser the SMEs' international performance in exporting. The findings indicate that institutional environmental factors concerned with legal/ government environment factors play an important role in agricultural SMEs' export performance (Zou & Stan, 1998; Sousa et al., 2008).

5.0 Limitations and Areas for Future Research

This study has some limitations. First, the cross sectional design applied in this study makes it difficult to examine cases causality variables, thus precluding us from making causal statements. Future studies should attempt to employ a longitudinal study to capture the dynamic performance effects of firm capabilities. This would help establish the causal relationships between firm competencies and export performance.

Second, the scope of the research participants was confined to CEOs. Hence, a measure of sample bias that leads may lead to inaccurate coefficient estimates. Though this was verified in

this study using a Harman's one-factor test , and such problem was not found in the data collected (tested through) .However based on the views Podsakoff and Organ (1986), future research should collect data from more than one respondent in each firm to further minimize possibilities of common methods variance in the data collected.

Lastly, another issue of increasing interest in the international business literature, which has received to date, almost no research attention, is concerned with the possible influence of certain dimensions of export performance on other export performance dimensions. This call for further research on the potential relationship existing between different export performance dimensions/assessment modes .Future studies should utilise structural equation modelling to investigate the potential relationship established between export performances assessed objectively and export performance measured subjectively.

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