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Knowledge Management as an Effective Tool to Improve Economic Performance in Micro and Small Enterprise

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### **Abstract**

The purpose of this exploratory study through the use of narratives, is to understand and develop a conceptual framework for the use of knowledge as a generator of economic performance in the micro and small size enterprise development, and then study on the nature of this knowledge to entrepreneurs, and the characterization of this knowledge in order to establish how this contributes to economic performance of small size businesses. Knowledge as a generator of economic performance has been proposed by Romer's proposal on endogenous growth (Romer P 1986; Romer P 1994) and spread throughout Audrestch to the framework of small size businesses (Audretsh D & Thurik R 2001, Acs Z & Audrestch D 1990); however these investigations do not define the knowledge, nor investigate its use, only studying the resultant effect into new products or patents. The contribution of small size businesses to employment generation makes that studies on improving its economic performance will be an important area in the treatment of inequity.

To obtain a detailed knowledge of what happens in this area of economy and the knowledge, it was used as methodology to "collect stories" and to establish theories based on the basis found in the analysis of these Stories (Czarniawska B 2004). The research is divided in two phases, for the first phase three stories were gathered, which are presented here and they serve us as a base to speculate a conceptual frame that allows us to study the relationship between knowledge and economic performance in the small size company settling down. For the Second phase, 40 stories were explored to establish a characterization of knowledge in small size business and mainly in its entrepreneurs.

The Research contribution has enormous implications from practitioners point of view, to understand how using current entrepreneurs capabilities, organizations can support and help to Mise performance. For the Academy, to study knowledge management in terms of creation, distribution and use; considering its flow from institutions to personal entrepreneurs; doubtless represents an interesting research field.

### 1. Introduction

Economic yield of Micro and small enterprise is determined by dynamic of countries on the income distribution and struggle against poverty (Herrera B 2005; Serida et al 2006). As this economic yield increases, it provides most population better possibilities

to improve, since this is the biggest group in most countries, then income improvement and distribution are better for everyone.

Solutions to increase economic yield of micro and small enterprise are in general on economic and financial field, of public policies or subsidies; also we find direct or indirect contributions from states or organizations that help small size business. An analysis of those solutions indicates us that in general these are not effective, mainly in developing countries (Romer P 1986; Romer P 1994; Audretsh D & Thurik R 2001; Cabrera et al 2002).

The proposal developed in this work, is related to knowledge management, considering that Mise is managed by an entrepreneur and a small group of workers, where most of them belong to the less favored society group, and who don't count with all the capacities to manage their business and therefore to increase their yield (Irarrazabal et al 2001; Villaran et al 2001; Cabrera et al 2002). In this way we approach our investigation in two phases, the first from the point of view of the enterprise and use of knowledge to generate economic returns. Speaking of the use of knowledge directly involves the relationship between the entrepreneurs with their environment, and then we will be studying the administration of knowledge in the small size and micro enterprises. Determining use of knowledge factors and how they impact on the economic performance of small size and micro enterprise, a model will arise from the point of view of the use of knowledge. The second phase will be necessary to investigate the nature of this knowledge, therefore define or study the knowledge base that is used by small size entrepreneurs, first defines the use of knowledge, then the nature of this knowledge whose use has already been explored in the first part of the investigation. This second phase is very necessary to understand that policies implemented on the first phase, therefore the use of knowledge, may or may not succeed. Both phases of the investigation will involve an exploratory study given that the subject of study represents a new field is not sufficiently explored (Babbie E 2004).

For the first phase, it is considering both, the available theory and the analysis of these three stories, it was possible to identify the following important aspects, to settle down the economic performance of Mise based in the relationship between organizations and entrepreneurs, considering a knowledge management approach, those main aspects are summarizing in the following Propositions:

- 1. To simplify environment conditions, through knowledge managements tools applied to create easy instruments from support entities and regulator entities, allowing entrepreneurs work in areas that are not required advances skills or knowledge to manage their relation with organizations. This proposition is based in the John Dewey analysis about simplify the concepts transfer for the educational system, to reach better result for the knowledge students. (Dewey J 1916)
- 2. Create intermediaries organizations between organizations and the entrepreneurs to help them to manage every difficulties that they can not handle for lack of knowledge, this is called Knowledge Brokering. (Hargadon A & Sutton R 2000)
- 3. Define the technological, political and economical pattern to stimulate the new business creation where Mise has competitive advantages. Therefore entrepreneurs would have access to imitate those business models that have been successful, and expand the current market options. I will call this, Create Imitative Knowledge.

Additionally, it is important to know the classical approaches to improve the Mise performance; however those propositions will be excluded of this work because are analyzed deeply in other works. These are:

- 4. To improve the entrepreneurs access conditions to specific knowledge about business management, through education, training, human capital and communities of practices. (Dewey J 1916; Becker G et al 1990; Brown J S & Duguid P 1991)
- 5. Incorporate knowledge management to a business, related to workers group, to improve the performance of production processes, what means Organizational knowledge (Tsoukas H & Vladimirou E 2001)

Development conditions and Mise existence, along with its characteristics, determine the problems that arise, those that depend on its economic performance as well as, define the solutions in terms of Knowledge management in a defined context.

For the second phase, exploring 30 a 40 stories to establish a characterization of knowledge in small size business and mainly in its entrepreneurs, propositions to be explored at this stage are:

- 1.- Given the classification of companies, consumers and business services to determine what type of knowledge possess each of them and their entrepreneurs.
- 2.- What is the impact of knowledge in real terms for small size business.
- 3.- Determine the characteristics of the creation, use and transfer of knowledge to small size business.

Knowing this characterization determine the validity of the policies pursued in relation to education incentives and financing to small Size businesses.

## 2. Theoretical Background

### 2.1 Micro and Small Enterprise (Mise)

The existence of micro and small size business is related to a series of essential factors; main ones are:

- Efficient operational size (Stigler G 1958).
- Indivisibility (Rosen S 1983)
- Specific demands or "Specific niches" (Caves R & Porter M 1977)
- Heterogeneity (Lucas R 1988; Acs Z & Audrestch D 1990)
- Cost Structure (Caves et al 1975; Acs Z & Audrestch 1990)
- Balance between the enterprise size and his strategy (Mills D 1984; Mills D & Schumann L 1985, Acs Z & Audrestch D 1990)

The Mise is run mainly by entrepreneur work and management, who has all the responsibility of its performance and is supported by a very small group of collaborators in specific tasks related to the products, processes or services offered by the company (Irarrazabal et al 2001; Cabrera et al 2002). This entrepreneur must handle different kind of tasks such as; financial, enterprise management, internal processes, products, commercialization, marketing and sales, and if was not enough, he also must handle his relationship with the institutions. Usually the Mise entrepreneur become part of the lowest educational background group, while the groups with better educational background are in medium or large size companies (Villaran et al 2001).

Those factors are important when we analyzed the relationship between the entrepreneurs and organizations, and how economic performance is affected by them.

# 2.2. Economic Knowledge

The economic results that historically were attributed to capital and work (Solow R 1956) in today's global growth scenario are not explained by the neoclassic models or the technological changes. This is not enough to explain the differences between models and reality. In the same way, innovation cannot explain this phenomenon either. In addition, the neoclassic models are incapable of explaining why in poor countries with great availability of manual labor and the possibility of adding capital to a business; the growth does not yield the projections in the models (Lucas R 1988; Romer P 1986; Barro R 1989).

Romer's approach is important because it indicates that the explanation of performance and success is related to internal factors, especially knowledge. This can be measured by the number of new patents, investment in R & D and new products (Audrestch D & Thurick R 2000). So, it is possible to improve the performance of the Mise by decreasing the knowledge that the entrepreneur needs by having the institutions simplify the procedures. Then, identifying the variables to simplify the process of the institutions and also the personal knowledge used by the entrepreneur are the objective.

# 2.3. Creating Knowledge at the Institutions Level.

As we define we can understand the institutional elements that surround the Mise. In this case we will treat institution knowledge as the knowledge applied to create these rules and procedures, and the rules and norms that the organizations use to establish their relationship with the Mise. Then we are talking about creating knowledge (Nonaka I & Takeuchi H 1995; Cook S & Brown J S 1999) produced by the institutions through there processes, then we can analyze it from the point of view of organizational knowledge (Davenport T & Prusack L 1998).

Another result of the institutions comes from the market and its regulations. In this case, the knowledge is concentrated on rules that follow the participants in a determined businesses sector. This knowledge is defined by its own rules, and what is contributed to the Mise requires analysis of the success or failure factors. The factors for the Mise success and its classification can be found on (Stigler G 1958; Caves R & Porter M 1977; Rosen S 1983; Mills D & Schumann L 1985; Acs Z & Audrestch D 2001; Audretsh D & Thurik R 2001).

The organizational knowledge will give us the basis for the treatment of the institutions knowledge, then we will understand this as "The capacity of the members of an organization to make distinctions in the process of executing their jobs in particular specific contexts, when decreeing the set of generalizations whose application depends on the collective understanding historically developed" (Tsoukas H & Vladimirou E 2001).

Creating knowledge by simplifying the products or services produced by the institutions could be an important tool to facilitate access for a larger number of people by easing the process and at the same time by improving its use. The same idea was proposed by John Dewey in his vision of democratize education. He emphasized that simplifying the products offered to the educational system and to improve the access and use of the knowledge for the majority of the people (Dewey J 1916).

## 2.4. Epistemology of Possession and Entrepreneur Personal Knowledge

We pointed that, the distinguishing characteristic of the Mise is that they are managed by a single entrepreneur whose success or failure depends on the company (Irarrazabal et al 2001; Cabrera et al 2002). Then, it is relevant to analyze the personal character of knowledge which has generally been centered on the educational level of the entrepreneur (Dewey J 1916). This is incomplete and must be complemented with a study of the dimensions of personal knowledge.

The Individual nature of knowledge comes from very old times, evidence of this we can found in Meno of Plato (380 BCE) were an slave can describe a complex geometric theory answering the questions formulated for Socrates and in a modern approach the "Cartesian interpretations of knowledge" (Cook S & Brown J S 1999) and to the characteristic or property of knowledge (Tsoukas H & Vladimirou E 2001). This means the knowledge belongs to somebody and is what it is known as epistemology of possession (Cook S & Brown J S 1999). Nevertheless, the great contribution related to the personal characteristic of knowledge is attributed to the works of Michael Polanyi. Especially in "Personal Knowledge" which it is difficult to find definitions of knowledge. However, they provide us with important analyses of personal character, among others we emphasized the concept of "All knowing is personal knowing - participation in through indwelling" (Polanyi M 1962)

For a more thorough analysis of the character of personal knowledge, Polanyi introduces us to the tacit dimension. Indicating that there is a world where the knowledge is explicit and codify able and another which is tacit in which underlying knowledge that is non-codify able or expressible unless it is by actions (Polanyi M 1967).

In our case we must to focus to improve the use of the current knowledge posses for the entrepreneur, in this way we will introduce the analysis of the epistemology of use (Cook S & Brown J S 1999). The example of Meno (Plato 380 BCE) is very illustrative to reinforce my proposition, from the point of view that if you facilitate the answers doing the correct questions the entrepreneurs can do complex task to run them business.

# 2.5. Simplifying Knowledge

An important tool, to spread knowledge to more people, is to simplify its access, and at the same time to improve its use, John Dewey already grants us this vision in 1916. Talking about the democratic education. Furthermore, this knowledge simplification

relates directly with use of technologies and with the reconstruction of previous experience through reflection (Dewey J 1916).

Concerning to this Dewey mentioned, that is more effective for a learning process create a basis of knowledge easy to understand and assimilable by students, and then the results in practical terms will be better because people can learn more than if they received complex contents. (Dewey J 1916)

# 2.6. Brokering Knowledge

The concept of Knowledge Brokering was introduced to analyze the use of old knowledge to create new ideas in the innovation field, and was defined as "Companies that act as intermediaries, or brokers, between otherwise disconnected pool of ideas. They used their in-between vantage to spot old ideas that can be used in new places, new ways and new combinations" (Hargadon A & Sutton R 2000).

In the financial area, Brokering is used to define an intermediary that participates in complex technical aspect to help final customers in financial transactions between sellers and purchasers.

Using both definitions and extending the meaning to relationship between Institutions and Mises, we will define Knowledge Broker as the intermediary between institutions and entrepreneurs that helps them in specific aspects where entrepreneur knowledge is not good enough for being efficient.

### 2.7Knowledge Imitative Creation

The concept of exploitation and exploration became highly important in competitive strategy (Nelson R & Winter S 1982). "The exploitation essence is the refinement and extension of exiting competences, technologies and paradigms. Its returns are positive, proximate and predictable" (March J 1991) the exploration on the contrary has uncertain returns, distant and often negatives (March J 1991). The same happens with the basis concept of Innovate and imitate, were innovative process is equivalent to explore, with high demand on resources and it is expensive. Then Mise where resources are not the greatest to run a business the imitation is a key factor. Then create Knowledge to allow entrepreneurs imitate new business will be an important proposal to be investigated.

## 3. Methodology

The design of this research is based on the conceptual framework proposed by J.W. Creswell (Creswell J 2003, Creswell J 2007), and the methodology in the work of Barbara Czarniawska (Czarniawska B 2004), even though are complemented by the

work of other authors, in their baseline these are the main ones. The conceptual framework of Creswell delivers a powerful tool that greatly facilitates the design work of the investigation and at the same time framed in a solid benchmark the necessary elements to be considered during the design phase. The Czarniawska's work was chosen first because of the nature of the investigation was ideal to be addressed with this methodology, and then because of the treatment that gives Czarniawska research based on narratives better approaches to best elements of this specific investigation.

Based on Creswell, considered three framework elements: philosophical assumptions about what constitute knowledge claims; General procedures of research called strategies of inquiry; And detailed procedures of data collection, analysis, and writing, called methods (Creswell J 2003)

## Knowledge claims

The constructivist approach is eminently where the most important research is to understand the use of the knowledge and characterization own knowledge of entrepreneurs in micro and small size enterprises so as to generate better economic performance. That means seeking to understand a social problem where entrepreneurs generate meanings from their interactions with their environment represented by other agents that relate to the company but also of a social nature and come from the human community, this is part of the assumptions posed Crotty to discuss constructivism (Creswell J 2003)

In the same vein, Crotty also said that "Meanings are constructed by human beings as they engage with the world they are interpreting" (Creswell J 2003). This requires research on the "meaning constructed by the entrepreneurs" and raise questions openended so that the entrepreneurs surrender us their views.

Finally knowledge in the small size business must be understood from that entrepreneurs engage with their world and make sense of it based on their historical and social perspective "and put our research in the domain of entrepreneurs to try to understand from this context their interpretations.

Then proposing a Constructivist approach, we find that the application of qualitative research fits with this philosophical assumption.

## Strategies of inquiry

Established Assumptions about the knowledge claims "and defined that the constructivist approach connects seamlessly with qualitative research, we are faced with the choice of operating at a more complex level that provides specific directions to procedures of our research design (Creswell J 2003). At this point we have a practical problem, because we want to establish both the first concerning the use of knowledge and its relationship with its environment- entrepreneur and the second to determine the nature and characterization of such knowledge, this invite us to divide our research in two phases.

The first phase is defined by an exploratory study on the elements of the use of knowledge and its relationship with its entrepreneurial environment, which allows us to generate a conceptual framework for a better understanding of the subjects of study.

This proposed seeking sources of information where we can extract what are the elements of the use of knowledge and its relationship with its entrepreneurial environment, this is not possible other than studying entrepreneurs and their surroundings and in their context as the knowledge is used. We consider three stories of entrepreneurs who have succeeded or failed, only considering how knowledge has been used in each case and how the relationship has been raised by these entrepreneurs regarding the use of knowledge itself and its surroundings. The cases selected are very effective because they are extremely clear in expressing that the appropriate or inappropriate use of knowledge leaves us evidence that the economic performance of small size business is related to the proper management of knowledge within it and its proper use. Exposure to exaggeration and the resulting ridiculous, as are key elements in this rhetorical analysis.

The Narratives are very suitable for the proposed study, since a history of the development of the three businesses surveyed is required, over the time. And it is not possible to follow these cases directly in a longitudinal study, because when they start no one could have guaranteed that will be of interest for being studied, but become a subject of analysis by the results and processes followed over the time. Therefore to reconstitute the history requires that participants tell their stories and develop their experiences, from these to construct a new story from the point of view of the investigator and then establish an analysis of this narrative for the conceptual framework proposed.

The second phase, resulting in a new exploratory study, this time it comes to determining the nature of knowledge and its characteristics, in small size and micro enterprises. This address to define policies as a way to improve the performance of this sector of the economy.

In this case you must study the behavior of small size business, in terms of existing knowledge, this will require many companies to study segmented according to any categorization of how to establish a framework for knowledge in each of the categories studied. Again here requires a study in depth the nature of knowledge of micro and small size entrepreneurs, that is studying from their point of view and in a social context, this requires knowing the history of their enterprise and their lives as entrepreneurs, and analyzed from the point of view of their social reality and segmentation according to business types.

The study of the first phase, here is insufficient and should be considered another approach, which is why we consider a group of 30 to 40 micro and small size enterprises, segmented according to the classification of gems. For each one of them be a collection of data directly from the entrepreneur through propelling the narrative of their experiences and knowledge, and then generate a narrative that generalize by kind of business and its analysis to define the nature of knowledge and its characteristics.

#### Data collection

Phase I, the three stories are based on very specific experiences that tell stories as small size entrepreneurs have been successful from a very low base of knowledge but they have enjoyed an institutional context that has generated knowledge to develop tools that facilitate the use of knowledge of small size entrepreneurs in such an environment and thus increase the chance of being successful. The other two stories presented failures of entrepreneurs who were aided by well-intentioned agencies but did not provide the necessary knowledge on key elements for the operation of the business and even the knowledge possessed by intermediaries was much higher than that of entrepreneurs, it was not enough to the success of business, exaggeration and ridiculous increase exposure to the outcome of the stories and make them very attractive narration for the generation of theory.

Phase II, will be collected from 30 to 40 different stories of small size businesses in the categories of services to consumers, businesses and services to other processing

companies classified as GEM, the objective would be to have different sources of information to make a narrative to explain the subjects of study, which is the nature of knowledge of small size business.

# Forms of Data

It will be used interviews open-ended type, it is important to capture interviewer trust in order to let us have their story in the anecdote way or short stories that can build up the history of their company and to determine the characteristics of their knowledge. Interviews for phase I will be multiples because it is very important to know in depth how the stories have evolved over the time and its evolution were positive or negative. In the case of Phase II, there will be an interview by enterprising but with a longer duration and cover more topics in each. Additionally photographs will be taken, data from other sources and general articles to help contextualize the stories.

## Data Analysis

We used the proposed by Yussen and Ozcan involving five elements for plot structure, character, setting, problem, actions and resolution. This was applied to both phases of the study, the first concluded in the design of a framework with elements drawn from the analysis of data and the second with a ranking stratified for knowledge.

### Validation

Construct Validity: I used multiple histories, were I analyzed the same constructs from different points of view and also different evidence sources (Yin R 1994) it was possible to establish an evidence chain (Yin R 1994) it was used during the data collection. For phase I, these different histories came from different actors involves in each narrative. For the phase II, the different histories came from different companies.

While I was making my report. I talked to important information sources in order to

While I was making my report, I talked to important information sources in order to review main ideas (Yin R 1994). In the Desert Knowledge and Flourished histories, was difficult to present the drafts report directly to entrepreneurs, because them lower level of understanding, then I talked to them to explain verbally the main ideas.

Internal Validity: I included the propositions 4 and 5 as others plausible propositions (Yin R 1994) and I also considered endogenous models of capital and labor; as rival propositions (Yin R 1994) to explain the possible success or failure of Mise in terms of

economic performance. But I was rigorous in testing validity of main propositions in the study context.

External Validity: The context where propositions were validated is defined by the scope of each narrative; all of them are related with clear results in terms of success or failure of Mise, based in a strong relationship between Organizations and entrepreneurs; where institutions act directly affecting relationship. Use the narrative results to extend it to an analytical generalization is possible if we consider this context, to extend the dominium to all kind of Mise contexts as cultural, economic or political that will require more analysis, and it could be a new topic to continue with a new research.

Reliability: A record for each studied case was made in order to assure the consistency of collected data and also from the analysis.

## 4. Phase I, Results

Knowledge of micro entrepreneurs is related mainly on the operation of their business, in a specific way. Instead to care about other aspects related with organizations.

Knowledge does not exist to face changes especially in business structure or in aspect related with strategic management. The institutions knowledge creation does not care about entrepreneur deficiencies. Are only expressed in accomplishment of its operational aims. Then organizations are not prepared to help Mise to improve their performance.

Specifics results are analyzed in the annex of each study of case, here I will present a summary based in resultant model from the analysis Figure#1.

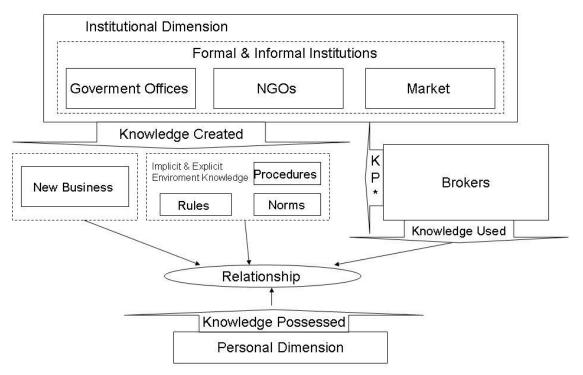


Figure #1: Institutional and Personal Knowledge Dimensions KP \* = Knowledge Possessed

In this model, we emphasized that the institutionalism is formed by organizations and these organizations by individuals, the organizations are formal and informal. The Institutions creates knowledge that is expressed in regulations, procedures and norms. Some of these are implicit and some explicit, but all these comprise the institutional surroundings.

Then entrepreneur from his personal dimension relates with the institutionalism based on the knowledge that he posses and how he uses this knowledge created by institutions. Therefore, the proposal to improve the output of Mise, is based on simplifying the surroundings, produced by knowledge from institutions which allows the current knowledge that entrepreneur has of it. There could be an established relationship between personal and institutional dimension that improve the capacities that impact global performance. It is appropriate then, to moderate the relationship from the point of view of making it more coherent and fluid for the entrepreneur.

The entrepreneur sometimes must interact directly with the Institutions, but at the same time appear an intermediary figure between the entrepreneur and institutions, those that we call brokers, to help them to understand regulations, procedures or norms and facilitate the use of their own knowledge. In the model it is represented using the

knowledge that he posses in the institution creations and using this knowledge providing support to the entrepreneur.

In our study of cases, brokering role was really important, in the case of the Ice cream seller and in the flowers producers this role was negative in terms of the final results, mainly because they did not consider all the aspects related with the institutions knowledge, focusing in particular areas that they had expertise. Then it is important to consider a systemic approach to the brokering role.

Finally, in the model appears the concept of New Business created from the Institutions Knowledge and related with the entrepreneur directly using their own acquired knowledge. It is important to consider that most business follow, establish and proven successful models, this is more relevant in the case of Mise.

The management of knowledge applied to the simplification of the institutional surroundings, the creation of new business and also the brokering mediation must include applied basic tools on creating knowledge in the organizations

To consider the aspects of heterogeneity and standardization in the surrounding creation, the task of simplifying goes through the consideration of the heterogeneity of Mise and entrepreneurs. At the same time to be effective in the implementation and in the use and control these must be standardized (Argote et al 2003). External and internal knowledge as sources of knowledge creation and use must be integrated to the model (Zack M 1999; Nevis et al 1995; Jordan J & Jones P 1997).

Finally, I think that is very important to focus on the value chain that would be considered on product design, aside from the entire process and its effect on the outcome (Nevis et al 1995).

In the personal Dimension, we will focus more on the use of the available knowledge and its interactions with the surroundings where the concepts and strategies of communities are applied (Brown J S & Duguit P 1991; Wenger E 1997), than knowledge creation. It is also important to include the subject of sharing the knowledge as far as the relationships that take place between the entrepreneur and his surroundings, also in the relationship with the brokers (Terrett A 1998). The balance between personal and collective knowledge where each one feeds the other (Polanyi M 1967; Wittgenstein L 1999) is an interesting aspect to be analyzed. It is the nature of knowledge and other aspects pertaining to epistemologies of possession (Cook S & Brown J S 1999), even though they have no relevance at the time of generating the final result.

### 5. Phase II, Results

We used to stratify the data capture, classification proposed GEM from the International Standard Industrial Classification (ISIC) to define economic sectors involved in the business and thus has a reference to the behavior of firms by sector this gives us the following categories (Serida et al 2006):

Extractive Fields: Which brings together, agriculture, forestry, hunting, fishing and mining. This sector does not take into consideration for the analysis because it depends on the specific characteristics of each nation and small size enterprises related to this classification, may be considered in the other three typologies.

Transformation Sector: Related to the activities of manufacturing, storage and transport of goods, transport of people, construction and communications.

Services to other companies Sector: which brings together businesses in financial intermediation, insurance, real estate, consulting, professional services, among others.

Oriented to consumer Sector: Which comprises retail, restaurants, bars, hotels, health, education, social service, recreation and others.

The GEM study suggests that while largest is national income, the number of companies dedicated to businesses service increase, declining in great proportion those oriented to consumer sector and a lower level those oriented to transformation sectors (Serida et al 2006). So the first concern was to seek knowledge associated with each sector and its characterization.

The Review of the literature I have inferred that the model proposed by Cook and Brown is best applied to understand the inner workings of a small size business, from the point of view of generation, possession and use of knowledge, because as we understand this (Cook S & Brown J S 1999).

Small size businesses such as corporate entity, is composed by an entrepreneur who basically carries most of the company's activities, a small size group of workers, no more than 9, and finally the environment represented by the rules and institutions with which it is linked. Let's analyze knowledge from the three positions, Entrepreneur, Employees and environment.

### Possessed Knowledge

The entrepreneur perspective is more complex and requires more attention on its analysis, since entrepreneur has a base a knowledge that comes from epistemology possession (Cook S & Brown J S 1999), this knowledge is derived from their formal education and experience in their previous activities and their current business, expressed as Cook and Brown in the way of concepts that represent their individual and explicit knowledge, and skills that are their individual knowledge and tacit, then we see that the concepts are very relevant in the case of service companies to other companies where the explicit knowledge is key here formal education plays an important role and there is general agreement that while greater is explicit knowledge exist businesses tend to participate delivering its services other companies, in these companies you can see what Reich calls symbolic workers (Reich R 1993). The biggest tacit knowledge, expressed as skills presented in the business sector, not related to transport, particularly in the manufacturing area, what Reich called routine production workers (Reich R 1993). For consumer companies presents workers in person and knowledge is a mixture of explicit knowledge and skills developed not too focused more on treatment and management of relationships with other people. But this knowledge described relate mainly to the core business, so what is its main activity, in terms of the production of goods and / or generation of services offer, which we will call business expertise or business core, there is another type of knowledge that is common to all types of businesses and entrepreneurs should possess this kind of knowledge is very broad and has to do with the management of the business and its environment, has to know marketing, distribution channels, sales tax issues, accounting, inventory management, negotiation, relationship with suppliers and many other things related to the development and operation of business, in general this type of knowledge is a glaring deficiency in the Most of the micro and small size enterprises, being grater in service companies that lend services to other companies, bad in the processing companies and very poor in the case of consumer services. This lack of such knowledge influences heavily on the performance of small size businesses, especially when the rules and regulations are complex and the opportunities for new business for this sector of the economy are not many.

For the rest of the workforce in general is a lower level of knowledge, than the entrepreneur skills, being more likely to have more developed skills than concepts, therefore they have more tacit knowledge than explicit, this trend is very evident in

processing companies and also important in service to consumers ones, changing a little trend in the service to other companies where knowledge of workers is better in terms of managing concepts.

Regarding the organizational knowledge, repeating the trend of individual knowledge of workers finding greater definition of gender than stories, that means higher level of tacit group knowledge than explicit, in the same categories of enterprises, those oriented to processing and consumer also the tendency changes for those cases of service companies to other companies.

# Epistemology of practices

When knowledge is put into action the epistemology of possession is not useful to explain what is happening, because these individuals even possess the same level of knowledge have different ways of implementing it or put it into action (Knowing), it is then we will refer to epistemology of practices (Cook S & Brown J S 1999). Thus, we find small size entrepreneurs who have the same basic concepts and skills, have met with mixed success to put them into action, most entrepreneurs reaffirms the fact that improve their capabilities as they experience when using their knowledge, not distinguish large differences between the various types of companies in terms of this conclusion.

American pragmatism result individuals not only require having a base of abstract concepts and principles, but putting them into action. Then we should see the "Knowledge as a tool at service of not knowing something that, once possessed" (Cook S & Brown J S 1999), in the company in general is a clear direction to the goals, it means the knowledge that employers have in general terms is used in concrete actions, entrepreneurs are people of action that used to maximize their potential and within them their levels of knowledge. At processing companies, the key is to put into action the tacit knowledge or skills to generate products of this transformation, and also consumers companies where skills translated into capabilities of caring people have no greater sense, but in practice, in service companies to companies using knowledge is more subtle than in previous cases but it is not means less important the difference here is reflected in action to put an explicit knowledge or concepts, rather than tacit knowledge that are found in other types of businesses.

Knowledge must be within a context where it expresses itself as a "productive inquiry" (Dewey J 1936), therefore each activity should deliberately seek what they need in order

to do what they really want to do. Entrepreneurs guide their activities very focused on obtaining the desired results when applied knowledge into action are doing a conscious action with a purpose. Still in many cases where the results are poor or very low, it is clear that there is deliberate search for success in the results and not achieve it is based on gaps in knowledge or their misuse, instead considering the productive inquiry This in a context of interaction with the world, small size business is very dependent on this context and epistemology of practice for this sector has a significant meaning in terms of the small size business and their relationship with the world. In this regard we must separate the specific knowledge of the business from general knowledge of specialties of business, in the first case small size businesses responded positively to the challenges of using knowledge in the context of its interaction with the world, in the second type of knowledge presenting serious deficiencies in the possession of this interaction with the world is not only chaotic but it is also overwhelming and ends being a major cause of poor performance (Cook S & Brown J S 1999).

## 6. Analysis and Conclusions

Mise is a sector that deeply hit social structures of developing countries, because it is a great employment source and also provides elements for inequalities control. Therefore to care about Mise performance is important. From knowledge management point of view an attractive tool that is a good opportunity to take advantage of

The knowledge of micro entrepreneurs is related mainly to the operation of their business, in specific way. Instead to care other aspects related with institutions.

Knowledge does not exist to face changes especially in business structure or in aspect related with the strategic management.

The institutional knowledge does not care about the deficiencies of entrepreneurs. It is only expressed in the achievement of its operational aims.

The Institutions are not prepared to help to Mise to improve their performance.

The narratives study provides consistent and reliable evidence for validating propositions.

Considering the fact of the three cases were very different in the origin entrepreneurs, institutions related, industry and brokers, the results were very similar to create a theory based in the propositions.

The stories weakness, was to consider relevant cases with strong results were the evidence was exposed from the beginning, then to extend the results to enterprises with

average behavior is not possible. However the theory exposed is valid in the context where is valid the logic of the analysis (Mitchell C 1983). On the other hand it was not included in the study the classical approach to solve this problem, as was exposed in propositions 4 and 5, from the introduction section.

The contributions of the investigation have enormous implications from practices point of view, given the meaning that has the yield of Mise, entrepreneur capabilities, Mise organization and how the institutions work supporting Mise.

For the Academy, considering the knowledge in the strategic administration displayed in terms of use of knowledge integrated to its creation, distribution, and use in the three institutional levels, Brokers and Mise Entrepreneurs; doubtless represents at least interest field for investigating. The resultant model is a contribution to the academy discussion in terms to include the knowledge management point of view to analyze and propose solutions for an important problem as the economic Mise performance.

The proposal of the econometric model will demonstrate or not the basis theory in a wide range, for Mise including an international comparison between developed and developing countries.

It is relevant to have a practical proposal to incorporate the new management tools for the Mise, to solve a big problem as the economic performance. Especially in a field, knowledge management, were Mise is not the main focus of public programs.

It does not exist scientific studies analyzing from knowledge management point of view how to increase the economic performance of Mise, neither from economic science point of view, the effect on performance of Mise based in management knowledge aspects. Even the studies conducted by Paul Romer do not have treatment in the Knowledge management field, just tangential mention in Audrestch, Thurick, Acz and other, but anything trying to understand the relation between the economic performance and knowledge management, because in most studies mentioned the knowledge is measured as patents, new products, R&D investment (Audrestch D 1988).

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#### Annex A

## Narrative A: The Desert Knowledge

On the highway that drives to Minera Escondida, in the middle of Atacama Desert, there is a railroad crossing that makes drivers to stop their vehicles that go to or come from mining companies. In this crossing since many years ago, a micro entrepreneur is located making his trading activities, selling ice cream to miners who stopped in the above mentioned crossing.

A few hours work allow him to earn enough money to make this activity a suitable and profitable one. The characteristics of this business were defined by him as an informal activity, where the entrepreneur had a complete knowledge about business environment conditions, among others:

- He knew the vehicles flow characteristics, from and toward mining companies.
- He knew the schedule that his products had greater demand.
- He knew, he had a captive customers, because every vehicles was forced to stop
- He knew that greeting and being nice and polite to people could improve his customers, because every one that stop in the crossing knew him and also likes him.
- He knew about supplies and his suppliers and had certain control on prices.
- He knew that in the chosen place there won't have competitors.

Therefore, he controls the key business conditions in operational and strategic terms, (Porter, 1975)

After some time, a few contractor companies and also Escondida Mine, knowing about Ismael business, created a plan to improve his enterprise conditions and also use the crossing point as a place to increase the road security conditions. The plan initially considered to install a kiosk next to the road, few meters far from the crossing. There, our entrepreneur would have the possibility of improving his business conditions, in order to:

- Increase his sales.
- Have a comfortable shop.
- Storage his merchandise.
- Have a refrigerator, to offer fresh drinks.
- Have a place where his customer can seat to have some rest and enjoy his

products.

- Formalize his entrepreneur condition, and use it to access to programs and benefits or organizations that help and support micro entrepreneurs.
- Have access to training programs and financing ways for micro business.

This way, the system and the institutional context were improving his business conditions, increasing his business hierarchy from an informal one to a formal one, the growth and increase of his sales per worked hour. At least it was the proposal.

Kiosk construction and the place where it would be located demand a strong investment of several thousand dollars that a micro entrepreneur as himself would never be able to reach.

After several months, while I was preparing the project, the kiosk construction, Ismael training and advances in his project development finally became a reality.

## The Project results are reflected in the following facts:

Location Problems: The kiosk was located some meters far from the road, and then it did not attract the enough vehicles, because nobody wanted to leave the main road, even for a few minutes.

Sale problems: The sales volume significantly decreases, instead of increasing.

Cost Problems: The costs of new business were higher than in the informal activity.

Bureaucracy Problems: The number of papers, meetings and bureaucracy has been increased too, as much as the government, sponsor institutions and his suppliers.

Product selection and Demand behavior problems: He does not know what kinds of product were good enough for customer needs and neither the demand behavior that requires the new business.

New Restrictions Problems: He has a number of new restrictions that before he did not have to be submitted to, such as environmental, sanitary and security conditions.

Pressure Problem: He has real pressures problems as much as psychological, that he had never felt before and that produce him anxiety.

From knowledge management point of view, this case serves to exemplify the nature of solutions and public policies, that historically has been considered as: Economic, Educational, Financial subjects, Training or Subsidies of several types, they haven't considered the knowledge in organizational, personal and institutional dimensions in order to provide an integral solution to satisfy each case requirements.

The institutional knowledge, has failed in anticipating that the entrepreneur has not the tools for facing the imposed challenges and also has not considered business managing elements to implement solution, among others:

Location problem; to locate the kiosk in a place of natural vehicle flow and that became the main cause of demand decrease. Originally Ismael located his business by observation and was part of his innate knowledge, when facing the new condition he does not have the necessary tools to identify that the real problem was that location is essential for this kind business. In this case, the institutional level must consider this and facilitates access to this knowledge through specific solutions; meanwhile this happens, because the involved companies are looking for solutions.

Sort of products; Ismael do not know what products are suitable for this new business and will have to be advised by the institutions involved into help him. Then, the institution must generate this new knowledge.

The bureaucracy and governmental proceedings have been covered partially through the sponsor companies, with specific support and training to simplify the task by means of direct assistance. Nevertheless in general terms Mise is far from having this support; the procedures and regulation for companies are really complex to follow in the Government office level; and as a result most entrepreneurs stagnation. To build knowledge from institutional level for simplifying this without decreases in government objectives is a real challenge.

The restrictions also are related with the institutional support, it provides the tools because of that it can fulfill its objectives and to make a routine from these tasks like others within its responsibilities.

Handling the pressures is attenuated by the participation in training communities where he has relationship with other entrepreneurs or organizations that help him to know how to face new conditions and for acquiring specific knowledge in different areas.

To summarize Ismael now works more, he has more responsibilities in order to fulfill regulation and procedure requirements, in the last time he has learned many things, but he earns less than before.

A solution for Ismael is being evaluated in some aspects and being implanted in other, in the near future, doubtless he has good expectatives for him and his business.

Nevertheless for other companies this institutional support does not exist and neither the solutions by means of knowledge management.

#### Annex B

## Narrative B: "A Micro Entrepreneur in the Big Apple"

In the early 90's Luis Martinez arrived in New York after receiving a letter of dismissal from the State Bank of Chile and spending several months in search of a decent job in his country of origin. As many of the immigrants that arrive in the USA without knowledge of the language and without papers, the first job he got was in a race track as a horse walker, with wages of 180 dollars a week, an amount that did not cover his expenses to survive in that city. In the middle of a devastating panorama that did not improve from his condition in Chile, he met Jorge González in October of 1991 when he tried to buy a package of peanut from one of his carts in downtown New York. The first day he realized that the « peanut vendor » collected much more in a few hours working than what he collected in a week. González offered him a job selling peanuts as a way of releasing some of the 12 to 14 hours a day that he worked taking care of the business. This way, Martinez started what later would become an innovative enterprise. In those days, the best locations for street commerce were taken by Greeks and Arabs, primarily with hot dog and refreshment carts. Then, the fight to get the best corners consisted of a game of ingenuity and pressures. It was necessary to arrive very early, by 6 a.m. in order to place the carts and avoid losing your corner to the other salesmen's who often defended their territories generally with violence. Another element to consider were the war veterans who sold smaller articles like handkerchiefs and stockings, although they did not have an organization they also competed for the best locations.

Martinez working as an assistant observed the characteristics of the business and defined what would be the means to its independence and a successful formal business. At that time the cart that they both worked belonged to Alex Rad, an Argentinean entrepreneur who was the first in this business in New York City. The sales generated by each cart were given to Rad who divided the profits 50% for him and the rest for the salesmen, after deducting the costs of raw materials that he obtained from a distributor who he worked with. The calculations were done starting from a set amount and the consumption of raw materials. Within his observations Martinez saw the deficient conditions of the carts, such as its presentation and that of the salesmen. Also, he realized that the fight for the corners had certain patterns which would be better formalized. As well as the product could be improved among other things by adding

more vanilla to the peanuts adapting it more to American's taste and by improving the way the product was presented to the customers.

Many times Martinez and Gonzalez lost their merchandise and the cart was impounded by the police when they where found selling without permits. At that point, Martinez worked with a fake identification. Therefore formalizing the business was imperative to make his business a sustainable activity.

Together with Alex Rad, they would create a formal company called "Nuts4Nuts" and Martinez would conquer the best corners of New York until having 12 carts of his own out of the almost 100 Nuts4Nuts carts and also employing his relatives and friends who were unemployed in Chile.

After almost a decade of working Monday to Mondays from 6 a.m. to 12 p.m., Martinez decided to return to his country and to settle with the business that had been its sustenance the previous years, meaning the sale of Peanuts in street carts. In Chile the sale of Peanuts has been a traditional business for decades, located mainly in Downtown Santiago. Nevertheless, it was a low yield activity with a series of problems, according to Martinez's experience in the USA. This way, when he settled in Chile he did it formally. Establishing the brand Nuts4Nuts in Chile, signing contracts with numerous shopping centers, supermarkets and institutions where the flow of people was attractive for the business. He changed the direction of the product offering only larger size peanuts and roasted in a more attractive way than the local salesmen did, and finally he worried about the image and presentation of the salesmen and carts. The result was surprising: today he has more than 200 carts distributed in 12 cities around the country. Not all are his, as he allowed some of his employees to grow. They bought their own carts and pay him a fee for brand usage and locations, and must buy the raw materials from him. This way there is a network of micro entrepreneur all working for Martinez. He has also internationalized his business having 10 carts in Cyprus, 5 in Spain and 3 in Italy, and has agreements to settle in Argentina and to extend to Russia and the Czech Republic.

Success brings with itself competition and this is how new companies are appearing to compete with Nuts4Nuts. "Roasted Peanut" appeared using the same strategy that its predecessors and also some of the traditional "peanut vendors" have innovated and handled the concepts of competition with efficiency. This is the case of "Copihue", a new company that competes in this industry, starting from a family history of many years in the traditional business. Today one of its descendants with studies of

administration renewed the business and became a good competitor in this niche market. Still Martinez says that there is room for all and that the competition is good. Meanwhile he is thinking of innovating in the international market and at the same time introducing other products that according to his experience would be a commercial success.

### Narrative B Results

Aspects related with Institutionalism

Territorial dispute: The location of the carts is one of the key elements to the success of the business. Nevertheless, this is determined by two very important aspects. The first has to do with the law of the street where the rest of the salesmen dispute the territories or points of sale with methods not necessarily passive. The second has to do with work permits, which during the Rudolf Guilliani period became stricter and authorizations to work on the streets became heavily regulated.

Environmental conditions: Without a doubt, working 12 to 14 hours a day under all type of weather conditions, sometimes very extreme. Without the minimum comfort conditions this was a negative factor as far as the surroundings of this business.

The condition of legality: In order to work in the USA without fear of being deported, and in order to consolidate his business in the long run he had to obtain a work visa and learn the basic aspects of the language.

Formalization: Obtaining a corner is not enough if there is no work permit and for that, it has to be a formal company or at least an enrolled entrepreneur. Therefore, it had to fulfill the requirements and rules associated to this condition.

Image: The success of a business that has direct relation to the public depends among other things on the projected image. Therefore improving the aspect and presentation of the carts and salesmen was an essential element.

Culture: Understanding the culture of the American people was the key. Not only for the sale of the product and the particular taste of the consumer but also and even more important because of the belief that if you work hard enough you will be successful because the conditions are given to achieve that success. This condition cannot be replicated in developing countries because the institutional conditions do not favor all the entrepreneurs and the number of failures is very high (Serida et al 2006). Nevertheless, the institutional factor that the surroundings facilitate and help the success of the enterprises highly motivates and surpasses the barriers of the arduous work of the start ups.

Aspects related with Personal Knowledge

Entrepreneur's potential: Martinez was never satisfied with his condition and continued looking for better opportunities for his business. This way he was generating learning and knowledge to improve his business from the point of view of the economic performance, competitiveness and growth, as we can find in Davenport & Prusak (998). Base Knowledge: Martinez through his numerous previous trades developed the knowledge that together with his personal capabilities, allowed him to distinguish opportunities and to work them to generate positive results (Polanyi M 1962). He accomplished all these considering that he only had a medium-low high school educational level from Chile.

Relationship with the institutionalism: Martinez took advantage of each one of the opportunities that the institutionalism generated, like formalization. He understood perfectly well that not getting involved with the surroundings was an entrance barrier and applied it completely; it is consistent with Argyris & Shön (1978).

Generation of Knowledge: Martinez generated knowledge in several levels that allowed him to be successful from the first days of his business and had the capacity to expand and increase this knowledge as he advanced in his undertake. It was this accumulated knowledge that allowed him to implant the business in Chile at his return without many difficulties and of thinking about future growth options, basis for this approach we ca find in Davenport & Prusak (1998).

#### Annex C

### **Narrative C: A Flourished Small Business**

The Agricultural Development Institute INDAP from Chilean government has developed a program of help to rural family, in the creation of micro enterprises related to agriculture in different cultivations. The case that I present is related to flower cultivation. The found evidences although are contradictory, according to the source that is considered, are directly related with research purpose and as to consider the opinion from experience has been a complete success or for the other side it has been an economic failure, the results are interesting for research purpose.

The support program for flowers cultivation, according to official data from INDAP has leaned on 960 projects for a mount of \$836.913.000 (US \$1,594,120. - approximately) this is about US \$1,660 average per project. This with different kind of incentives for Long and short Term and other programs, under the system of Unique Application of Financing (SUF).

At the beginning of these programs the production was concentrated on the central area of the country and North center, mainly cultivating Carnations in 25% and among the chrysanthemum, alelies, gladiolus, the queen Luisa and roses covered other 54%. The Market wholesaler was concentrated on the capital and from there it was distributed toward the rest of the country. Today based on these programs and the technology inclusion like hothouses, it has expanded the offer toward the south and toward the bulbous flowers that would be the axis of a market expansion toward exports.

The presented case will involves the study of two rural communities in the North of the country, each one has support for fourteen and eighteen farmers that are constituted in micro enterprises that are grouped in the denominated work "Technified Watering and outdoors Hothouse for flowers and vegetables", with INDAP contribution that arise to US \$2,150 as an average and micro entrepreneur contribution that arise to US \$1,300, important amount if we consider the low entrance of farmers.

## Technological results

Each one of the micro enterprises, are supported by dependent intermediaries from INDAP, these lend support to micro entrepreneurs on hothouse preparation, grounds, kind of cultivations, seeds and productive methods.

The product of this technical assistance, it is considered by all the interviewees, without distinction as "an extraordinary success". It has been possible to produce diverse kind of

flowers of great quality, so much in size, colors, presentation and an outstanding point caring about external market, last of cut flowers. In farmer's opinion "The flowers that are cultivated, with INDAP methods are much better than those that were obtained previous years with the old methods."

#### Commercial results

In this aspect, not having objective figures, I should focus my attention to collected data from interviews and these are contradictory. Most of farmers are not according with economic terms results, although some of them say that even they are not what they expected, they are not so bad in comparison to their previous situation. The fact that some of them avoid to refer directly to the commercial result and the excuses of making INDAP responsible or the intermediate organizations, indirectly indicate me that the opinion of those that openly claim for the poor economic results, have foundation.

On the other hand, the opinion of official organisms is "the economic results are excellent", although it can have cases in that some of the entrepreneurs have not had an efficient commercialization of their products, it would be due to that "they have not used all the alternatives at their disposal."

As a fact, most of micro entrepreneurs considered in this study, continue maintaining the same market, customers and distribution channels that they were using before have INDAP support, and the market is local. Therefore, even when they have better products, the market is not able to absorb the new offer or it doesn't grant the real value to grant them a considerable improvement in price. Some of these entrepreneurs appreciations are interesting, concerning how some characteristics of new flowers, that should improve the strategic position has been counterproductive, for example "that the flowers are more durable, it has been negative, because the clients now take a long time for buying again, since they have flowers that last more."

INDAP has developed support groups, knowledge basis and participative systems through Internet or directly in some towns to help to micro enterprise, however most of them are unknown by farmers, they don't have access to them or they find them very complex. Most of these systems are of technical character and help for commercialization is poor or hard to understand.

The opinion of an expert in floriculture gives some alarms about the future business development that should be take into consideration: "Although flower business is attractive and you can develop in small lands, achieving good interesting revenues, it has important limitations for rural micro enterprises, one of them is the vegetal row

material for stat the cultivation, the requirement are very demanding because of that it is necessary a continuous research and changing of products". These warnings don't make more than ratify that the micro entrepreneurs will require more help as soon as more success has the business.

#### Conclusions

It is recurrent to notice the complexities of helps or regulations settled by organizations to entrepreneurs. Therefore, the idea of creating simplified knowledge becomes stronger.

Independently, if the reached economic result is good or not. The cause is the same so the solution. Entrepreneur, doesn't have the necessary knowledge to cover all the requirements of his/her business, in this case the commercialization, therefore institutions should directly or through intermediaries cover those necessities. If these intermediaries consider all the aspects from an integral point of view, then the results will be good.

There is no doubt about Brokering Knowledge from the technical point of view, in this case was a success, covering all the necessities to produce good flowers. Therefore, the pattern should extend to the areas that are not covered at this moment that in case of any business becomes the most important.

Brokering Knowledge role will be more important it has measured that the business is internationalized and the micro entrepreneur participate in the chain of efficient commercialization.

Creation of new opportunities of business is a point to highlight in this case, although it can have deficiencies it offers better opportunities to entrepreneurs that otherwise could not develop their business and sooner or later they would finish looking for a job in another activity for less money.