

# The Intrapreneur Innovation: Led by Medium and Small Size Companies' Managers\* (Qualitative Research)

By Manuel Alfonso Garzón Castrillón \*\*

## ABSTRACT

*This research is focused on an exploratory study developed with Pymes managers and their roles as intrapreneurs. Using their leadership to impel innovation into organizations.*

*Looking to determined how Pymes employers incentive into organizations individuals or group innovations. Therefore, it is possible to think that managers lead the innovation process, which is classified gradually according to companies needs in order to improve their competitiveness. Organization must have intrapreneuring and organized culture with flexible structure to generate individual autonomy. A characteristic is the amount of capital risk needed; that is why it is necessary encourage their work and their risk tolerance.*

**Key Words:** *Intrapreneur, innovation, high intra-entrepreneurs, intrapreneur organizational culture, medium and small size companies –Pyme- (Pequeña y mediana empresa)*

## RESUMEN

Esta investigación esta centrada en el estudio exploratorio de los directivos en la Pymes en Bogotá D. C. y los roles que desempeñan como altos intraemprendedores haciendo uso de un liderazgo estratégico para impulsar la innovación en sus organizaciones.

El estudio esta dirigido a determinar como los gerentes de las Pymes en Bogotá D.C. ponen atención a incentivar al interior de las organizaciones la innovación individual o en equipo, de lo cual se puede inferir que el directivo de mayor rango es el que lidera el proceso de innovación, como un top intrapreneur; que impulsa innovación intraemprededora clasificada

---

\* Paper accepted to the 2005 BALAS (The business Association Latin American Studies) Conference. Madrid May, Institute of enterprise Business School.

\*\* PhD., Director research group and teacher Business Faculty, Rosario University  
.mangarzo@urosario.edu.co

gradual, como una necesidad para mejorar la competitividad de la empresa. Se requiere para lo anterior de la puesta en marcha de una cultura organizacional intraemprendedora que busque generar autonomía individual, con una estructura flexible característica de las Pymes, un gran apoyo con capital de riesgo. También es necesario el incentivo del desempeño premio y una gran tolerancia al riesgo.

Tiene como objetivo general determinar cuáles son los factores que caracterizan al directivo de una Pyme para orientar la innovación como una estrategia para afrontar la competitividad y que rasgos de cultura se requieren. Como objetivos específicos se plantearon: obtener información relacionada con los factores que facilitan la función Directiva intraemprendedora; Identificar los factores que facilitan la innovación y el cambio estratégico en las pymes e identificar los rasgos de la cultura intraemprendedora que se presenta en la Pymes.

**Palabras Claves:** Intraemprendedor, innovación. Altos intraemprendedores, cultura organizacional intraemprendedora, Pymes

## 1. ANTECEDENTS

This research is focused on an exploratory study with Pymes' managers in Bogotá D.C. and their roles as high intrapreneurs using the intrapreneur leadership to boost innovation in their organizations. This study is part of the research project "Knowledge management".

The current high intrapreneur is different from the former one. History teaches us that Industrial Revolution, during XIX century, had an important number of creative entrepreneurs that perceived new opportunities and found the correct way to face them.

Looking backwards, the pioneer of entrepreneur behavior in 3M was Dick Drew, according to Art Fry, quoted by Garzón (1998: 29). In 1923, he discovered the adhesive tape,

which is used today to paint cars with two colors.

During the 50's, Mammen, in a Harvard Business Review article, talks about innovation as base of work developed by researchers in Silicon Valley. He describes them as "few brilliant people in a dark room full of money and hope." There is an innovation management method with a hope strategy.

During the 60's, literature related to innovation in topics as change management and technologic transfer, is written.

During the 70's academics as McGinnis and Verney (1987) wrote studies about the creative spirit inside the organizations or the corporate entrepreneur.

In 1974 Art Fry goes beyond the intrapreneuring innovation history

with the post-it and his projection over the 3M's internal organization.

In 1985 Gifford Pinchot III published his book *Intrapreneuring*, taking back the term *intrapreneur* invented by the journalist, Norman Macrae, in a *The Economist* article on December 25 of 1976. In 1979, the Swedish group, Foresight, offered programs to companies to training intrapreneurs. The Pinchot's proposal establish the needed principles into organizations to allow employees to behave as intrapreneurs.

Peter Drucker in 1985 published his book "Innovation and entrepreneurship, practice and principles." In this book he brings in the need of a change in mentality about innovation and the entrepreneurs' function.

Between 1985 and 1998, cases, articles, books and doctoral researches as Clagett's, Garzón's and two new Pinchot Gifford III's books are orientated to intrapreneurs and their role into organizations as engines of innovation. This is an answer to the lack of innovation and competitiveness in big companies.

In 1994, Roman Lombriser wrote and defended his thesis in the Doctoral Program of Strategic Management at the International University. This thesis was supervised by Igor Ansoff, and published by the *Financial Times*. In his thesis he tackles the concept of *Intrapreneur* leader-

ship. He stressed the importance of an increase strategic leadership in all kind of companies. He called "Top Intrapreneur" the board of directors. Considering them responsible for their companies. Distinguish them from the common intrapreneurs. The top intrapreneur is the general manager. He has under his responsibility the transformation of his company.

## 2. OBJECTIVES

The innovation is related with the strategic change and the organizational intrapreneur culture of Pymes in Bogotá D.C. This study wants to reach the following objectives:

- Get information about factors that make easy intrapreneur management function in Pymes in Bogotá D.C.
- Identify factors that facilitate innovation and strategic change in Pymes in Bogotá D.C.
- Identify characteristics of intrapreneur organizational culture established by Garzón et al (2002:25) in Pymes in Bogotá DC.

## 3. JUSTIFICATION

The lack of continuity in the environmental changes demands new success strategies. In ages of big changes, historic success strategies will not guaranty the wished outcomes.

Therefore the success high intrapreneurs, as is stated by Lombriser (1994: 33), perform a key task developing new strategies as an answer to the environmental threat or an opportunity. They:

- Warn the need or opportunity of an early strategic change to start an active response.
- Lead the process of managerial decision. This involves the decision takers, the consequences and risks of these decisions.
- Keep a group vision over the practical carrying out of change

The published material over business is abundant and provides information about what managers should do. However, only few studies have proved their advices in real. Fewer have focused on the intrapreneur aspect of Pymes' managers

This exploratory study researches the high intrapreneurs' attitude of Pymes in Bogotá D.C., which lead their companies to a strategic change, and the consequences that intrapreneur culture had in their organizations.

The data was collected through a semi-structural personal interviews. They were done to fourteen Pymes' managers. Companies were from a wide number of economic sectors.

## 4. LITERATURE REVISION

### 4.1. The Pyme in Colombia

To start the analysis of Pymes in Colombia, is mandatory define them. It can be a misunderstanding about its meaning.

In Colombia, according to the Promotion for the Micro, Small and Medium Size Company Law (Ley para el Fomento de la Micro, Pequeña y Mediana Empresa), 590 law, Pymes are classified:

Micro-company: Less than ten employees. Total assets bellow to 501 monthly minimum salaries.

Small company: Between 11 and 50 employees. Total assets higher than 501 and lower than 5.001 monthly minimum salaries.

Medium: Between 51 and 200 employees. Total assets between 5.001 and 15.000 month minimum salaries.

Despite this classification, the limits are not enough to develop an analysis about what this companies need in innovation topics.

The micro, small and médium company's contribution is seen in these indicators:

The Annual Manufacture Poll let us determine the importance that

MIPYME has in Colombian stage. These companies represent the 96.4% of the total number of companies, providing the 63% employment; the 45% of the manufacture output, the 40% of salaries and the 37% of aggregated value. There are more than 650.000 entrepreneurs in the social security system.

The geographical distribution establishes that PYMES follow the same trend of manufacture industry. The 70% are gathered in the four (4) principal productive centers: Cundinamarca-Bogotá, Antioquia, Valle y Atlántico.

#### 4.2. Main Sectors

The PYMES are concentrated in agricultural and mining industry. These two industries represent the 71% of the industrial production. Excluding oil refinery and petrochemical industry, industry based on use of natural resources represents the 60% of total industry outcome.

The main sectors are: Food, Leather and shoes, Furniture and wood, Clothing industry, Graphic arts, Plastic and chemistry, Metallurgical and metalmechanical, auto parts and mining –non-metallic.

#### 4.3. Pyme Features in Bogotá

The study developed by Barriga et al (2003) found the following :

- The study founding to Bogotá shows that the market size attended by most of Pymes is small and local. 97% of their sales are for local market. The gross assets amount and the annual sales are lower than U\$500.000 for the 48,5%. The production capacity and product batch lack of continuity. This shows that the use of technologies of scales is limited. Therefore, less demanding in investment.
- The main corporate body among Pymes is limited company. Though 7.9% expect get resources issuing shares. Informality is common among societies, specially in the leather and shoes industry, 27,3%, where one of each four has not formalized its juridical situation. All companies started up with national capital, specially family resources, owners and third people how have become shareholders in 35%, 31% and 29% respectively.
- Managers are characterized by their maturity and expertise. They are older than 40 years with work experience higher that 10 years and with high educational level. More than half have undergraduate education and 10% have post-graduate education. There is a new generation of entrepreneurs where the 22.4% are women.
- Company objectives are focused on improve profits, in its accounting concept, more than improve owners wealthy. At short term,

the objective is liquidity. This is due to problems in local markets and the loyal and disloyal competence impact, that has affected work capital structure.

- Entrepreneurs' perception about time threshold is heterogeneous. Without clear limits of short, medium and long term. In general, less than three years is considered short term, medium until five years and long term until seven years.

#### 4.4 Intrapreneur Ing

The word intrapreneur has French roots, from the word "entrepreneur", which comes from the enterprise term. Germans have its equivalent with *Unternehmer*, which has the same meaning (Luchsinger y Babgy 1987:10). "The combination with at home, inside, in, therefore gives the term intrapreneur. Thus, the entrepreneur is who live inside or is in the borders of an organization. It is a social invention that allow people to express their own potential" (Kolchin y Hyclak 1987: 15). This term was used for first time at The economist magazine by the journalist Norman Macrae in 1976 and with the meaning that lead this research by Gifford Pinchot III in 1985.

Taking into account the term origin and based on the bibliographic revision over intrapreneur nature the following definition is proposed:

Intrapreneurs are people with entrepreneur vision. They oriented their behavior to the development and arising of their internal entrepreneur spirit, generating and making the most of innovative ideas. Developing them as profitable business opportunities. They compromise their time and their effort to research, create and model those ideas in business, to benefit their own business and the steady company's growth. Intrapreneurs see success where others see failures or problems. Their strong point is the innovation of products and services with talent and creativity, becoming in a change agent. They are called internal entrepreneurs, intrabusinessman, intracorporation, corporative businessman, intrapreneuring and new adventure units. (NVUs) (Pinchot:1985; Peter & Waterman1982; Finch 1985; Ross & Unwalle 1986; Duncan 1986; Pinchot 1987; Hill 1987; Cates 1987 Luchsinger 1987; Fry 1987;Mac Ginniss & Verney 1987; Kolchin & Hyclack; Bart 1988; Rule & Irwin 1988, Agor 1989; Gerard 1989; Filion 1989; Dufour 1989; Jadoul 1989; Claget 1992, Kuatko & Hodgetts 1992; Revista Apertura 1992; Romero 1993; Salinas 1993 & Garzón 1995, Garzón et al 2002))

This concept requires people that assume that behavior. "These are people with an average intelligence level or a bit higher, which means that they are not genius". (Kuatko y Hodgetts 1992)

## **4.5. Intrapreneur Leadership (Top Intrapreneur)**

According to Lombriser (1994: 26-28), an intrapreneur is a person who foresees challenges of future environments and goes ahead, allowing the company's reaction according to the new external conditions. This means that they must be the highest intrapreneurs of their companies.

Therefore, the intrapreneur leader behavior is what leads organizational changes to success.

### **4.5.1. Intrapreneur Learning**

We understand intrapreneur learning according to Garzón (1994) as a social activity. That expresses itself in organizations through different collaborative stages. Allowing gathering and integration of different experiences, knowledge and abilities around a community in which all members learn from each other.

This means that, learning is a process that modifies every part that takes part in the process. Not only does the person under the learning process change but also the environment where he interacts.

### **4.5.2. Strategic Change**

The objective of high intrapreneur actions, based on Lombriser (1994:

145), when a organizational competence is created, are to provide the organization with the needed capacity to perform the change.

High intrapreneurs create and share with others a new success model. They develop and implement in the organization an exciting vision about the company's future. To reach this vision, they feed and award the behavior and the acceptance of entrepreneur risk.

### **4.5.3. Idea Gestor**

Taking Lombriser (1994: 207) idea up again; the high intrapreneurs track actively the environment, to detect rising signs of new opportunities and threats. They look for those opportunities and try to make those threats into opportunities. They introduce change soon, when the information is incomplete.

### **4.5.4. Recognizing the Opportunity**

The entrepreneur and intrapreneur process, start with an idea. This needs a development to become in a certain business opportunity, that justify a business plan. Therefore, determine that there is a good opportunity in the "opportunity window", which opens and closes constantly as an answer of the volatile and dynamic market nature; represented by tech-

nology changes and competitors reactions. "It is important to organizational success and to intrapreneur, make a careful study about key opportunities. It is important as well, find initiative and create favorable conditions to execute them". (Timmons 1990 cap 3).

Therefore, the generation of a real business opportunity has three stages: (Varela 1992:123)

- Identification of business idea
- Evaluation of business idea
- Conformation of the business opportunity

Each one of them require different processes and qualities, according to Varela (1991), the business idea will come out when the future intrapreneur relates his imaginative and creative capacity to business prospective. He starts to relate that with resources, markets, contacts, technology, among others. This is made with the specific intention to make it work out inside the organization. The business opportunity comes out when the idea is based on customer needs, competitive advantage, human resources, technology, finance. Business ideas must have the support of an sponsor and the vital impulse of intrapreneurs who make it real.

#### **4.5.5. Planification**

High intrapreneurs, as demonstrated by Lombriser (1994: 207), are in-

olved personal and directly in strategy definition. This involves all important people with responsibility in the strategy performance and with knowledge to make strategic decision analysis. To make strategic analysis the hierarchical level are defined. Trying to reach agreement in the team over the strategic decision.

High intrapreneurs base their decisions on explicit estimations of likely risks. They reduce risks with actions directed to that goal and use a gradual commitment strategy if the ignorance or risk are high.

## **4.6. Organizational Culture**

### **4.6.1. Organizational Culture Antecedent**

The 80's was scenary of one of the most important events in organizational studies. Studies published about this topic have left a deep footprint in managerial procedures and in the crowd. Why does an organization perform successfully and other alike is mediocre? Some studies consider that the answer is found in the organizational culture: culture that creates from values, principles and organizational practices.

Denisson (1991) states that research of culture in organization includes the symbolic interactive prospective of Mead(1934); Cooley (1922) and

Blumer (1969), the anthropology and social statement of Kluckhorm (1951) and Levi-Strauss (1963), the cultural reality as social construction of Berger and Luckman (1966), myths of Eliade (1959), archetypes of Mitroff (1984) and ideology histories of Starbuck (1982). All are useful to explain people's behavior, as more objective organization characteristics because they incorporate and enunciate clearly the identity of organizational members. Maybe the most positive impact of cultural prospective is that it has represented a return to inductive thought over organization's behavioral characteristics.

#### **4.6.2. Definition of Organizational Culture**

The organizational culture is integral part of organizations life and it has important implications to managerial action. The culture of an organization is comes from things, words, actions and feelings that its members have in common. This clarifies that culture is what allows cohesion to its members to reach determined goal or objective. Organization is made of people, have elements and proper manifestations of its organizational culture, understood as "particular system of symbols inducted by society, by the organization's history and its former leaders. According to this conception, culture is not an static element, but an alive new material, used in different ways for each em-

ployee and transformed by them during the decodification process of organizational events." (Allaire y Firsiroto 1992:33).

Therefore, the culture is a powerful force over the organization that can be related with tastes and preferences of its members, depending on the identification degree having with the organization. Culture is related with the sub-systems of what it is made.

Based on different definitions for this research this meaning is proposed. Organizational culture is the system of particular symbols, customs, habits, legends, tastes, preferences, influenced by society, organizational history, its founders, its actual and former leaders, which modeling the relationship between person and problems, coordinating those answers. This definition retakes in its conception proposal of Allaire and Firsiroto (1992) and Ouchi (1981) Beals and Hoijer quoted by Deal and Kennedy (1985) Varela (1991), which base their hypotheses in the systemic approach proposed by Ludwin Von Bertalanffy (1951), its pioneer. This approach allows to determine that inside the organization there is a cultural system as macro-system, this is an all made by pieces or sub-systems interrelated in a dynamic equilibrium, one of them is the intrapreneur organizational culture.

It is important clarify that the proposed meaning does not retake and is con-

traire to Foucault's (1991) proposals in things related with general horizon and joint analysis and Habbermas (1993) about totality concept.

Therefore if organizational events allow independence, freedom, capacity to have control over decision taken, commitment feeling, ownership feeling of wear the t-shirt, and responsibility, will favor innovation as has been stated. (Fry, 1987 ; Finch, 1985; Karagozolu 1993; Kolchin 1987; McGinnis 1987; Kuateko 1992 ;Gerard 1989; Pinchot 1985 ;Peters and Waterman 1982 ; Drucker 1985 ; Hornsby 1993 and 1986).

Taking into account characteristics that reveal the essence of organizational culture according to Robbins (1987) and requests established in study of cases consulate in intrapreneur programs, following proposal outcome.

#### **4.6.3. Intrapreneur Organizational Culture Characteristics**

- Individual autonomy: It includes responsibility, independence, freedom of failure, time to practice initiative that intrapreneurs have in the organization, capacity and control over decisions took.
- Structure: Related with flexibility in schedules and budgets, with decentralization that accept disorder, lack of coordination, leaving

a bit a side order, with wide description of jobs and little supervision.

- Support: Make reference to the impulse of directives and godfathers in intrapreneur activities.
- Identity: Related to ownership feel, commitment or wear organization's t-shirt.
- Performance – AWARD: Requires awards, in risk capital, more time, promotions, bonus, shares, profits participations, personal recognition, among others.
- Conflict tolerance: Specially in interdisciplinary teams.
- Risk tolerance: The degree in which the intrapreneur is encouraged to be innovative, aggressive, entrepreneur and takes moderate risks.

Sources:Kuateko (1992Cap4); Ross (1986:46); Fry (1987:9); Hornsby (1993:32) ; Taylor (1990:100); Barth et al(1988:36); Pla(1989:47); Duncan et al (1988:20); Peters and Waterman (1982: 189); Cates (1987: 45); Robbins (1987: 440);Gerard (1989); Fondation d L' entrepreneurship (1989).

Therefore the change from administrative culture to intrapreneur "should be structured and systemic in organizations. It must be supported by the organizational culture of the high direction, creating the proper atmosphere, that leads to cover needs of identification and development of business" (Barth et al 1986:36)

Other important aspect that must have taken into account is the need of “built an organization with a culture that lead to team work, that motivates people to make things in different way and better” (Taylor 1990. 100)

It is necessary clarify that the expression organizational culture must not be taken as fashion according to Trevenet et al, (1991), but the bases for the born of new intrapreneur behaviors. It only represents a benefits if it helps company to solve its adaptation and organizational problems. The equilibrium between the benefits and the limits of the culture will be established on this base.

It can be inferred that a profound change inside organizations must be done to turn from a culture characterized, according to Horacio Andrade (1992) for a high and strict formalization, dogmatic, and basically task orientated. It has a high degree of power centralization in the handling of information and decisions taking. The leadership trends to autocracy and paternalism, with high control and supervision. There is a strong fight for power, which lets an starring role to rules, policies and established procedures to a intrapreneur culture.

This is not an easy change. Its change must be gradual, it can not be fast. Studies developed by Kras, (1993) Cambio organizacional(1993); Fundameca , (1993); Nosnik, (1993) and José de la Cerda Gastelúm, (1993) show results that allow state that

Latin-American organizations have had an important progress in this topic, “though very recent and far from the high competitive administration“ (De la Cerda 1993:23). It is important to understand the intrapreneur spirit. It must start with a value system, specially with the eleventh mandate: “do not kill the idea of a new product or service” (Peters and Waterman 1982:213).

It is necessary create confidence into the organization in each one of the members. Confidence, self – confidence and collective confidence. This is the base for any organizational prove of boost intrapreneur. It is not easy. It is the result of a process but not a wish imposed. Started for “*open the organization's book*”, so everybody will be able to see it. The book would show which ones are the better and worst possible sceneries, that can be reached with the spreading of the entrepreneur culture inside itself.

Confidence inside makes easy the second key: delegation. Let people take autonomy decisions over the research of possible variations in a process or/and in a product or service.

Delegation implies “share power”, democratize structures, break paradigm “power and control” by other management models more flexible base on better practices of leadership. Limits established by selfish interest must be defeat, and increase the relative power of each boos or department.

The environment of this spreading effort of entrepreneur culture is determined by the quality of the internal communication channels and bosses' behavior.

#### **4.6.4 Culture in the Scenario of High Intrapreneurs**

The efficient high intrapreneurs affect principally the strategic culture inside the organization. They communicate the change as something positive that must be welcome, giving confidence to take risks and make emphasis on the future and on factors that are definitive to be successful in the new environment.

- Social culture: embrace values, rules, behaviors that affect the social process into the organization.
- Strategic culture: embrace values, rules, behaviors that affect the organizational strategic work.
- Operative culture: embrace values, rules, behaviors that affect operative work.
- The success high intrapreneurs are focused in these factors

#### **4.7. Innovation**

To determine innovation concept in this research, it is necessary clarify the innovation meaning of Adair (1992). He gave the meaning of make

or introduce something new, ideas, methods or new instruments.

Schumpeter(1939) defines innovation as an irreversible historic change of make things. He defines company as the realization of new combinations and entrepreneurs to which that realization is aimed. This is expressed as a "change in the production function".

It is important clarify that this research is focused in the intrapreneur, who gives the innovation initiative and this can end or not in an invention. Borrel (1982:265) makes a distinction between original innovation, innovation transference and adaptable innovation. Innovation can be transferred to other situations. It is called adaptable innovation to transferred technology.

Innovation is more than have new idea. It includes the process of introduce them with success or make things to happen in a new way, for instance, making new ideas in useful, practical and trade able products or services.

After look carefully at different positions quoted related with innovation, for this research the following meaning is proposed :

Innovation is the action of introduce or produce something new, idea, method, instrument, ways of thinking in business, services, of start up in a market, organize, solve problems, make adaptations and modifications to products or services with the purpose of fulfill needs or generate new. Source: Adair 1992; Brohel

1982; Clagett 1992; Drucker 1986, 1992; Hagen and Aiken en Asomoza 1980; Porter 1991; Henderson and Clark 1990; Romero 1993; and Schnarch 1992).

Authors define different kinds of innovation. Schumpeter, (1939) divides five kinds: production of a new good, a new production method, a exploitation of a new sources of raw materials, reach a new market, the reorganization of a production system. Other authors as Stephen, (1992); Ramírez et al., (1992); Halty, (1986); Hannan and Freeman, (1984); Henderson and Clarck (1990); Katz, (1986); Corona(1989); Abernathy en Ramírez et al. , (1992) classify innovations in absolutes or radical, that break with everything. Incremental innovation or making minor changes in existing products or services, taking advantage of their potential.

This search process of Henderson and Clarck(1990) propose a classification that contemplates:

- Incremental innovation or minor changes; modular innovation, for stages. Radical innovation and architectural innovation. Its essence is the reconfiguration of an establish system. Tiding the current components in a new way, making significant changes between these components. These changes are based on how product components are tide. To be integrated in a new way more efficient.

- Radical Innovation, Kuatko Hodgetts, (1992): It is the innovation that requires experimentation and represent inaugural preconceptions that have been issued (computers, post it, pampers, etc.). Increment innovation, which refers to a systematic evolution of a product or service through new or more markets (pop corn at the microwave, frozen yogurt, etc) Kuatko y Hodgetts 1992). It is important taking into account, that incremental innovation is after the introduction of radical innovation.
- Arquitectural innovation that contemplates the impact of components in the system. This produce important changes in the interaction between the product's components (Henderson & Clark 1990: 9-13).

Therefore the typology to use in this research is as follows:

- Radical innovation
- Incremental or gradual innovation
- Arquitectural innovation

Therefore, we can see that the only unchanging thing is the change. Never did the scenarios have changed so vertiginous in all aspects and more in innovation, in which the obsolescence goes faster. One of the most important changes is the lost of value of economies of scale and its replacement for the economies of ambit. It is characterized by small productions of high quality and with competitive costs.

On the other hand, the organization is conceived as a cultural institution, that is orientated under values such as responsibility and professionalism.

Finally, and based in the explanation above, a theory about innovation cannot be developed. We already know enough to say when, where and how a systematic way of new innovation opportunities is found. And how the probabilities of success of fail are evaluated. In changing environments organizations have two ways to follow:

React fast to environment changes creating internal process of innovation, which generate changes in the environment. According to Peters (1989), there is not more important capacity for an organization than the change in itself. The second most important task is, to give the welcome to innovation. Innovation in the organizations is a economic and social responsibility. For this reason is mandatory learn to innovate, this implies changes to avoid failure.

## 5. METHODOLOGY

### 5.1. Research Approach

The study approach was a qualitative investigation, based on the concept that the experience is the best way to understand the social behavior. It has the advantages of:

- Include a wide sort of variables in the leadership behaviors research.
- Interpret actions and facts through the eyes of the people researched.

The qualitative research was developed with personal interviews to Pymes' managers. Inviting to discover a case of initiation and execution of a strategic change under their personal supervision.

The research process has been proved by the hermeneutic. It helps specify the qualitative aspect. It is the interpretation of an historic and linguistic condition present in the human condition. This is a research that let approach the problem in an opposite way as it is done in the analytic rationality. It has previous procedures to the treatment of the objective. Talk over hermeneutic means go further than the simple description, keeping the tension between singularity and the context (culture) and the search of universals that let improve the knowledge over what is studied. It also implies the pertinent tension between the analysis categories above and the emergent categories of the studied reality.

### 5.2. Stages of Methodology Construction

The qualitative method is based in three stages: cases acknowledgment. This embrace exploration of

the situation, research design and the work field preparation. Cases characterizing corresponds to recollection and organization of information. Cases study in depth include the pattern identification that organize the situation and the data analysis, their interpretation and the inductive conceptualization.

**First stage:** Case acknowledgement that embrace the exploration of situations, research design and preparation of the field work.

To do this a form of a semi-structure interview was prepared. (see attached No.1). Fourteen students of the intrapreneur organization subject were trained to apply the interviews. The interviews were recorded, transcribed and checked by a research assistant.<sup>1</sup>

To the elaboration form of the semi-structure interview in its first stage, was taken from the questionnaire made by Lombriser in his Doctoral thesis (1994:225). The second part was based on Garzon's Doctoral thesis (1998: 51-52).

The semi-structured interview was chosen as essential instrument of data recollection because with this technique it is possible to have per-

sonal contact and go deeper into the researched topic.

The interviews lasted between 1,5 and 2,5 hours. The arithmetic mean was of 2 hours. In all interviews the same procedure was used. After a small introduction about the study objectives, the interviewer asked the questions in the questionnaire.

After the interview, a protocol of the meeting was written. In these cases are the tape transcription. Each protocol was printed. Afterward the research assistant listened the recordings and review the fidelity between these and the written protocol. The mistakes were corrected.

**Second stage:** Information characterization and organization.

The interview transcriptions were used to codify the answers into analysis categories, using the software Atlas.ti, the knowledge workbench, version WIN 4.2, scientific software developed in Berlin.

Based on the information gathered from the interview, the next step was to categorize. Organizing from the initial questions, making a pre-diagnosis based on the interviewed words and classifying in certain category. In the same way, finding inside the same category what happen with the Pymes' managers in their relations with themselves. The categories used are showed bellow:

<sup>1</sup> Egna Avendaño Cárdenas Graduated in International Relations and member of the research seedbed of the Faculty of Management and Business.

1. Intrapreneur organizational culture
  - 1.1. Risk tolerance
  - 1.2. Support to innovating ideas
  - 1.3. Identity and ownership feeling
  - 1.4. Autonomy
  - 1.5. Structure
  - 1.6. Performance - award
  - 1.7. Conflict tolerance
2. Innovation
  - 2.1. Processes ( how was done)
  - 2.2. Causes ( external and internal)
  - 2.3. Opportunity
  - 2.4. Outcomes
    - 2.4.1. Outcome architectural innovation
    - 2.4.2. Outcome gradual innovation
    - 2.4.3. Outcome radical innovation
3. Intrapreneur leadership.
  - 3.1. Leader role
  - 3.2. Strategic change
  - 3.3. Idea mentor
  - 3.4. Supervision
  - 3.5. Reasons
  - 3.6. Planification
  - 3.7. Orientation

**Third stage:** Patron identification to organize the situation. This embrace the data analysis and their interpretation.

The information categorizing, supplied by the interviewed managers respond to the need of retake the initial categories to determine the information pertinence in the exploratory research project developed. Making pre-diagnosis and tiding the interviewed voices with the initial categories.

Once the interviews content has been reviewed, it is analyzed in concordance to the codification system done and the support of Atlas.ti version WIN 4.2.

Data analysis and interpretation demanded a review by the researcher. From this review frequency tables were generated of each on of the signification category. Each category was confronted with the interviewed answers getting crossed analysis tables, tendency and frequency tables. Based on this the researcher develops a discussion about the results and establishes conclusions.

### 5.3. Reliability

To this study the content analysis was used. This technique gives emphasis to different message components. There are three categories, defined by Roger Muccheilli in 1974: The first one, the logic-semantic technique (also called of thematic AC), this is the most frequent and typical. It resorts to logic to summarize, define categories and verify the arguments and conclusions validity. This leads the analyst to verify, classify and eventually uses statistics, through the frequencies list, that is the most simple technique of thematic analysis. It consist in make a list with the frequency of words appearance in the text. This was obtained from the software used to analyze the answers

and questions of open end. This requires categorize each interview in questions and answers. Afterwards, it demands the lecture and identification through what is highlighted in each answer and text quotation for each interview identifying its relation with the codification system.

## 6. ANALYSIS AND DISCUSSION OF RESULTS

There are several aspects in the Pymes' high intrapreneur behavior, which will be analyzed based on the results of exploratory study.

### First field:

This study confirm the results got by Lombriser(1994:207), where it is proved that the high intrapreneurs track actively the enviroment to detect weak or soon signs of new opportunities or threats.

This is shown by the Pymes' managers interviewed in:

- We look for differentiation
- We do this based on the knowledge of market needs.
- We identify products in foreign markets.
- We are strong observation and monitoring the environment
- We look for improve our organizations competitive

### Second field:

To Lombriser (1994:207) high intrapreneurs plan the strategy. They are part of the planning strategy, involving important people and with responsibility in the strategy development. In the poll pymes:

- Managers design the plan and supervise its fulfillment.
- The above taking into account knowledge, experience and vision.
- They try to reach the team agreement.
- They direct the business plans achievements.
- They foresee alternative plans.

### Third Field:

In the process of carrying out the strategy, the high intrapreneurs studied by Lombriser (1994: 208) started planning but delegating the detailed planning. Keeping a joint vision process and establishing controls. The pymes' high intrapreneurs:

- Direct
- Are the ideas mentors (all the interviewed)
- Start the project
- Lead the project
- Join the team
- Get everybody involved
- Coordinate the development
- Are sponsors
- Take the final decisions
- Assume the responsibility for failure or success
- Oversee and control the execution

According to the interviewed, people get involve:

- With good communication
- Total and direct to everybody
- Verbal, informal in the team
- Written communication with customers
- With periodical reports
- Using different available media in the organization

#### **Four field: Creation of an intrapreneur culture.**

Taking the model developed by Garzón (2002: 51) that reveals the essence of an intrapreneur organizational culture, the outcome obtained that make easy the intrapreneur work at pymes in order are:

- Risk tolerance
- Support to innovative ideas
- Identity and ownership feeling
- Autonomy
- Structure
- Performance – award
- Conflict tolerance

Each one of this characteristics is described as follows by the pymes managers:

#### **Risk tolerance**

- It is a permanent factor in an intrapreneur life to keep update in the market.
- It is necessary be willing to take risks

- Lots of risks must be taken
- The risk is to lose customers if there is not innovation
- Followed hunches (understood as the match between experience and knowledge in a mental process) is necessary when things fall themselves or change.
- It is necessary to make people aware of the process to measure scope and risk taken.
- The steps forward are done gradually, thus risks are less and is more difficult fail.
- If we fail, we have to accept and learn.
- The 90% were ideas, 10% risk.

#### **Support to innovative ideas**

- When an ideas is proposed, it is discussed and developed after a team agreement.
- It is given trusting people
- It requires priority changes
- External support must be demanded
- It requires escort
- It is necessary to make people feel confidence
- It must be given everyday
- Debe darse todos los días.

#### **Identity and ownership feeling**

- People who participated feels love for their work and for the company.
- A flexible schedule lets people feel identity and commitment
- Recognize what people do is important and helps to organization perdurability

- Empowerment generates it
- It is got aware of the responsibility
- It depends on the organization management to reach it
- People who work for the organization are necessary
- It was reached with a commitment culture
- It requires tools that let the employee participate without fear.
- It requires a good time management.

#### **Autonomy**

- There is total autonomy with responsibility
- It requires tranquility to make mistakes
- It lets freedom
- It demands independence and freedom

#### **Structure**

- Requires a structure redefinition
- All have the same responsibilities
- Decisions are taken by agreement
- The innovating team is strengthened
- Low formalization
- Coexisted with disorder
- Flexibility is needed

#### **Performance – award (the more used)**

- Bonus
- Awards (shares)
- Public acknowledgement

- Salary improvements
- Extra- income
- Profits participation
- Promotions
- Budgets for innovation (risk capital)

#### **Conflict tolerance**

- Argument is allowed
- An open doors management is required
- It generates creativity
- It is constructive
- It invites to participation
- It is tolerated because everybody wanted that innovation
- It accepts disorder

#### **Fifth field**

Innovation, according to Lombriser (1994: 212) the important is process and mentality. To this respect, interviewed stated:

- The innovation project was developed to solve the work disorder in the organization
- It was made intuitively
- Came from the tool knowledge and customer requirements
- It started selling the idea to people to fulfill the commitment
- It needed to bring the idea to people at the project.
- The main objective was search the way to keep organization inform about the product development.

- People should know company very well. Its objectives at long and short term.
- It is made through the agreement process
- First we looked for information and then we taught our knowledge to make everybody learn
- A key element was kind of knowledge that was going to be transferred and the used methodology
- The key was the consultancy. Argue the options with the team and finally socialize with the organization.

Respect to innovation answers these were:

- Gradual 13
- Arquitectural 1
- Radical 0

### Sixth field

Other important aspect identified to the success change generation by pymes' managers to develop innovation in their organizations is the organizational learning. This confirm the statements of Garzón (2003) as follows:

- To innovate it is necessary to get information
- Working and learning in team let improve the learning
- The first step was training to speak the same language
- We learn from our mistakes and we never did those again
- The trained, at his return to the organization trained other employees
- In the innovation process we were stressed and asked for additional motivation training
- A pyme that wants to be a knowledge organization generates innovations permanently
- Innovation development implied an entire learning process
- To innovate we had to learn about materials and processes.
- The change was my idea. I planned and developed the strategy
- Tiredness and money issues make people innovate
- Because of misunderstanding with customers
- Customers complains
- Technological improvements
- High costs of raw materials
- WOST analysis
- Improving market share
- Solve maintenance problems
- Imports substitution

### Contraire outcome against from the theory statements

The following are the results that do not match with the profile of the high intrapreneur proposed by Lombriser (1994: 214). He classifies this as "less efficient" related with innovation causes:

These is identified by Lombriser (1993:207) as the development of reactive strategic information, reacting to the threats and introducing late the change, when the signs are not strong.

## CONCLUSIONS

To reach succes at the Pymes, they need a new kind of managers that, quoting Lombriser is called high intrapreneur, who has to fulfill three basic qualities and abilities:

1. Entrepreneur capacity to foresee in a creative way the strategies that will be taken in the future.
2. Organizational ability to create an intrapreneur organizational culture characterized in importance order:
  - Risk tolerance
  - Support to innovative ideas
  - Identity and ownership feeling
  - Autonomy
  - Structure
  - Performance – award
  - Conflict tolerance

Therefore high intrapreneurs influence directly in the organizations' social, strategic and operative culture

3. The behavior stages of high intrapreneur of polled Pymes are:
  - **Fist stage:** follow actively the environment to detect weak or new signs of new opportunities and / or threats.
  - **Second stage:** High intrapreneurs plan the new strategy personally and directly. They involve all important people with responsibility around the strategy execution
  - **Third stage:** High intrapreneurs start the general plan but

delegate the detailed plan, maintaining a joint process vision and establishing controls.

The high intrapreneurs interviewed in some aspects can be classified according to Lombriser as “less efficient” establishing internal and external causes of the innovation performed, the development of reactive strategic innovation, reacting to threats and introducing a late change.

The organizational learning is considered as a key variable to boost innovation, integration of different experiences, knowledge and abilities around a community in which all members learn from each other, modifying the attitude in the person behavior and the environment where he interacts, improving:

- The organization strategic capacity
- Strengthened the change capacity
- Improving the organization performance

Finally, taking into account the interviews to pymes' managers, high intrapreneurs get a systematic strategic direction and active during all the change process.

## REFERENCES

- [1] Agor, Weston H (1988) Burturing executive Intrapreneurship

- with a brink-skill management program, in *Business Horizons*, Vol. 31, 3, May-June (page 12-15).
- [2] Agor, Weston H (1989), *Intrapreneurship and productivity*, in *Bureacrat review*, Summer (page 41-44).
- [3] Apertura (1993) *Intra emprendedores, informe especial*, Buenos Aires, Argentina (p. 78, 91).
- [4] Allaire Yuan y Firsirtu Mihaela (1992) *Teorías sobre cultura organizacional*, editorial Legis Santafé de Bogotá D.C. Colombia.
- [5] Asomoza Miguel (1980) *Innovación, tecnología y complejidad en un grupo de organizaciones mexicanas*, C.I.C.A. No. 7 I.P.N. E.S.C.A. México D.F.
- [6] Atlas Ti versión WIN 42.
- [7] Bart Christopher K (1988) *New units: Use them wisely to manage innovation*, of national center for management research and development, in *Sloan Management Review*, Summer (p. 35-43).
- [8] Barriga Manrique Enrique (2003) *gestión de mediana y pequeña industria en los países miembros del grupo andino*, EAFIT, Cámara de comercio de Medellín, CAAF, Medellín.
- [9] Brohel Wayne (1982) *Entrepreneurship in the less developed*, World Prentice Hall, U.S.A.
- [10] Cates Norman (1987) *Intrapreneurial models and applications for hospital and health-related organizations*, in *Advanced management Journal*, Summer (p. 41-45).
- [11] Clagett Donald (1992) *Harnessing innovation through Intrapreneuring: a study of champion program in a large telecommunications firms*, tesis PhD. Walden University, U.S.A.
- D'Ambois R (1989) *Colloque de la fondation D' Entrepreneurship*, Montreal, Canada.
- [12] Denisson R Daniel (1991) *Cultura Corporativa y productividad organizacional*, editorial Legis, Colombia.
- [13] De la Cerda Gastelum José y de la Peña Francisco (1989). *Los conocimientos administrativos en México, retraso y avance*, en *investigación administrativa*, SEPI, ESCA, IPN, México. (p. 35-42).
- [14] D'Hainaut Louis (1985) *Objetivos didácticos y programación*, editorial OIKO, S.A. España.
- [15] Duncan W. Kack, et al (1988) *Intrapreneurship and reinvention of the corporation*, in *Business Horizons* (May-June) Page 16-21.
- [16] Dufour Ghislain (1989) *L'intrapreneurship, génératur de développement économique valor, refusons toute confrontation*, Colloque de la fondation de L'entrepreneurship, Motereal, Canadá.
- [17] Drucker, Peter (1960) *La gerencia de empresas*, editorial Suramericana.
- [18] Drucker Peter (1977) *El empresario de la nueva era*, editorial Continental S.A. México.
- [19] Drucker, Peter (1986) *La innovación y el empresario innovador*, Principios y Prácticas, editorial Suramericana S.A. Buenos Aires.
- [20] Drucker Peter (1992) *Gerencia para el futuro el decenio de*

- los noventa y más allá, Editorial Norma, Santafé de Bogotá D.C. Colombia.
- [21] Finch, Peter (1985) Cultivating free sprints, fresh ideas, and growth, in *Business Marketing* July (p. 32-40)
- [22] Filion L Jaques (1989) L'intrapreneurship du colloque de la fondation L'entrepreneurship, Montreal, Canadá.
- [23] Fry Art (1987) The post-it note: An intrapreneurial Success, in *Sam Advanced Management Journal*, Summer (p. 4-9)
- [24] Fondation de L'Entrepreneurship (1989) L'Entrepreneurship en 1898 Vudu, Quebec, Janvier, Canadá.
- [25] Garzón Castrillon, Manuel Alfonso (1995a). El programa intra emprendedor, y la productividad , en Simposio perspectivas de la empresa y la economía Mexicana frente a la reestructuración productiva, Universidad Autónoma Metropolitana, México.
- [26] Garzón Castrillon Manuel Alfonso (1995b) Guía para la elaboración de planes de negocio, (traducción y adaptación), Programa intraemprendedor, México.
- [27] Garzón Castrillon Manuel Alfonso (1998). El programa intraemprendedor una alternativa para incentivar la innovación, Estudio experimental en una gran empresa de energía en México, Tesis doctoral IPN ESCA, México D.F.
- [28] Garzón Castrillon Manuel Alfonso et al (2002). El programa intraemprendedor una alternativa para incentivar la innovación la Educación Superior, UAN Bogotá DC.
- [29] Garzón Castrillon Manuel Alfonso (2004). Una alternativa para impulsar la innovación intraemprendedora en organizaciones que aprenden, Segundo congreso internacional en Gestión del conocimiento y de la calidad, Corporación Instituto Tecnológico Iberoamericano de Informática ITI, y el Centro de Innovación y desarrollo para la investigación en Ingeniería de Software, la Universidad Industrial de Santander, Cartagena de Indias, Colombia
- [30] García Hoz Víctor (1989) Tratado de educación personalizada, ediciones Rial, S.A. España.
- [31] Gerard D'Amboise (1989) Pour des intrapreneurs entrepreneurs, Colloque de la Fondation de L'Entrepreneurs, Montereal, Janvier, Canada.
- [32] Hannan Michael y Freeman Glenn (1984) Dynamics of organizational , Oxford University. U.S.A.
- [33] Habermas Jurgen (1993) Teoría de la acción comunicativa, complementos y estudios previos, Editorial Rei, México.
- [34] Henderson Rebecca y Clark Kim (1990) Architectural innovation, the reconfiguration of existing product technologies and the failure of established firms, in *Administrative Science Quarterly*, 35 (p. 9-30).

- [35] Hirsch R.D. y Peters M.P. (1989). Entrepreneurship starting developing and managing a new enterprise P.I.P. Irwin Home-wood Illinois. U.S.A.
- [36] Hill Ira (1987) An intrapreneur-turned entrepreneur compares both worlds, in *research Management* vol 39 May-june (p. 33-37).
- [37] Hornsby Jeffrey S, et al(1993) An interactive model of corporate entrepreneurship, process in entrepreneurship theory and practice vol 17 No 2 winter (p. 29-38).
- [38] Jadoul, Pierre (1989) L'entrepreneurship á Bell Canada Générateur de développement économique, Colloque de la fondation de L'Entrepreneurship, Montreal, Canadá.
- [39] Karagazoglu Necmi an Brown Warren B (1993) Times bases management of news product, development process in production, *Innovation management* No. 3 vol. 3 June (p. 204-214).
- [40] Katz Jorge (1986). Importación de tecnología, aprendizaje e industrialización dependiente, fondo de cultura económica, México D.F.
- [41] Kolchin Michael And Hyclack Thomas J. (1987). The case of the traditional intrapreneur , in *Sam Advanced Management Journal*, Summer (p. 14-18).
- [42] Kwartko Donald, y Hoegestts Richard (1992). Entrepreneurship a Contemporary approach, Second Edition, Driden Press, U.S.A.
- [42] Kras Eva (1993) Cultura gerencial México EEUU, editorial Iberoamericana, México D.F.
- [43] Luchisinger, Vince and Bagby D. Ray (1987). Entrepreneurship and intrapreneurship: Behaviors, comparisons and contrast , in *Sam Advanced management Journal*, Summer (p. 10-13).
- [44] Lombriser Roman (1994) Grande intraempresarios, *Financial Trimes*, Biblioteca de empresa editorial Folio, España.
- [45] McGinnis Michael and Verney Thomas P. (1987) Innovation management and intrapreneurship, in *Sam advanced Management Journal*, Summer (p. 19-23).
- [46] Nosnik Abraham (1993). La transformación de le gerencia mexicana, en *Management today* (Mayo) México D.F.
- [47] Ouchi William (1981) Teoría Z, ediciones Orbis, Biblioteca de la empresa, Barcelona.
- [48] Peters Thomas and Waterman Robert Jr. (1982). *In search of Excellence*, Warner , New York.
- [49] Pinchot Gifford III (1985) Intrapreneuring: Why you dont 'n to leave the corporation to become an entrepreneur, Harper& Row, Cambridge.U.S.A.
- [50] Pinchot Gifford III (1987). Innovation throuth intrapreneuring in *Research Management*, March-april vol. 30 No. 2 (p. 14-19).
- [51] Pinchot Gifford, Pellman Ron (1999) Intrapreneuring in action

- a habdbook for business Innovation Berrett-Koehler Publishers, Inc USA.
- [52] Pinchot Gifford & Pinchot Elizabet (2000). The Intelligent Organization, Berrett-Koehler Publishers, Inc USA.
- [53] Ramirez Bustos, Juan Antonio et al., (1992). Desarrollo tecnológico, una posibilidad al alcance de su empresa, Fonei, México D.F.
- [54] Roos Joel and Unwalla Darab (1986). Who is a intrapreneur in Man personnel Magazine (p. 45-49).
- [55] Robbins Stephen (1987) Comportamiento organizacional, tercera edición, editorial Prentice Hall, México D.F.
- [56] Roman Perez Martiniano y Diez López Eloisa (1988) Inteligencia y potencial de aprendizaje, evaluación y desarrollo editorial Cintel, Kapelus, Colombia.
- [57] Romero Luis Ernesto (1993) Intraempresariado una estrategia gerencial de estímulo al espíritu empresarial y a la innovación de las organizaciones. Ponencia VII Congreso Latinoamericano de Espíritu empresarial, U.A.M. Xochimilco, México D.F.
- [58] Rodríguez Astrid Genoveve (2003). La realidad de la Pyem Colombia, desafío para el desarrollo, Fundes, Bogotá D.C.
- [59] Rule Erik e Irwin Donald (1988). Fostering intrapreneurship: The new competitive edge, in the journal business strategy, may-june (p. 44-47).
- [60] Salinas Gómez, Orlando (1993) El empresario interno como dinamizador del cambio tecnológico de la empresa, VII Congreso Latinoamericano de Espíritu Empresarial, UAM Xochimilco, México DF
- [61] Scharch Alejandro (1992) Nuevo producto, estrategias para su creación, desarrollo y lanzamiento, editorial McGraw Hill, Santafé de Bogotá D.C. Colombia.
- [62] Stephen Kenneth (1992) How to perform Skip lot and chain sampling, ASQC, Quality press, U.S.A.
- [63] Schumpeter Joseph (1939) Business cycles a theoretical historical an stadistical, analysis of capitalist process, McGraw Hill, New Yor U.S.A.
- [64] Schumpeter Joseph (1967) Teorías de desarrollo económico, Fondo de Cultura Económica, México D.F.
- [65] Trevenet Maurice (1991) Auditoria de la Cultura empresarial, editorial Diaz Santos, Madrid.
- [66] Varela Rodrigo (1991) Innovación empresarial, un enfoque de desarrollo , editorial I.C.E.S.I. Cali Colombia. &