ABSTRACT
Management Education has reflected the accommodation of business leadership to an ambiguous political leadership for most of the Twentieth century. Very little research has been done on the growing role of new knowledge creation in the business environment and the interaction of the business and political leaders in this area.
Limited production of scientific studies of business practices in the Mexican context is still a few, but starting in the late eighties, international textbook publishers financed the local production and release of management books and magazines.
Additional production of business studies has been undertaken in a few educational and research institutions, located most of them in Mexico City, where a centuries old accumulation of wealth and power has crippled sustainable economic and scientific development throughout the rest of the country.
This paper proposes some avenues to the long term improvement of the quantity and quality of research and development of business in the Mexican context, and the fostering of more grounded relationship of the business leadership and institutionalized R&D throughout Mexico.
An empirical research of small and medium-sized Mexican firms has provided some of the original data concerning managers facing an increasingly complex world domestically and abroad. Semi-structured interviews to top level executives deal, among other things, with their view of the Mexican government as sponsor of business activities, learning and knowledge accumulated throughout domestic and international activities, and their role as responsible leaders in their communities, if any.

TERMS
Leadership, Research and Development, Knowledge

OVERVIEW
In 2005, Mexico was the tenth largest exporting nation, representing 2.8% of worldwide exports. Also in 2005, Mexico became the eighth largest importing nation, representing 2.9% of worldwide imports. In the nineties, Mexican exports and imports grew at a compound rate of 15%, tripling its pre-NAFTA international total trade by the year 2000. At the regional level, Mexican international total trade represents more than 45% of Latin American international trade, and in 2005 Mexico received approximately US $18 billion of FDI, the largest amount in the region. Nevertheless, concern was expressed in the business media about the Mexican firm’s
ability to sustain its presence in the fiercely international markets, so the international competitiveness of the Mexican manufacturing firm was questioned (Expansion, July of 2006, Rodriguez-Valle, 2010).

After fifteen years of NAFTA enactment, a sense of urgency is mounting due to the reverse of fortune for the Mexican firm both in foreign and domestic markets. After the more than quadrupling of the Mexican goods trade from barely US$50 billion to more than US$200 billion in 2005, trade has started to stagnate in several sectors of the economy, and incoming FDI is diminishing significantly, look at Table 1 for the trends in the external sector of the Mexican economy.

Other fact that remains is that, contrary to what most experts expressed, Mexico took the sliding route towards loss of competitive stance witnessing how the Chinese firms took over market by market from Mexican hands. This happened mostly in traditional markets like textiles and leather products, but also in the maquiladora business along the Mexican-American border, and when international investors left ‘en masse’ nothing was left but an practically illiterate work force, whose competitive force resided in relatively low cost labour rates.

This work researched the Research and Development involvement by small and medium-sized Mexican manufacturing that started an internationalization process, mostly by exporting its products and services. Other fact that was being researched was the use of internationally qualified top management executives, by the researched firms.

It is an acknowledged fact from the new globalization times, that the work force constitutes a strategic weapon like any other rare, valuable and inimitable asset (Barney, 1994). Then, given the competitive problems that are present in a large emergent economy like the Mexican one, we are focusing our research efforts in understanding the practices of Mexican manufacturing firms in incorporating qualified management executives who can help their employers while entering foreign markets. This paper is a contribution to scientifically explain the mechanism of management involvement in international decision-making and the building of capabilities by Mexican manufacturing firms when they build a qualified top management team. This is an exploratory research and it should produce new insights into the development of internationally oriented managers and the internationalization of manufacturing firms in Mexico, based on rigorous research methodology, which included a literature review, the development of a conceptual framework, the research design and the collection and analysis of data concerning the achievement of our research objective, and specifically, contribute to answering one research question.

Research Question: How does the integration of a qualified top management team help the internationalization process of the Mexican manufacturing firm take place?

Literature Review

The following review revolves around three schools of thought that deal with the managerial and entrepreneurial requirements of an internationally oriented top management team and their acquisition through hiring and/or training.

Edith T. Penrose (1959) brought the attention of scholars to the resource side of the firm, when defining this concept (the firm) as “more than an administrative unit, a collection of productive resources the disposal of which, between different uses and over time, is determined by
administrative decision...strictly speaking, it is never resources themselves that are the „inputs in the productive process, but only the services that the resources can render...resources consist of a bundle of potential services and can, for the most part, be defined independently for their use, while services cannot be so defined, the very word „service” implying a function, an activity” (Penrose, 1959, pp.24-25).

Barney (1991) is responsible for researching sources of sustained competitive advantage and transforming them into a major scholarly research subject. Research efforts shifted from cost-saving to capability identification and exploitation. This author examines the link between a firm’s internal characteristics and performance, assuming:

a) that firms within an industry (or group of firms) may be heterogeneous with respect to the strategic resources they control; and

b) that these resources may not be perfectly mobile across firms and thus heterogeneity can be long lasting.

A definition of resources is that which comprises “all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc, controlled by a firm that enables this firm to conceive of and implement strategies that improve its efficiency and effectiveness” (Barney, 1991, pp.102).

Knowledge-Based Theory

Nelson and Winter (1982) adopted a new methodology for dealing with dynamics in economics. They introduced the concept of change due to innovation in all fields of knowledge. Together with Tacit Knowledge (embedded routines), with Absorptive Capacity, while Research and Development generates innovations, it also develops firm’s learning, that is, the firm’s ability to identify, assimilate, and exploit knowledge from the environment (Cohen and Levinthal, 1989, pp.569).

The Internationally Oriented Entrepreneurship School

Oviatt and McDougal (1994) found that transplanted and internationally seasoned executives are responsible for this ‘fast-track’ internationalization. They define international new venture as “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries” (pp.49).

THE THEORETICAL FRAMEWORK

This framework is our vehicle for identifying the relevant variables, in the internationalization of the firm, and the links among the variables interacting in such process. We have a detailed illustration of our theoretical framework in figure 1. In this chapter we discuss the variables involved, their relationships, and whenever possible, the elements which were succinctly incorporated in our framework. In our approach, the internationalization of the firm is, at least partially, a sequential process, and explicit choices of the owner-manager and the management team of the firm were also incorporated. In the conceptual framework (again see figure 1) we may distinguish three sections or modules: In this presentation, we will deal only with the capabilities development module, on top of figure 1. In this section , a Sustained Capacities Development section, where we isolate the interactions between the managerial and
entrepreneurial variables detected as influencing drivers of the internationalization process (see Teece, David J., G. Pisano, and A. Shuen, 1997). Here we identify that both these managerial and entrepreneurial elements are influenced by a learning sub process (Absorptive Capability) that decisively help producing the dynamic competitive advantages of the firm, which make a difference when facing competition in international markets. Strategizing, leading and innovating;

RESEARCH DESIGN

We built a qualitative methodology based on multiple case studies of Mexican manufacturing firms during their internationalization process. An interviewer’s guideline (see Appendix 1) serves as a focalization instrument. It should be noted that the narrative element of personal interviews imposes certain difficulty and inconvenience to standardize the content of each interview, but, also, quality of information is conceived and measured differently from quantitative methodology.

Theoretical Sampling

When building our sample, we followed Yin (1994). We used background lists of Mexican Manufacturing firms published by Mercametrica and Banco de Comercio Exterior (Bancomext). After a work of cleaning lists from errors, cases were chosen to provide the richness and variety necessary in research material.

The quality of the information provided through cases (firm executives interviewed) looked not for statistical generalization but for thorough description, and when possible theoretical build-up (Eisenhardt, 1989). Therefore, cases were selected not randomly, but purposefully so as to fulfill a „thick” observation. We should emphasize that we were selecting cases, not a single case, no matter how thick and relevant the information provided. The reason for choosing multiple case studies was that we were looking for triangulation when possible. That is, we were confronting finding from one source of evidence with another in order to upgrade the quality of our conclusions.

The Personal Interview as Data Collection Instrument

Although in-depth non-structured interviews are particularly popular among qualitative researchers, we have chosen a focused semi-structured interview whose main characteristic is the fact that the interviewee is known to have had certain kind of experiences we are looking for, and which are closely related to the phenomenon under study (Merton et al, 1990).

In order to stay focused, we designed a personal interview guideline, which consisted of a set of general questions to be used as fit during the course of the interview, which allows the researcher not to lose sight of crucial information to be picked up, at the proper moment (see appendix 6).

Two sets of personal interviews were included in the sample. The first set was assembled from ten interviews made in August, 2003, in the northeast and southeast of Mexico (see Rodriguez Valle, 2003), and which initially envisaged as an exploratory study. The second set was assembled from fifteen interviews made in west, central and southeast Mexico in November, 2007. Both sets of interview material had been collected with the same guideline; therefore, we joined both sets of interviews. A total of 22 firms were interviewed in eleven different cities, in five different states of the Mexican
Republic. The chosen firms were either small or medium-size, and all executives interviewed belonged to the international management team. We were looking for diversity of geographic location, industry and size within an accessible population of internationalizing manufacturing firms. Unfortunately enough, access to large firms was rather limited, and public relations officers were the only potential interviewees. This decided us to reject this source of data, which tends to produce Public Relations „garbage packages“ of inflated and unreliable information (see Salas Porras, 1998). It should be pointed out that due to the fact that the first set of ten interviews made in 2003, the screening out of foreign affiliated was not applied, and two of such foreign firms were included in the sample.

The Focused Personal Interview

An interview guide was used to interview international top managers and owner-managers whose firm’s characteristics were, at least partially, known in advance, which made this a focused type of interview (Merton et al, 1990). The guide consisted of eleven questions, made of twenty eight researched items. Items were grouped around the first ten questions of the interview guide. The administered data collection instrument was written in Spanish (see Appendix).

The Collection of Qualitative Data and the Multi-case Research Method

All interviews took place at firm’s locations, either at Head quarter offices beside manufacturing facilities or at a separate location. With no exception, interviews were made in Spanish, and each of them was tape recorded with the interviewee’s authorization. The time allowed us for the interview was between twenty five to sixty five minutes, with an average of forty five minutes. A copy of the interview guide was handed to the interviewee at the start of the interview, and the order of questions and items within them were kept with slight variations to pick up some unforeseen information. After a brief period, each interview was transcribed to a computer file, and then reviewed and re-written for reading purposes. But, original transcriptions became lengthily documents, and although an interview guide was used always, not every interview dealt with every question and sub-question.

PERSONAL INTERVIEW ON MANAGEMENT CAPABILITIES DEVELOPMENT

Here we illustrate a few interviews, which are the most representative of the 22 interviews which were conducted according to our Semi-Structured Guide, just described a few lines above. All conversations were taped and transcript.

BEBITI (2003)

Bebidas Típicas (BEBITI) manufactures fruit syrups which places the firm in the 311 SIC group code. We interviewed Mr. CGLJ, General Manager and family member of this family business, sometime in August, 2003, in the headquarters next to their production and warehousing facilities in a popular neighborhood in Veracruz, VER, a City-port in Southeast Mexico.

The firm was founded in 1963, although it was not formalized until 1974. For some years the business was run out of the family house, at the time headed by Mr. CGLJ’s father. But, BEBITI survived and prospered to develop into a regional business. In 1988, Mr. CGLJ was involved in its first international sale to some Colombian businessmen based in Chicago, IL. The merchandise was sent, but the clients just disappeared. The product was recovered, but this
experience showed some of the risk involved in operating across borders. Then, in 1990 they started supplying HEB in the state of Texas, but this time it became evident the lack of production capacity of BEBITI, and management should retrace its steps. Also, distribution of the merchandise proved a nightmare. Finally, in 1991 the family decided to risk the establishment of a sales subsidiary, with warehousing facilities in San Antonio, TX. A member of the family was commissioned to move to the new location.

According to Mr. CGLJ, it took much time, money and ingenuity to get to know the market and to penetrate it, in face of a more intense and demanding market.

In 1995, a financial crisis in Mexico took a heavy toll on the financial stability of the firm, but fortunately for BEBITI, foreign sales started to rise, precisely when BEBITI market plunged back home.

At the time of the interview, 50% of total sales were foreign, and new production facilities were under way, in an effort to match an increasing foreign demand.

Mr. CGLJ commented that, throughout the process, it had helped them to have family relatives in the USA. This had been a reason, first, to travel and visit central Texas, and second, it had been always supportive to count with someone so far away from home. Still more, with time the family had enlarged its circle of contacts, although, most of them were of a personal nature.

With time, they had made some learning to comply with American FDA rules, which, in turn, made Mexican business look uncomplicated.

**CEMUR (2007)**

Cerámica Mural (CEMUR), is a ceramics manufacturer-classified as belonging to the 327 SIC group-is located in Dolores-Hidalgo, Guanajuato, in central Mexico. We interviewed Mr. CGN, General Manager, and son of the semi-retired founder of the firm, sometime in November, 2007. CEMUR was founded 32 years ago, and it started export activities five years later. Its first sale was to a client in San Antonio, Texas. It sells direct to foreign clients, who are located in Canada, El Salvador, USA, Holland, UK and Japan. CEMUR's foreign sales-of more than US $5,500,000-represents, typically, 40% of its total sales. Management believes that it is their quality control, and its adaptation to customer demands, being capable of offering not only a resistant and durable product, but also different designs and colors. Mr.CGN told us that CEMUR international sales are more profitable than national ones.

CEMUR started international operations without having their management international experience, and still today, it does not have a formal structure for handling exports. It has no foreign representatives.

Most product development has been a responsibility of the founder, who is recognized by management and workers alike as an expert and innovator in their line of business, where ceramic walls are the most known in the market, according to Mr. CGN. Nevertheless, the bulk of its products have been the same for the last fifteen years, and they have not changed method of entering and servicing foreign markets.
CONEX (2007)

Conexiones (CONEX) is a manufacturer of electrical components, which places it in the 333 SIC group code. We interviewed Mr. GTB, General Manager in his office next to CONEX plant, located in Celaya. This happened sometime in November, 2007.

CONEX was founded in 1995, but it was in 2002 when the firm made its first foreign sale to a Colombian client. It took the firm another two years to enter into its second foreign market, and another year to enter its third year.

At the time of the interview, CONEX exported to Colombia, Costa Rica and Guatemala.

Mr. GTB told us that the firm relied on five suppliers as valuable contacts, even before CONEX started to sell abroad. Today, it relies only on three suppliers and three clients, as reliable contacts abroad.

Although no formal alliance has been made, CONEX has had three informal alliances in the past. Concerning R&D activities, CONEX counts three new successful products and two new successful processes in the last five years. In fact, the firm has no R&D facilities, although the firm counts with one employee that is devoted to R&D activities, at least half of his working hours.

CONEX has three members in its international management team, out of which two speak more than language, have some foreign work experience. Only two specialties are present in the international management team.

FICATA (2003)

Fibras Catalina (FICATA) is a manufacturer of vegetable fibres products, which places this firm in the 313 SIC group code. We interviewed Mr. SMM, General Manager and head of the family which owns FICATA. The interview took place in the Santa-Catarina, NL headquarters of the firm, next ro the production plant and warehouse facilities, sometime in August, 2003.

FICATA was bought by Mr. SMM's father in 1951. Since then, it has remained in his family, and when his father died, he took charge, and immediately emphasized the international activities of the firm, and exports boomed for FICATA.

Mr. SMM attributes some of their success to the fact that his father spoke several languages, and so he does. And, it remains the fact that, first his father travelled and worked in several countries, and he himself studied in the USA. Also, the management of FICASA always considered Europe as a single market zone, rather than different countries and markets. In many countries we do not have distributors because the market does not justify such arrangement. We have agents, instead. For direct sales, we use internet, and we have developed a web page.

When FICATA became internationalized, first they exported. They did it since the 1960s through the 1980s. But, if they wanted to be present in the market, then they had to have an office. So, it happened with SMM's father. He first had an office in Europe and, then, in the USA. FICATA has already its own subsidiary, to sell its products, in the USA.
SIBLOCK (2003)

Siller-block (SIBLOCK) is a concrete block manufacturer, which classifies as a 327 SIC group code. We interviewed Mr. TGC, General Manager and Stockholder, in its Santa-Catarina, NL office, next to their largest production plant and warehouse facilities, sometime in August, 2003.

SIBLOCK was founded in 1978, but it was until 1995 that this firm exported into the USA, due to a slump of the construction industry throughout the Northeast of Mexico. Mr. TGC mentioned a drop of up to 60% in sales before its looking forward for foreign markets.

Due to the weight factor of SIBLOCK products, geographical distance is a critical variable in the distribution costs of its products. So, production of the Monterrey plants is limited in their market potential. But, the drop of the value of the Mexican peso helped to compensate intrinsic disadvantages of Mexican construction products.

For some time the export market reached 30% to 40% of total sales. So, a marketing and production program was implemented so as to learn how to penetrate and hold the border market in the American side. It required adaptation to different standards, but for SIBLOCK it was not that difficult, due to its already strict quality standards.

At the time of the interview, exports sales did not represented more than 10% of total sales, but management had determined that some significant market share should be kept, for any future eventuality. Also, an alliance to build a plant on American soil was considered, but, so far cost/benefit considerations, and lack of a reliable partner in sight, prevent any action in that direction.

ZADUR (2007)

Zapatos Duros (ZADUR) is a Leather Footwear Manufacturer, classified as a 313 SIC group code firm. We interviewed Mr. VRLM, Sales Manager of ZADUR in his office, in Leon, GTO. This firm is 40 years old, and it became a wholly owned subsidiary of BISSEA in 1990. Two years later, ZADUR started exports to USA, which account approximately 10% of its total sales. BISSEA is also a Leather Footwear Manufacturer, located in Mexico, DF, but its clients are mainly government agencies, and its line of business includes other leather products.

ZADUR has only large American clients, which specialize in orthodox Jewish products. ZADUR participates in Industry Exhibitions, but it has discovered, in one of these Expos, that his commercial name has already been registered in Europe by a firm from another line of business, but which has refused to negotiate a deal, that would let ZADUR to make use of its brand name abroad, particularly in EUROPE.

ZADUR has a restricted R&D budget, and its product development technology is outdated. Its reliance on BISSEA funds seems to limit its international activities potential. Recently, it has dealt with strong competition from Brazil manufacturers, even in its home market.

ZADUR and its parent company have already explored the subcontracting of certain line of products, to compete domestically and abroad.
RESULTS

Relying on the Interview guide (see Appendix), we developed a series of 22 stories. Then, based on stories told by interviewed executives from our sample of 22 firms, we can make a description of the effort, if any, to develop competitive capabilities by internationalizing firms.

a) As we can see in figure 4, somewhat around 30% of the firms in our sample had R&D facilities.

b) In figure 2, we can observe that somewhat around 40% of the firms developed either one or two new products, last five years. Then, 45% of firms developed 3 or more new products.

c) The activity was more intense developing new processes. As it is drawn in figure 3, Therefore, in figure 3 we can observe more than fifty of the firms developed three or more new processes.

d) In figure 5 we notice that approximately 50% of top management executives have not gone through foreign studies.

e) About being multilingual, as we can see in figure 6, in every firm from our sample there was not a single case of a firm without executives speaking at least one foreign language.

f) Of those companies that have established R&D facilities, as is shown in figure 7, dive out of seven firms have national presence in the Mexican market.

g) In figure 8, it is shown that more firms that have not formalized the international activities have indeed established R&D facilities.

h) We were able to obtain a two cluster partition of our sample (see table 4)

i) In order to form our clusters, as we see in tables 3 and 5, we found that to develop more processes, to have more executives in the international team, to have more executives that speak at least one language other than their mother tongue and to have more executives that have studied abroad, all these factors work in the direction of a distinctive firm, in eight firms out of twenty two.

Statistical tests were not conclusive in our case, but the associations show that certain elements fit together, and this is a start to further our studies in competitive capabilities.

We can conclude that a more qualified management team, will be better equipped to lead the firm in their quest for distinctive advantages facing their competitors, in their domestic markets as well those foreign markets.

We have signalled that the Absorptive Capability promises to be give the keys to a much better performance in the development of differentiation and sustained capability. But, it must be researched under different contexts, including those pertaining to the international scene.
Table 1

| Exports $billion | 110 | 136 | 171 | 178 | 214 | 271 | 229 |

Note: There is a slump in 2008 and 2009 that coincides with the American Real Estate crises.
Figure 1
INTERNATIONALIZATION OF THE FIRM
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Table 2 COMPARISON OF INTERVIEW DESCRIPTIVE INFORMATION
APPENDIX

SEMI-STRUCTURED INTERVIEW GUIDE (ENGLISH VERSION)

This interview is being conducted as a part of a doctoral research to help us understand the Internationalization process of the Mexican manufacturing firm. The interview will be recorded.

1. **We'd be interested in knowing how your firm became involved in internationalization activities?**
   a) What is it that attracted you to become involved in such activities?
   b) What previous experiences have you had in the international scene?

   **Note:** This question is an introduction to the subject, posed in a non-threatening way, dealing with description of behaviour.

2. **What does it mean for your firm to internationalize?**
   c) What was the meaning of internationalization when you started international activities?
   d) How do you see your evolution in arriving at your present meaning of internationalizing your firm?

   **Note:** This question poses a demand for giving a clarification of the interviewee's meaning of the concept internationalization, without imposing one. It is an opinion/sensory versus a factual type of question.

3. **How is it that you started international activities?**
   e) Tell us about the circumstances that surrounded your starting in international activities?
   f) How did you arrive at the decision to internationalize?
   g) What role did your local and national environment play in your decision to internationalize?
   h) What role did the international environment play in your decision to internationalize?

   **Note:** This is a factual question, mixed with opinion about those facts. But we used singular questions, so that issues are taken one by one. We ask first for the history (a and b), and then their opinion of the role of the environment (c and d).

4. **What difficulties were the most important when first undertook international activities?**
   i) What cultural elements did you find the most challenging when undertaking international activities?
   j) How did you find language as a facilitator versus an obstacle in undertaking international activities?
   k) How did you find technology issues as facilitator versus obstacle in undertaking international activities?

5. **How did internal elements, like production/operations, marketing, finance, etc. influence your firm in its internationalization process?**
   l) How is it that internal elements helped…?
   m) How is it that internal elements hindered…?
Note: Although this question appears a factual (knowledge) question, it is more an opinion type one.

6. What stages or phases do you see as going through in the internationalization process, from your firm’s perspective?

n) How do you see the transition to a higher involvement in internationalization, in your firm’s experience?

o) What other stages or phases have you been involved, after your first stage or phase was completed?

p) What other stages or phases do you foresee to be involved in the future?

Note: This question looks for a discernment of the interviewee’s “theory” of the internationalization process. We are only assuming the interviewee will be able to discern steps or phases, but always in his own words. In this question we have introduced the future dimension, which will be used more, history issues have been dealt with previously.

7. What do you think about the learning your firm has been through in its own internationalization experience?

q) What kind of learning do you think your firm acquired during the first phase or step it undertook in internationalization?

r) What kind of learning do you think your firm acquired during later in the internationalization process it has undertook?

s) What kind of learning do you think your firm has still to acquire necessary or just useful, in its internationalization?

t) …..why?

Note: This is a question mostly of an opinion type, where we have introduced a new subject-learning- but which involves a reflexion from the interviewee, from the whole time dimension perspective, that is past, present and future.

8) What do think has made your firm successful, in its internationalization?

u) What differences do you find in your competitive behaviour in comparison to other local and national firms, which allow to better compete internationally?

v) What similarities do you find in competitive terms, between your firm and other foreign firms, dealing in international activities?

w) …why?

Note: Another type of opinion type of question (the knowledge element is not prevalent, due to the subjectivity of the issue), but the why framing of last sub-question is definitely a risky one, but we are in the final stage of the interview, so that it might be a reasonable risk.

9. How do you find the way your firm internationalized, different from the way another firm in foreign markets might have done it?
x) Do you see the circumstances surrounding your firm much different and influential, as no other firm trying to internationalize, but in another region of NAFTA (USA, English-Canada, or French-Canada)?

y) …why?

I find this question, a short but loaded of reflexion demands on the interviewee. I find this loaded enough, so as to just ask for why, after a first „re-phrasing“ (ina).

10. What decisions you would have done differently during your firm’s internationalization, if you had the chance of doing it again?

z) What do you see as the hard lessons you have learnt during your firm’s internationalization?

aa) How do you see your firm doing things differently along the steps in the internationalization process you have gone through?

bb) ….why?

Note: This a highly speculative question, which are only answerable at the end of the interview, if at all. Why not take the risk?

11. Do you have any insight you would like to share with us, concerning your firm’s involvement in international activities?

Note: This is a closing question, looking for the extra mile!

Thank you for your cooperation…you will hear from us soon.

Figure 2

Number of new prods. last 5 yrs.

Number of new prods. last 5 yrs.

Percent
Capítulo 11 – Ingeniería y gestión de sistemas

Figure 7

Multilingual executives

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Bar Chart

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The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Table 4
### Number of Cases in each Cluster

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Table 5

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