

## **Identifying The Actions Taken by Supply Companies Enrolled to Nacional Financiera's Productive Chains Program (Mexico)**

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### **Abstract**

This document carries out a description and characterization of the actions taken by the MiPyMEs (Micro, Small and Medium size companies), which are suppliers of the Regional Residence of Projects Building on Transmission and Transformation of the South East (RRCPTTS, in Spanish) of the Federal Commission of Electricity, which are currently appointed to the Productive Chains of Nafin. The factors reviewed are: Financial Capacity, Human Resources Administration, Technological Resources, Products Quality and services and innovation. The main discoveries reveal that it is required a bigger support from the development banks in order to facilitate the Mipymes an access to financing; developing human resources with the aim of adapting to the borders opening and updating technologies required by the processes and an efficient communication with clients and suppliers, thorough the Internet.

**JEL classification numbers:** L250, G320.

**Keywords:** Productive chains, Mypimes, Financial capacity, Technological resources, Innovation.

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## 1 Background

According to the Economy Ministry at his webpage “*ContactoPyme*” it is mentioned that the close collaboration between private suppliers and buying entities from the public sector, which prevailed in Mexico to 1985, while the economy was closed to the international markets, it propelled the development of a wide variety of industries producing capital goods. However, that collaboration did not exceed the limitations of a protectionist environment, which often prevented the national productivity from reaching enough competitiveness according to international standards. Also, the effective collaboration between private suppliers and the public sector entities got reduced at the beginning of the nineties. The credit restrictions, which affected the big public entities buyers of capital goods, mainly the Federal Electricity Commission and PEMEX, gave place to a severe reduction of their direct purchases and forced them to carry out their capital goods acquisitions through key in hand schemes<sup>5</sup>. Due mainly to the strong financial support that their foreign competitors have, this change in the purchase patterns made it particularly difficult in the performing and development of the national suppliers (ContactoPyme).

On the other hand, the Entrepreneurship Development Program 2001-2006 of the Mexican Government stipulates, among the guidelines for achieving the regional and sectorial economic articulation and integration that it shall promote and develop the regional and sectorial competitiveness, through the support of the Economy Ministry to strengthening projects in favor of the productive chains.

About the sectorial promotion programs, Muriel and Ruiz (2000), consider them a fundamental mechanism in order to look after the particular problems of segments of the industry, increase competitiveness and promote high impact productive projects. Among the benefits and advantages of this sectorial programs it is included strengthening the integration of productive chains and the particular development of specific industrial sectors.

As a response to the Entrepreneurship Development Plan 2001-2006 in Mexico, “Nacional Financiera”, creates the Productive Chains Program in 2001, as a solution for business, with the aim of offering financing electronically, training, technical assistance and information, as well as promoting the development of big value chains in Mexico. The value chain is integrated between big companies, governmental institutions and all those companies with which it has a business or commercial relationship.

Among the financing alternatives it can be remarked, the advance money asked for orders and contracts, credit to the public construction and electronic financial (NAFIN, 2007)<sup>6</sup>.

Later, Nafin and the Federal Commission of Electricity signed in April 2<sup>nd</sup>, 2001 the Productive Chains Agreement for the development of suppliers through electronic devices, and since then, many successful credit operations have been carried out in favor of the CFE’s suppliers who enrolled in that program.

Nowadays, the Regional Residence of Projects Construction on Transmission and Transformation of the Southeast<sup>7</sup>, an area belonging to the CFE, is carrying out the Nafin’s Productive Chains Program since 2003 and counts with a portfolio of 59

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<sup>5</sup>Key in hand: Integral projects in which the contractor is obligated since the design of the work to do to the full termination, including, when required, the technology transference.

<sup>6</sup>Consulted on September 30<sup>th</sup>, 2006 at the website. <http://www.nafin.com/portalf>

<sup>7</sup>From now on it will be cited as RRCPTTS.

suppliers currently affiliated to that program, who have been using electronic finance as a means for financing (SICAP, 2007)<sup>8</sup>.

Currently, in Mexico there are structural issues which make difficult the proper development of Mipymes, a phenomena which is not exclusive of Mexico, since it is possible to be analyzed almost everywhere in the world. "Among the problems there are wrong governmental policies, inappropriate technical- productive infrastructure, lack of technological resources, almost inexistent use of adequate entrepreneurship planning systems and a lack of corporate culture of the Mexican entrepreneurs" (Kauffman, 2001). Moving forward with the Mipymes difficulties development, López (2007) states that the Mipymes do not have a long term vision about investments to carry out in order to have a competitive access to markets and neither they have a long term vision for the maintenance and reposition of their, productive, distribution and commercialization system.

It is fair to recognize that despite their problems, the Mipymes are an important factor for Mexico's growth and economic development. According to the National Institute of Statistics and Geography, (INEGI) and the Economic Census 2004, there are 2,792,6782 micro businesses, 96,620 small businesses, and 22, 390 medium size businesses, compared to 11,360 big companies registered in the economic censuses. In these, it can be remarked that micro businesses generate 6,061,731 employments, small businesses 1,888,456 employments and medium size businesses 1,686,797 employments, compared with 4,774,769 generated by big companies; it is, the micro, medium size and small companies generate 66.87% of the employment at de productive sector, without considering other sources of employment.

The Mipymes (micro, small and medium size companies) according to the 3d., Article for the Competitiveness Development of the Micro, Small and Medium Size Companies, published in the Federation's Official Newspaper on December 30<sup>th</sup>., 2002, classifies them based on the following criteria:

Table1: Classification of the micro, small and medium size companies in Mexico.

| Stratification by number of workers |          |          |          |
|-------------------------------------|----------|----------|----------|
| Sector/Size                         | Industry | Commerce | Services |
| Micro                               | 0-10     | 0-10     | 0-10     |
| Small                               | 11-50    | 11-30    | 11-50    |
| Medium-size                         | 51-250   | 31-250   | 51-100   |

Source: law for the competitiveness Development of the micro, small and medium- size companies (2002)

According to Haime (2002), there are three first order elements that every management should consider in order to be able to generate the necessary conditions for development and those are: an optimum stock handling, a strict control over expenditures and costs and the generation of cash flow, mentioning that almost all the decisions taken by the company must be in the track of generating more cash flow, which at the end, represent the true profits for business (pp. 196-198).

<sup>8</sup>SICAP Productive Chains System in Spanish, is an application via web ( Intranet) which makes possible to review information on the different operations of electronic finance between the CFE and Nafin.

## 1.1 Research Questions

According to the arguments mentioned, referring to the problems on managing Mipymes, the development issues they face and the inability of the governmental programs offering solutions for this sector, it is proposed a need for identifying the actions adopted by the Mipymes currently enrolled in Nafin's productive Chains, which may be of benefit for their business development. Therefore, the following question is set out:

Which are the actions that have been taken by the Mipymes who are suppliers of the RRCPTTS, in the benefit of their business development and which are currently enrolled in Nafin's Productive Chains?

## 1.2 General Objective

- To identify the factors associated to business development.
- To describe the Mipymes' profile, suppliers of the RRCPTTS, affiliated to Nafin's Productive Chains, related to the actions they have taken and which may benefit their business development.

## 2 Referential Framework

This section addresses those factors that support the research, being these: contextual, theoretical and empirical. Considering that this is a descriptive research that does not require a theoretical framework to be built, it is necessary to review some theories that make possible to have a better understanding of the variables in the observed phenomena in this research. At the same time, the research retakes the empirical evidence about a research carried out in the state of Veracruz by Aragón-Sánchez and Rubio-Bañón (2005), both full time professor and researchers at the University of Murcia, Spain. Beginning with a description of the contextual framework where the research takes place and a conceptual definition of the items mentioned along this study.

### 2.1 Contextual References

The growing interest, both, academic and technical-political on the problems faced by companies about the companies issues according to CEPAL (2004), is based on a series of arguments and evidences which state the positive relation between business development and economic growth, its significant role in terms of renewal of the socio – productive tissue, the enrichment of innovating process and the creation of new labor positions. Though the key for economic development in general is related to the level and increasing speed of productivity, this depends at a great extent on the performance of the economic agents at a macroeconomic environment, its predisposition to assume new risks, innovate and invest, the pressure of the competitors and clients, its concern about reducing costs and improve the efficiency, of its constant search for new opportunities and market areas, the advantages offered by complementarity and synergy generated between companies, among other factors( CEPAL, 2004,pp. 237-260).

According to some international public organizations, they define business development as the process that the entrepreneur and his/her personnel do in order to acquire or

strengthen their abilities and skills, which boost an efficient and accurate management of the company's resources, the innovation of products and processes, in a way that they contribute to a sustainable growth of the company.

According to Martínez (2005), business development depends on “the capacity for strategic management and organization of the company to be informed; make decisions, carry out and control resources, actions and results, in relation with the market's institutional changes, the organization, education's effectiveness, culture, ability for innovation, interacting with an organizations network”.

The term business development is understood in this study, as the different actions carried out by companies, which have determined their growth from the point of view of the determinant factors of competitive advantages.

### **2.3 Theoretical and Empiric References**

During the last years, beginning with Wenerfelt's paper (1984), about the internal factors of the company as a competitive advantage, a new focus has emerged, the resources and abilities, theory developed by Robert M. Grant (1995). According to this resources and abilities theory, the base where companies support their ability to achieve superior economic benefits lies in the fact of counting with resources and special or distinctive skills. Resources can be technical equipment, brands, capital and distinctive skills refer to the fact that some companies count with a specific “Know how”, they have a full command of a certain technology, they carry out more efficient procedures and in general, they know how to do a certain thing better than their competitors. This is, according to this perspective, the origin of their sustainable, competitive advantage would be their resources and over all, their skills or capacities and therefore, it resides at the inside of the company.

In relation with the internal factors which propel the competitive success of the PyMEs, Aragón-Sánchez and Rubio-Bañón (2005) in a recent research named “Factors that Explain Competitive Success: The Case of the PyMEs at the State of Veracruz”, they conclude that these factors include:

- Financial capacity: Mentioning that the companies will be closer to competitive success if they set incomes budgets and annual expenditures and if they analyze the economic and financial situation of the company.
- Human resources management: Paying more attention to practices in favor of the human capital growth and capable of managing correctly the organization knowledge.
- Technological resources: Developing and acquiring new technological assets. If the main competitors count with a more efficient and modern technology or if the companies only invest once they confirm the good results achieved by rival companies, the lesser their capacity to compete.
- Quality of products and services: Analyzing constantly improvements at their processes, products or services.
- Innovation: in order to deal with the constant changes in technology, products and services, as well as the consumers' preferences.

### 2.3.1 Company's characterization

According to Betancourt and Lopez (2005), research work, where they carry out a diagnostic about the PyMEs in the metropolitan area of Veracruz – Boca del Río, with the aim of knowing which are the main competitive factors in order to achieve their development and market continuity, it is considered among the variables, the companies' characterization which is made of factors that may influence their competitive success, factors such as size, sector, market, how old is it, and education of the top responsible person at the company. Therefore, for this research's purposes, these factors will be included as the dimensions of the control variable named company's characterization.

### 2.3.2 Financial management

Financial management includes all the planning stages, execution and monitoring of money resources of an organization (Lusthaus, 2002). For the purpose of this research and according to Guiman (1997), we will focus on financial planning “whose subjacent objective is evaluating the cash flow of the company and to develop plans which guarantee their availability, in an adequate way in order to support the achievement of its goals”. In other way according to Pascale (1999), “if the company keeps a level below the tolerable there can be a lack of cash; this situation could force the company to sell its negotiable assets, to take new credits what would bring additional costs, or may lose business opportunities” (Pascale, 1999, p. 554).

Besides, Haime (2002) has been considered; he considers that between the elements of financial planning there is the budgets elaboration, these can be classified in operations budgets, permanent investments and financial budgets, as well as their analysis. Among the main analysis methods there are the financial reasons and proportions, break-even, financial change status and comparative financial statement with absolute and relative data (Haime, 2002).

Financial planning includes the company's financial flow in general, projecting the consequences of different investments, financings, and dividend decisions and evaluating the effects of different alternatives.

The idea is to be able to determine where the company has been, where it is now and where it goes, not only in the most probable events, but also at the results deviations.

### 2.3.3 Human resources management

The human resources management is in charge of planning and controlling the personnel who integrate the organization with the aim of assure that the needs of the people will be satisfied in a way that they may be able to work in order to achieve the company's goals (Lusthaus, 2002). Among the elements of human resources management, Dolan, Shuler and Valle (1999), suggest:

- An analysis of work positions, a process which consists in describing and registering a work position, its main objectives and activities, the prevailing conditions under they are carried out as well as the knowledge, required abilities and skills.
- Valuation of the performance of the personnel, structural and systematic procedure in order to measure, evaluate and have an influence on the attributes, behavior and results related to work, with the aim of find out how productive the employee is and therefore improve his/her future performance.

- Personnel's training, defined as a cluster of activities with the purpose of improving the current and future performance of workers, increasing their abilities through the improvement of their knowledge, skills and attitudes.
- Adoption of variable payment systems, this is, salaries incentives plans, beginning from productivity norms and direct indicators on results of individuals, groups and organizations. (Dolan, Schuler and Valle, 199, p.p. 27-251).

#### **2.3.4 Information and communication technologies (ICT's)**

Technology has an impact on the competitive advantage if it plays an important role identifying the companies' position related to costs or differentiation from their competitors, as well as technological development can make feasible interactions where they were not possible and develop opportunities for advantages related to lowering the time required to get information and communication (Porter, 1987).

Since the 90's, there has been an important revolution on the intensive use of Internet., as well as with the adoption of computer apps for automatizing organizations' processes and there is an increasing evidence about the role played by the ICT's joining with other policies with the aim of improving the productivity and competitiveness of the PyMEs, both at developed and at developing countries. The level of ICT's adoption by a Pyme, is related to its size, economic activity and characteristics of the owner (Monge, Alfaro and Alfaro, 2005, p.p. 19-39).

#### **2.3.5 Quality of products and services**

In general, quality is defined as the product or service's capability to satisfy the client's requirements. Quality is now a status symbol for companies, which allows access to markets and improves the image of organizations. The increasing competition among organizations from the different commercial sectors has developed higher expectations from the customers related to products and services they buy. Due to the fact that customers feel attracted by quality and they expect to pay higher prices for a more lasting product, people inside the organization must believe that quality inspires an effective strategy in order to compete at the market.

An alternative for implementing a quality system assessment is certifying in the ISO 9000 norm, which is made of norms written by an international committee, based on several requirements that a company must satisfy in order to assess the quality standard of their processes (Luchi and Paladino, p.p. 2001, p.p. 115-140).

#### **2.3.6 Innovation**

Innovation is understood as a company's making of a product or delivering a service with knowledge that previously was unknown, no matter if it is the first organization carrying it out. What is really important is that innovation might be innovative for the company itself. The development of an innovation might be generated during the process, in the product or at the organization itself (Ib., p.p. 322-324). Though the innovation factor has a positive influence on organization's competitiveness, "The PyMEs' actions at the innovation field are characterized by its informality (predominance of intangible assets and use of resources applied simultaneously to other areas) and by its incremental characteristic (solving problems and adoption of changes and modifications on the track),

trying to reduce risks and uncertainties of innovative activities and fixed costs associated to them” (Lugones and López, 1977).

### 3 Methodological Design

This is a non-experimental research, since there is not a variables manipulation and the phenomena is observed the way it is, from its transversal modality, due to the fact that the information achieved corresponds to a single moment of the research. It is descriptive, since only describes the distinctive characteristics of the current profile of PyMEs, which supply the public sector, enrolled to “Nacional Financiera’s Productive Chains”, related to their adopted chains in the search of their business development, specifically those who supply raw materials or give service to the Federal Commission of Electricity, in the transmission lines and electric substations area at the Southeast region. Data will be collected through questionnaires applied to Mipymes owners or managers who are suppliers of the CFE, with at least 3 years of enrollment in the program at the moment of the survey.

#### 3.1 The Sample

The sample will be probabilistic, in order to determine the size, a simple random sample will be used. For finite populations the formula is:

$$n = \frac{Z^2[(p)(1-p)]N}{(Ne^2) + Z^2[(p)(1-p)]}$$

Where: Z = Trust level, (90%), N = Population (Universe), (39 companies), p = Probability in favor, (50%), e = Estimated mistake, (5%), n = Sample size. With a substitution of data at the formula we get:

$$\frac{(1.65)^2[(0.50)(1-0.50)]39}{39(0.05)^2 + (1.65)^2[(0.50)(1-0.50)]} = 34.11$$

The sample are 34 companies.

## 4 Results

### 4.1 For Specific Objective 1

Identifying the factors related to business development. The following factors were identified:

- **Financial planning:** About financial planning, it is evident the need for planning, analyzing and have a follow – up to financial resources, an inadequate management may put in risk achieving the company’s goals if there are not resources at the right time and under optimum costs conditions for operations financing.



- **Human resources management:** According to the bibliography reviewed, one of the main factors for a company to be successful, lies on being able to hire the most competent personnel, in recent years it has gained relevance the human factor and its contribution to the company to achieve its goals, then, it will be necessary to carry out an efficient process detecting the company's needs on knowledge, abilities and attitudes of the required personnel, as well as its enrollment, evaluation and professional development.
- **Applying information and communications technology:** Technological developments have gained great importance at all everyday areas, making it easier and reducing the cost of most of our activities. The same happens with organizations, which once they have access to technological resources and begin using them in order to obtain and transmit a big amount of information, they may have better conditions in order to compete at their markets, once they are able to bring their products or services to more places, with lower costs and investing less time.
- **Implanting a quality assessment system:** Quality is another factor accepted in literature as useful to explain competitiveness improvement and that has a strong influence in the image that the company projects to the market. If we consider that clients will feel attracted to products or services which accomplish their expectations, not only referring to price but also durability, then the products and services' quality that the company offers become of high importance in order to implement plans and policies which guarantee this and it can be achieved through the implementation of a quality assessment system.
- **Innovations development:** Due to the current accelerated dynamics on changes about preferences and needs at the market, it is increasingly important for organizations to reaction on time and before the competitors identifying those preferences with the aim of incorporating innovations to their processes, products and services they offer.

## **4.2 For Specific Objective 2**

A description of the profile of Mipymes that supply the RRCPTTS, affiliated to Nafin's Productive Chains Program, related to the adopted actions and that may propel their business development.

Table 2: Company's characterization

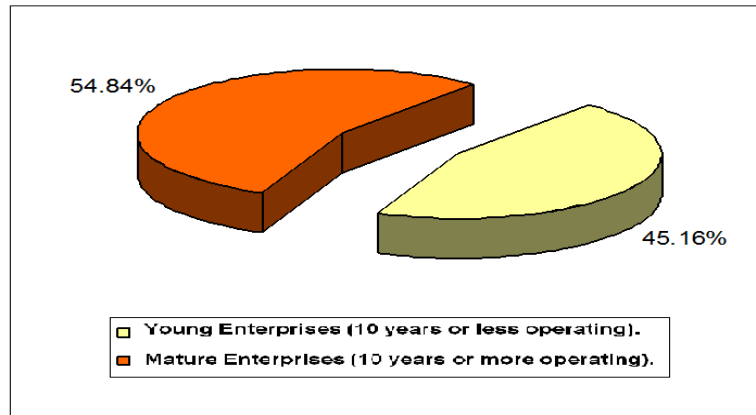
|   |                                     |                |
|---|-------------------------------------|----------------|
| Age   | Young companies                     | 45.16%         |
|   | Mature companies                    | 54.84%         |
| <b>Total</b>  |                                     | <b>100.00%</b> |
| Size  | Micro company                       | 6.45%          |
|   | Small company                       | 61.29%         |
|   | Medium size company                 | 32.26%         |
| <b>Total</b>  |                                     | <b>100.00%</b> |
| Market  | Local                               | 9.68%          |
|   | State                               | 22.58%         |
|   | Regional                            | 38.71%         |
|   | National                            | 29.03%         |
|   | International                       | 0.00%          |
| <b>Total</b>  |                                     | <b>100.00%</b> |
| Economic sector   | Industrial                          | 48.39%         |
|   | Commercial                          | 29.03%         |
|   | Services                            | 22.58%         |
| <b>Total</b>  |                                     | <b>100.00%</b> |
| Education of the top manager responsible of the company.                                | Primary                             | 0.00%          |
|   | Secondary                           | 3.23%          |
|   | High school                         | 19.35%         |
|   | University                          | 70.97%         |
|   | Masters/Doctorate                   | 6.45%          |
| <b>Total</b>  |                                     | <b>100.00%</b> |
| <b>Financing Planning</b>   |                                     |                |
| Budgets elaboration<br>(% of companies that make use of each kind of Budget).           | Operation budget                    | 93.55%         |
|   | Permanent investment Budget.        | 54.84%         |
|   | Finance Budget                      | 35.48%         |
|   | None                                | 6.46%          |
| Financial status analysis<br>(% of companies making use of each kind of analysis tools) | Financial reasons                   | 38.71%         |
|   | Break even                          | 25.81%         |
|   | Change status on financial position | 67.74%         |
|   | Comparative financial status        | 38.71%         |
|   | None                                | 32.26%         |
| <b>Human resources management</b>   |                                     |                |
| Positions analysis  | Never                               | 32.26%         |
|   | Almost never                        | 38.71%         |
|   | Some times                          | 19.35%         |
|   | Almost always                       | 9.68%          |
|   | In all cases                        | 0.00%          |
| <b>Total</b>  |                                     | <b>100.00%</b> |
| Performance/efficiency Valuation  | Never                               | 12.90%         |
|   | Sometimes                           | 45.16%         |
|   | Seldom                              | 16.13%         |
|   | Frequently                          | 25.81%         |
|   | Very often                          | 0.00%          |
| <b>Total</b>  |                                     | <b>100.00%</b> |

|   |   |                |
|---|---|----------------|
| Personnel training<br>(% of companies that have trained their personnel in the following areas)                     | Technical /Operational Course               | 54.84%         |
|   | Sales                                       | 12.90%         |
|   | Top management                              | 29.03%         |
|   | Informatics                                 | 41.94%         |
|   | Accountability/Finance                      | 64.52%         |
|   | Quality Control and management              | 29.03%         |
|   | Human resources                             | 64.52%         |
|   | Languages                                   | 16.13%         |
| Implementation of a rewards system<br>(% of companies that make use of each kind of reward)                         | Due to the achievement of company's goals   | 9.68%          |
|   | Due to the achievement of team goals        | 29.03%         |
|   | Due to the achievement of individual goals  | 83.87%         |
|   | None  | 12.90%         |
| <b>Information and Communications Technologies (ICT's)</b>  |   |                |
| Adoption of computer software<br>(% of companies that make use of each kind of software)                            | Texts processor                             | 90.32%         |
|   | Spreadsheet                                 | 77.42%         |
|   | Graphics program                            | 54.84%         |
|   | Accountability program                      | 58.06%         |
|   | Payroll and social security programs        | 45.16%         |
|   | Invoicing program                           | 61.29%         |
| Internet use<br>(% of companies that have implemented or carry out some of the following activities)                | e-mail                                      | 48.39%         |
|   | Web page                                    | 35.48%         |
|   | e- Commerce, sales.                         | 6.45%          |
|   | e- commerce, purchases                      | 3.23%          |
|   | Marketing through Internet                  | 9.68%          |
| <b>Implementation of a Quality Assessment System</b>  |   |                |
|   | Yes, we have a quality certificate          | 16.13%         |
|   | No, but we are working on it                | 9.68%          |
|   | No, and we are not working on it            | 74.19%         |
|   | <b>Total</b>                                | <b>100.00%</b> |
| <b>Innovations Development</b>  |   |                |
| Innovation Related to Product or Service<br>(% of companies that have carried out some of the following activities) | Improvements to offered products / services | 58.06%         |
|   | Incorporation of new products/ services     | 35.48%         |
|   | New products /services as raw material      | 48.39%         |
|   | None  | 12.90%         |
| Innovation Related to processes<br>(% of companies that have carried out some of the following activities)          | Production / service strategy               | 38.71%         |
|   | Changes in the organizational structure     | 12.90%         |
|   | Changes in the commercialization strategy   | 6.45%          |
|   | Services of pre-sale / post sale            | 16.13%         |
|   | Incorporation to new markets                | 29.03%         |

### 4.3 Company's Characterization:

#### 4.3.1 Age

Graphic 1: Classification of Mipymes by age

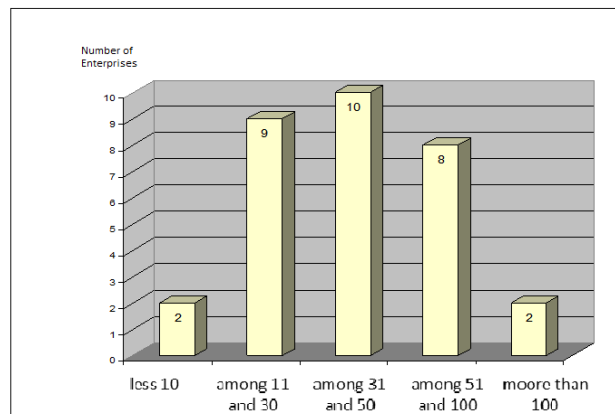


Source: Own

As it can be seen, Mipymes which supply the RRCPTTS enrolled in Nafin's productive Chains Program, most of them can be considered mature companies (54.84%) since they have an age of more than 10 years from the date they were created. Nowadays, the youngest companies at the sector were constituted 3 years ago and the oldest has 29 years of experience working at the market.

#### 4.3.2 Size

Graphic 2: Size of Mipymes by average number of employees



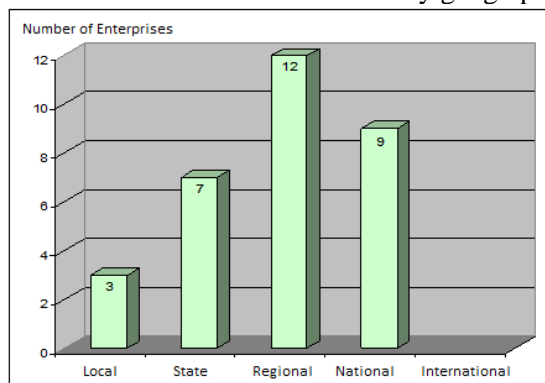
Source: Own

Considering the criteria of employees average in order to determine the size of companies, micro companies which employ 10 or less workers, represent a minority (6.45%) followed by medium size companies (32.26%) and finally there is a predominance of small companies (61.29%), which employ between 31 to 50 workers. This shows that micro companies represent in Mexico more than 90% of all companies

being the main source of employment, according to INEGI, these, have not currently played a meaningful role at Nafin's productive Chains Program.

### 4.3.3 Market

Graphic 3: Commercial market covered by geographic zone

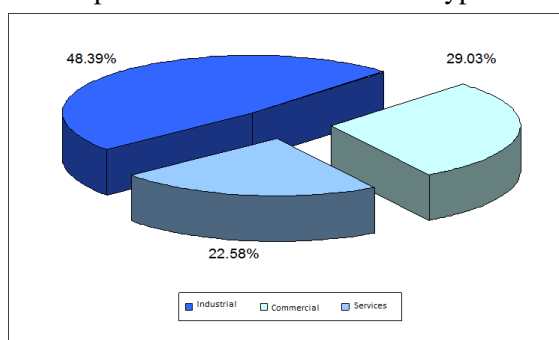


Source: Own

About geographic location of clients and suppliers with whom the Mypimes that supply RRCPTTS have their main business activities, it can be said that most of them are focused to the regional market, which contains 2 or more states of the Mexican Republic (38.71%), followed by companies that keep a business relation at a national level (29.03%), and at a lesser level companies which cover the market inside a state (22.58%), there are just a few the ones that center their efforts at a local level (9.68%). Finally, not a single company has showed interest in supporting its main activity in the exportation of goods or services.

### 4.3.4 Economic sector

Graphic 4: Economic sector of Mypimes

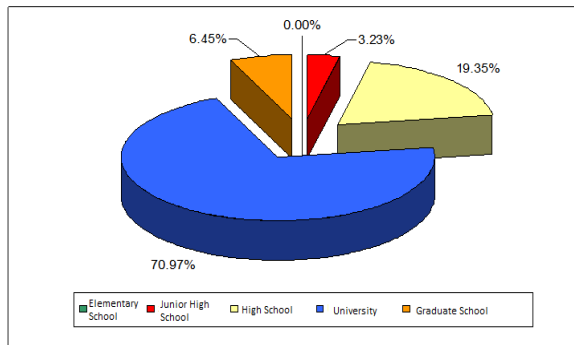


Source: Own

Companies belonging to the industrial sector represent a meaningful majority in the sample (48.39%) followed by commercial sector (29.03%) and finally companies that belong to the services sector (22.58%).

### 4.3.5 Education level of the top person responsible for the company

Graphic 5: Professional studies of the top person responsible for Mypimes



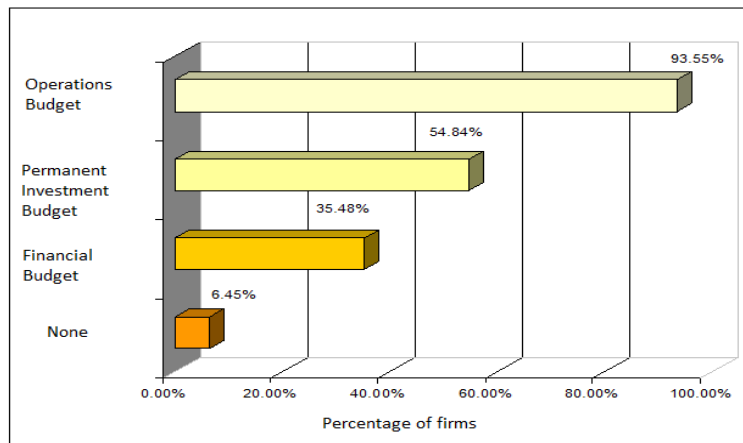
Source: Own

On the professional studies of people running Mypimes, there is a predominance of those who have completed bachelor degree studies, as their maximum level of education (70.97%), which means a strength for the companies of this sector, since they will be better prepared in order to face the diverse difficulties at the inside of the company and at their own commercial markets.

## 4.4 Financial Planning

### 4.4.1 Budgets elaboration

Graphic 6: Elaboration of different kinds of budgets



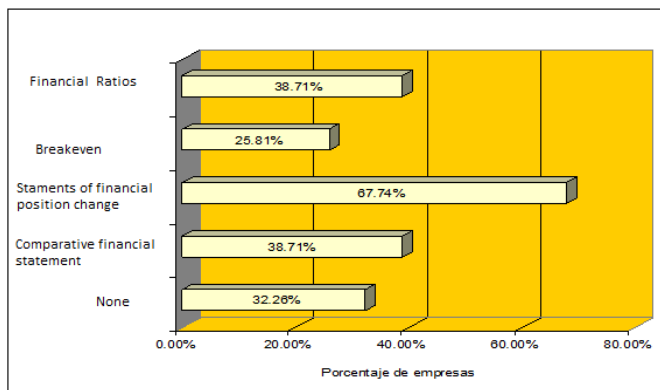
Source: Own

According to the results obtained from the questionnaires, related to the elaboration of the different kinds of budgets by Mypimes, with the aim of planning their activities, it can be observed that most of the companies make their operation budget (93.55%), a lesser number, companies make their permanent investment budget (59.94%) and just a few number of companies (35.48%) elaborate their financial budget and have a wider vision about how to manage their own and external resources. Simultaneously, it can be seen

that though at a very small portion (6.46%), there are still business that keep improvising their operations what makes them more vulnerable to the environment changes where they perform.

### 4.5 Financial Statements Analysis

Graphic 7: Use of diverse tools for financial statements analysis.

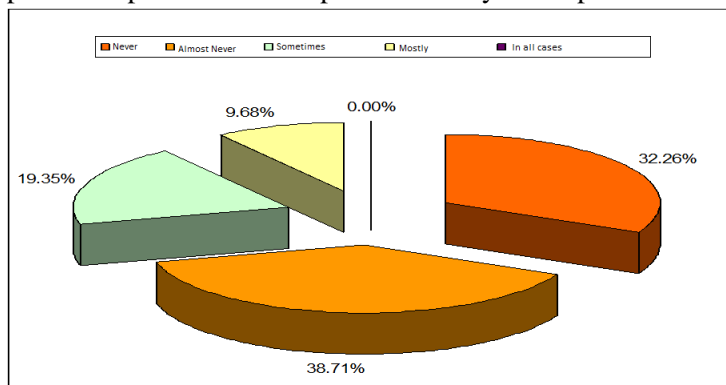


Source: Own

Currently, Mypimes that are part of the sample, reflect the use of change statement on their financial position (67.74%) as the main tool used in order to carry out the analysis of diverse factors, related to the business performance, evaluating the financial structure, cash flow, as well as being the support in order to design new plans of action which guarantee an adequate supply of financial resources for the company in order to be able of achieving its business development. Other elements for the analysis, like financial reasons and comparative financial statements are also used by Mypimes at the sector (38.71% in both cases) and a considerable sector that does not make use yet of any of these tools (32.26%), with a lack of a quantitative foundation for the evaluation of their actions and being able to carry out projections.

### 4.6 Positions Analysis

Graphic 8: Implementation of positions analysis for personnel hiring.



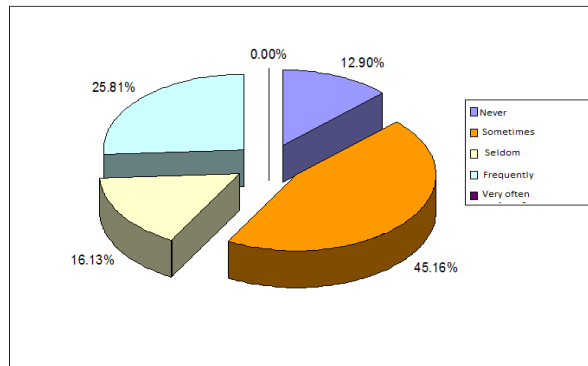
Source: Own

It is observed that no company that is part of the sample, has carried out in a constant way activities related to the description and registration of knowledge, abilities and skills required to fill a new position, in advance to hiring or personnel promotion that will fill the position, a very small amount (9.68%) declares to carry out these activities at most of the occasions when new positions have been created and a very important percentage (70.97%) accepts that never or almost never has carried out an analysis of the required needs of the personnel who will fill a new job position. This may have influence in the inability of companies to hire competent personnel.

## 4.7 Human Resources Management

### 4.7.1 Efficiency assessment /personnel performance

Graphic 9: Evaluation of Personnel Performance / Efficiency



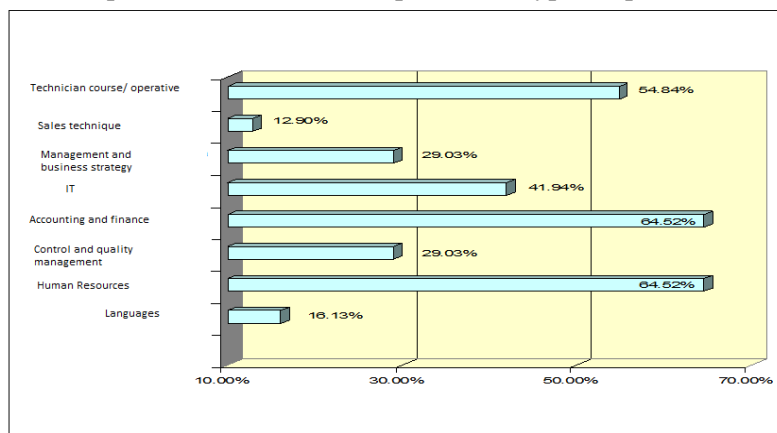
Source: Own

For the last 2 years, most of Mypimes supplying the RRCPTTS (87.10%) have implemented at least once, abilities evaluation, performance or results related to work, to the personnel that works in the company, with the aim of find out their productivity and improve their performance. This shows that entrepreneurs are aware on the importance of human factor as a means for achieving the company's objectives. However, it can be noted that though they are a minority, there are companies that have not carried out in the last 2 years, any evaluation to their personnel and therefore, do not count with a reference in order to detect their strengths and improvement opportunities about the involved human factor.



#### 4.7.2 Personnel training

Graphic 10: Areas of development of Mypimes personnel

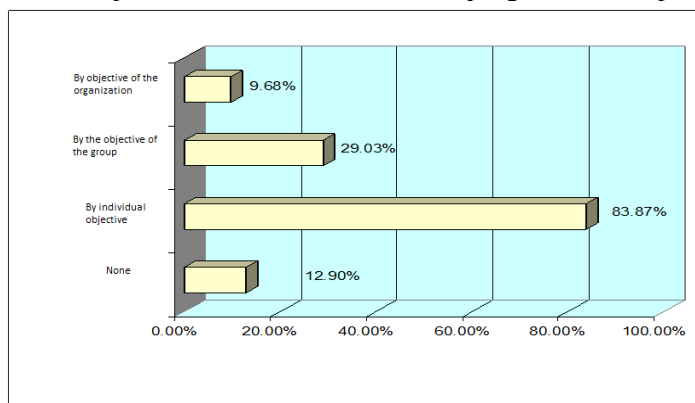


Source: Own

About personnel's training and development that conforms the Mypimes at the sector objective of this research, it can be noted the priority that companies give to the development of accounting and human resources areas (64.52%), followed by the development of operational or production areas (54.84%), and a very small interest for topics like quality and foreign languages, which indicates that this sector is not ready yet for international markets incursions.

#### 4.7.3 Implementation of an incentives system

Graphic 11: Implementation of an incentives program for the personnel.



Source: Own

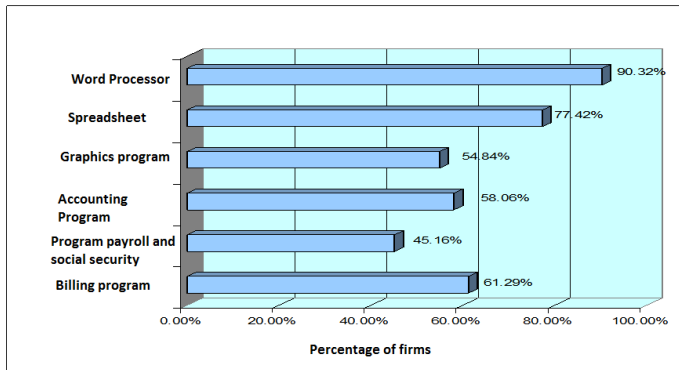
Though the economic factor is not the only one used for motivating the personnel to perform their activities, it must be remarked the importance of having salary incentives, which based on norms or preset productivity indexes, may contribute to a fair personnel remuneration to those who efficiently accomplish with their responsibilities. In that sense, Mypimes at the sample show an interest to fulfill this factor, since the majority (83.87%) implement salary incentives programs, based in the individual objectives achievement,

followed by group assigned objectives (29.09 %) and finally those companies that implement incentives for organizational objectives achievement (9.68%).

### 4.8 Implementation of Information and Communication Technologies ( ICT's)

#### 4.8.1 Adopting computer apps

Graphic 12: Use of computer apps.

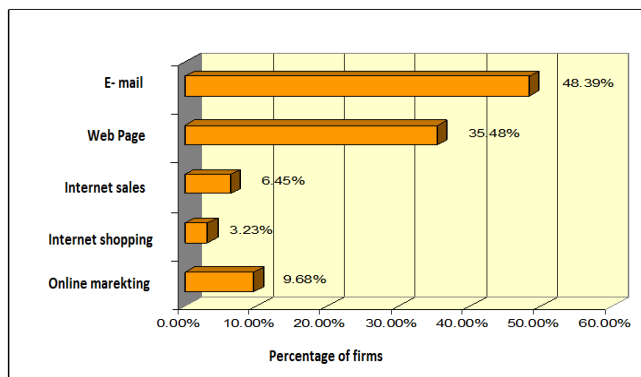


Source: Own

About the computing programs or software more frequently used for daily activities, it can be noted that 90.32% of Mipymes make use of word processors and 77.42% of them use spreadsheets. In general, the use of the referred different computer applications are used by more than 50% of companies, except the programs for pay roll and calculating the Social Security quotes (45.16%), indicating that most of the sector has already understood the importance of taking advantage of technologies available at the market, in order to facilitate and diminish the time for carrying out their daily activities, what could also lower their operational costs.

#### 4.8.2 Use of the internet

Graphic 13: Use of internet for commercial purposes.

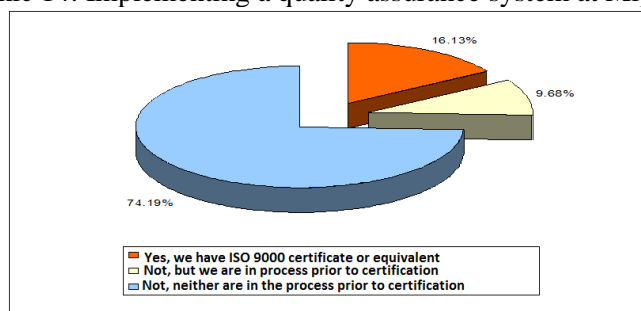


Source: Own

Though, in the last years there has been an increasing importance for the Internet use, to ease the communication and search of information, it is important to remark that in this sense, Mipymes supplying the RRCPTTS, have made a low use of this tool for commercial purposes, though it is observed that 48.39% already has an e-mail and 35.48% has a designed web page. It is also remarkable that less than 10% of this sector carries out purchase and sale activities and just 9.68% develops marketing activities through this tool. If we consider that a vast portion of this sector performs at regional markets, it would be assumed that there is lack about taking more advantage of electronic media in order to get closer to suppliers or current and potential clients, diminishing time and costs.

#### 4.8.3 Implementation of a quality assurance system

Graphic 14: Implementing a quality assurance system at Mipymes.



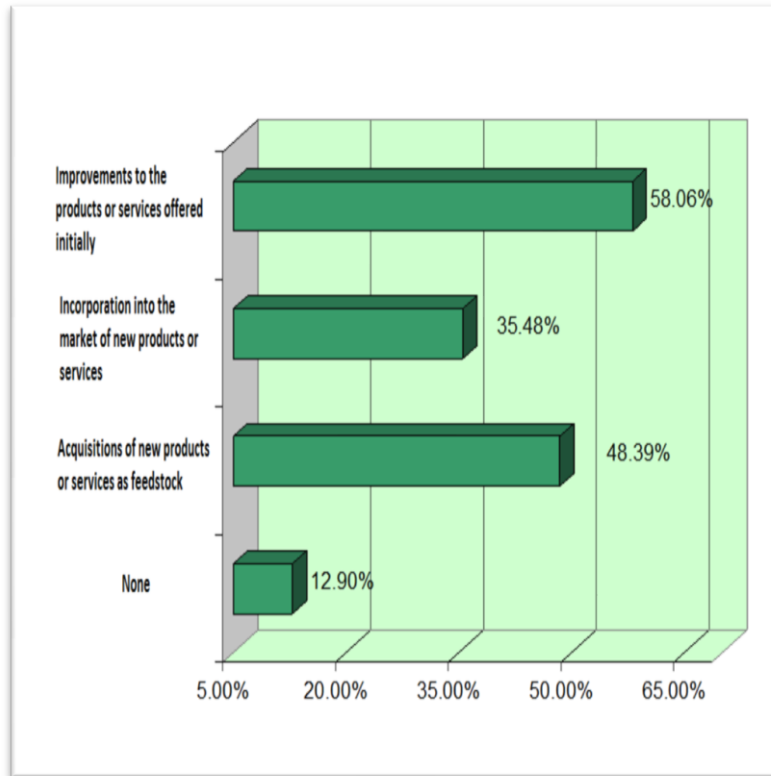
Source: Own

About the products and services quality, offered by Mipymes, it can be noted that at most of these companies there are no formal and objective mechanisms which guarantee their quality, since it shows the little importance given to the quality assurance systems, such as an ISO 9000 certification or an equivalent; 74.19% of companies are not interested in certifying their processes, 9.68% declares to be in a certification process and just 16.13% declares to have a certification. This describes, is another proof of the poor interest that this sector has about making incursions at international markets, but also indicates a lack of long-term vision in order to generate advantages over the local competitors.

## 4.9 Innovations Development

### 4.9.1 Innovation related to product or service

Graphic 15: development of innovations related to product or service.



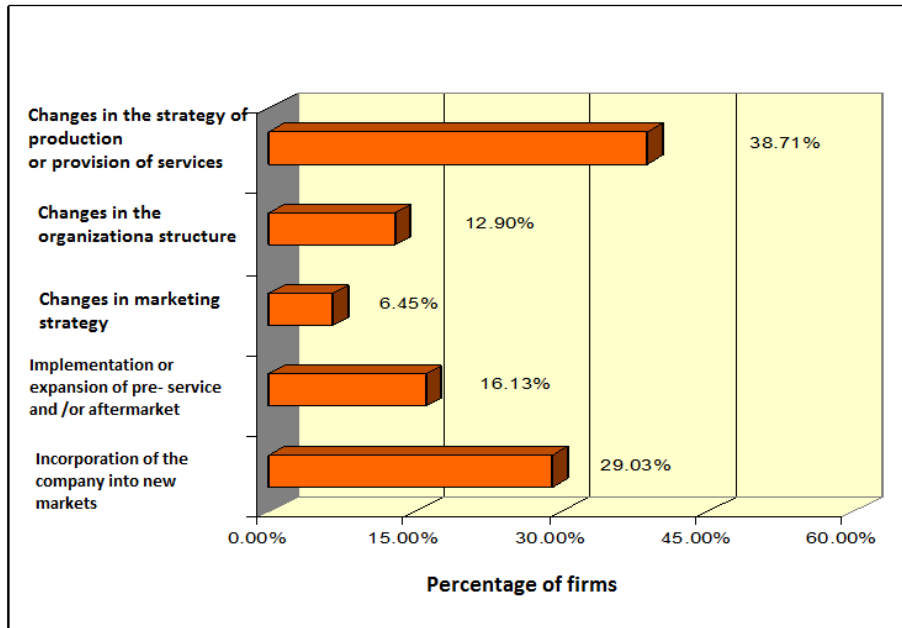
Source: Own

On the development of innovations directly related to offered products or services, it is noted that during the last years, 58.06% of companies declare having made improvements to products or services they were previously selling, 48.39% have incorporated new raw materials and 35.48% have launched new products or services to the market.

Just 12.90% of the companies have not made an innovation directly related to their products and in the close future they could lose a portion of their market share if they do not pay attention to the changing needs and preferences of the customers.

#### 4.9.2 Innovation related to processes

Graphic 16: Development of innovations related to processes.



Source: Own

We can note that in relation with innovations made by Mipymes at their processes, is remarkable the changes in production strategies or services (38.71%), as well as the incursion in new markets (29.03%), this as a consequence of both, enlarging the geographic zone where they perform their commercial activities, and incorporating new products for a new market segment.

## 5 Conclusion

From the results of this research, through the surveys applied to suppliers of RRCPTTS, it is observed that there is a non-meaningful participation of the micro companies (6.45%) compared with the total of the sample in relation with taking advantage of the development banking system, as an alternative of financial source at the short term, if it is considered that this sector represents a majority in the total of companies at the national level, as well as one of the main employment sources, it is evident the need to carry out a bigger effort from the development banking, in this case Nacional Financiera, NAFINSA, in order to attract and facilitate the access to financing for micro companies.

Derived from a new globalization era and open international markets, where Mexico is involved, signing diverse free commerce agreements, it is fundamental for established companies in the national territory to be better prepared each day in order to be able to face the challenges of competitiveness: In that sense, there are a few organizations that have showed a long-term vision, getting ready to compete with the same conditions with foreign companies, both, at the national market and international markets, a sample of this is the scarce commitment of formal systems which guarantee quality and

standardization of processes for goods production and services, as well as the scarce training of personnel in foreign languages that could facilitate communication and commercial links with international companies, widening their sales market and consume. In relation with human resources management, the Mipymes that supply RRCPTTS, should be aware that an adequate analysis of know – how, skills and necessary attitudes to carry out any position at the organization, plus a constant evaluation of personnel's performance, through formal methods and indexes clearly established for all the personnel will positively contribute to have a competent personnel and to be able to detect on time training needs.

About the use of information and communication technologies, (ICT's), Mipymes cannot put off a more extensive use of Internet to get closer to their potential clients and suppliers. To the present time, we observe an almost inexistent use of this tool as a support for strengthening commercial activities, being a good option to let a bigger amount of potential clients know about the goods or services offered by the companies, even more when it has been shown that 38.71% of commercial activities of this sector focus on regional markets, lowering time and operation costs.

Another factor to be considered in business development, object of this research, is innovation, which must be considered as the engine that will propel not only the organization's development but of all the personnel that works there, as well as the society as a whole which will get benefits with improvements in the diverse products or services it consumes, which ease the performance of our daily activities.

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