HIGH-GROWTH ENTERPRISES (GAZELLES): AN CONCEPTUAL FRAMEWORK

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ABSTRACT:

The objective of the present paper is to propose an integrative and explanatory model of the high-growth companies (gazelles). The present paper analyses high-growth firms (also known as “gazelles”) in the light of three different theoretical focus: (1) model about firm growth; (2) literature about strategic change and renewal; and (3) entrepreneurship field. An integrative model of radical growth of gazelle firms is proposed. This model combines the contributions of each stream of literature and allows the identification of a wide range of relationships among the main variables.
1. INTRODUCTION

From the middle of the 90s, interest in the analysis of companies known as “gazelles” has grown considerably. The term “gazelle” is used to nominate those companies that are capable experiencing a high rate of growth in a very short time (Cognetics, 1994; 2000). These kinds of firms are interesting because they generate a great number of new jobs (Storey, 1984; Barkham et al., 1996). In the USA, for example, these high-growth enterprises are responsible for approximately 70% of the growth of the employment rate in the recent years (Cognetics, 2000). This is why a better understanding of these companies could be very interesting for many different people. First, for the owners and managers of companies interested in propitiating a reactivation and a new size for their companies in a short time; and second, for public administrations and governments interested in the generation of new employment in order to design support policies to improve growth and innovation rates of SMEs.

Although from the decade of the 30s, a wide range of literature has been developed about the phenomenon of firm growth (see O’Farrell and Hitchens, 1988 and Storey, 1984), it is difficult to find research orientated towards discerning between the growth of “gazelle firms” and other types of company growth. The particularity of the gazelles is the nature and timing of the change process. It’s nor a gradual growth, but rather a radical change in the evolution of the entreprise that affects all its performance parameters.

The objective of the present paper is to propose an integrative and explanatory model of the high-growth companies (gazelles). To do this, we will begin, in the following section, describing a conceptual framework for the study of these companies, summing up firstly in the first place, the concept of high-growth enterprises and their distinctive characteristics and, secondly, describing three different theoretical perspectives that can enlighten the understanding of these companies (models of growth, strategic reorientation and entrepreneurial view). In the third section, we propose an integrative model of radical growth of gazelle firms. This model combines the contributions of each stream of work and allows the identification of a wide range of relationships among the main variables.

2. HIGH-GROWTH ENTERPRISES: A CONCEPTUAL FRAMEWORK

There are two main characteristics of high-growth enterprises: (1) they are companies that experience a strong growth in their size that in most cases, supposes approximately the duplication of their dimension; and (2) this strong growth is concentrated in a very short period of time that oscillates between four and five years (independent of indicators used to measure this growth rate - sales growth, duplication of employees, etc.-). Because of the great magnitude of growth, we can consider it as a radical change, a revolution (a non-gradual evolution) in the organizational life.
This fast growth can take place in two different circumstances. First, it can be a new enterprise. In this case, the company is in a process of searching for a minimum size that favours its survival (Barkham et al., 1996). What is especially relevant is the case of companies created to exploit a new technological/marketing opportunity that is not detected or met by other firms. From the technological or marketing point of view, they are usually small and medium innovative companies.

A second circumstance concerns the case of existing enterprises (firms with a history). The growth of these enterprises is derived from a change in their strategies, actions, behaviour, etc. These radical changes make the radical growth of the firm possible. This situation represents a clear example of strategic renovation. The company has to reconfigure its product-market position and modify the structure of resources and capabilities developed in the past in order to be able to grow. This kind of fast and high growth means a radical change, a qualitative jump in the evolution of the company, like changes defined by Tushman and Romanelli (1985) -punctuated equilibrium- or by Miller and Freisen (1984) -quantum structural change-.

These considerations are useful when developing a conceptual framework concerning the analysis of high-growth companies. From our point of view, the investigation on this type of firms and processes has to consider at least three different streams of literature: (1) theories about firm growth; (2) literature about the processes of strategic renovation and mainly those related with strategic change and (3) theories about entrepreneurship. The study of high-growth companies is located in the intersection of the three mentioned fields. In figure 1, the shaded area represents high-growth firms between the three different fields mentioned.

**Figure 1: Conceptual Framework for the research on high-growth companies (gazelles)**

**Literature about the growth of firms**

The growth of firms has been studied from many different approaches and streams of research (O’Farrell and Hitchens, 1988). This is one of the main topics in the strategic management field since the origin of the area (Andrews, 1949; Ansoff, 1957; Penrose, 1959). Andrews (1949) argues that companies grow due to their aim of diminishing unitary costs. On the other hand, Ansoff (1957)
proposes a model based on the concept of product-market position. This model has been combined with the ideas of resources-based perspectives in a recent work of Pettus (2001). Finally, Penrose (1959) suggests that the causes of the growth are internal; firms grow in order to use some inactive resources and capabilities.

Penrose’s proposal has been developed in the last decade through resources-based theorist. As everybody knows, the origin of the modern developments of a resources-based theory is the seminal book about the growth of the firms by Edith Penrose (1959). According to Penrose (1959), the growth of enterprises can be explained by the managers, intention of finding applications for different inactive resources and capabilities. These resources can arise from their indivisibility and their specificity. When resources cannot be divided, the company has to acquire unnecessary quantities of it, if it wants to assure the right use of other different resources. The resources specificity impels the company to maintain these unexploited resources in the company instead of selling or externalizing them in the market (Barney, 1991). Penrose (1959) places the attention on the managerial resources because they are characterized by the properties mentioned. However, and for the same reasons, the main constraints on growth are managerial resources (known as the “Penrose effect”), because there is scarcity of managers with the capabilities needed for a specific business.

In this sense, the company growth is considered to be a history-dependent process (Barney and Zajac, 1994; Dierickx and Cool, 1989). This consideration (path-dependence hypothesis), is the basis of the establishment of a logic sequence in the growth process (Pettus, 2001). This approach assumes that growth implies a gradual accumulation of new resources and capabilities for a long time (Hall, 1993; Mosakowski, 1993). This sequential focus of growth has also been considered in other works although without making any reference to the resources-based perspectives. There is a stream of research that suggests a stage-model of growth, designed in most cases to understand the evolution of the newly created small companies (Greiner, 1972; Deeks, 1976; Churchill and Lewis, 1983).

**Strategic renewal and change literature.**

Organizational change has been researched in past decades from many different approaches by organizational theorists (Hannan and Freeman, 1977; Meyer and Rowan, 1977). We can differentiate two types of organizational changes: evolutionary (incremental) or revolutionary (radical) changes or, using Weick and Quinn (1999) terminology, continuous versus episodic changes. The first type of changes is constant and convergent (Quinn, 1980), while the second one is massive and concentrated in a short period of time, affecting the whole organization very quickly (Miller and Friesen, 1984). However, both types of changes usually alternate in time, although nowadays we do not have a clear understanding of why and when a radical change broke a period of continuous changes (Fox-Wolfgarmm, Boal and Hunt, 1998; Huff, Huff and Thomas, 1992).

In the case of high-growth firms, change has to be radical. Floyd and Lane (2000, p. 155) define the strategic renewal as an evolutionary process associated with promoting, accommodating, and utilizing
new knowledge and innovative behaviour in order to bring about change in a organization’s core competencies and/or a change in its product market domain. Van de Ven and Poole (1995) define the strategic change as a difference in the form, quality or state over time in the organization’s alignment with its external environment. This change has a direct effect at different organizational levels. Armenakis (1988) differentiate between three types of changes: (1) alpha changes (changes in behavior), (2) beta changes (scales reequilibrium) and (3) gamma changes (concept redefinitions). While the first one is an incremental change, both beta and gamma are radical changes (Armenakis Harris and Feild, 2000).

In spite of the theoretical distinction between strategic renewal and strategic change, they are intimately related. Processes of strategic renewal imply more than a strategic change. It needs a change in at least two of the following dimensions: organizational structure, distribution of power and control systems (Gordon et al., 2000). Rajagopalan and Spreitzer (1997) propose an explanatory model of strategic change in which they incorporate the main contributions of three different perspectives: (1) rational lens, (2) learning lens and (3) cognitive lens. According to this integrative model, strategic change processes emerge because of changes in external and internal environments. These changes impact on managers’ perceptions and managerial actions. After that, these actions, in addition to external and internal environment changes promote change in the firm’s strategy. Finally, there are some feedback relations and direct effects among mentioned dimensions.

**The literature about entrepreneurship**

The study of the phenomenon of entrepreneurship does not have its own conceptual framework. Most research has been developed in the light of different paradigms. This lack of integration between Entrepreneurship and Management fields has been recently criticized by Hitt et al. (2001) and Shane and Venkataraman (2000) and they promote studies oriented towards combining both perspectives. The most recent examples are the respective monograph issues dedicated to entrepreneurship in the *Academy of Management Review* (2000) and the *Strategic Management Journal* (2001).

In this sense, Shane and Venkataraman (2000) declare that it is necessary to reorientate the definition of the field, passing from an individual conception (entrepreneur as a person who establishes a new business) to the function that he/she carries out. For these authors, Entrepreneurship is devoted to the analysis of how and which opportunities are discovered and exploited (Venkataraman, 1997). On the other hand, Hitt et al. (2001) proposes that it very interesting to combine the contributions of Entrepreneurship literature and the Strategic Management literature, through the concept of Strategic Entrepreneurship. According to these authors, the development of this concept is very useful in the following domains: (1) external networks; (2) organizational learning; (3) innovation and (4) internationalization.

From our point of view, the connection between these ideas and the high-growth companies are clear. Fast and strong growth that characterizes these companies cannot be understood without the capacity
of identifying and exploiting opportunities. The definitions of Entrepreneurship previously mentioned seem to be related even more with growth than with other performance measures (profitability, productivity, etc.).

3. A MODEL OF DETERMINANTS OF THE HIGH-GROWTH COMPANIES

The growth of the “gazelle” companies is very strong and fast. It usually implies a process of strategic change and reorientation affecting all organizational levels and the dynamic of a strategic fit between the firm and its environment (Zajac, Kraatz and Bresser, 2000). At the same time, a radical growth cannot be carried out without the discovery and exploitation of opportunities created by uncertainties and discontinuities or, in other words, without the development of entrepreneurial capabilities (Shane and Venkataraman, 2000). These capabilities have to be used through existing resources and capabilities, through the development of new dynamic capabilities or through innovation (Pettus, 2001).

The firm growth, and mainly the high-growth, is, in short, an adjustment process or strategic fit between the company and its environment, in which external changes (in the technological environment, in the market, in industrial characteristics, etc.) and internal changes (ownership objectives, incentive systems, organizational culture, etc) are joined together. For all these reasons, we propose a model in which different levels of analysis are combined. This model is represented in figure 2.

Figure 2: Determinants of the high-growth process.

The model is based on the multi-lens perspective of strategic change proposed by Rajagopalan adapted to high-growth companies. The framework presents two different generic approaches: the first one
means the development of a proactive growth process (Bateman and Crant, 1999; Crant, 2000), as a consequence of a deliberate and conscious process (although a process of strategic planning is not absolutely necessary) (relations 1, 2, 5 and 8); the second one assumes the possibility of a reactive growth process, based on favourable changes of internal and external environment conditions, exploited in an efficient way by middle and operating managers (relation 3, 4, 6 and 7).

In the first case, the origin of growth of the companies is a strategic reorientation process that modifies or creates a new model of fit between the firm and its environment (relation 8) (Zajac, Kraatz and Bresser, 2000). This strategic reorientation tries to exploit the opportunities that arise from the changes in the external environment (macro and micro) as well as the strengths based on inactive resources and capabilities (Penrose, 1959) and the development of new resources and dynamic capabilities (Pettus, 2001). However, every deliberate process of strategic reorientation and change requires the owners, managers or, in most small and medium enterprises, the owner-managers to perceive the external opportunities and the internal strengths in order to make the firm grow in a short period of time (Moran, 1998). Because the environment cannot be objectively determined, the cognitive dimension constitutes an essential aspect in change processes (Barr et al., 1992; Huck and McEwen, 1991). As a consequence, the strategic reorientation process requires of some cognitive conditions of the owner-managers -relation 5- that makes the perception of the environment opportunities -relation 1- and the internal strengths -relation 2- possible.

This idea supposes, however, that growth has been pursued by the company deliberately. But it is possible to grow quickly without an anticipatory attitude of owner-managers. In this second case, growth can be a direct consequence of radical changes in the internal and external environment conditions -relaciones 6 and 7- or a non-deliberate change in strategy, structure, behaviour and culture, without a conscious perception by owner-managers -relations 3 and 4-. Nevertheless, Upton, Teal and Felan (2001) suggest that in most cases, firm growth is derived from a planning approach.

The proposed model incorporates four levels of analysis: (1) general environment (national or international); (2) industrial environment; (3) company; and (4) owner-manager. The first three levels are used to explain differences in company performance (Porter, 1990; Grant, 1995, Rumelt, Schendel and Teece, 1991), and especially in the case of growth (Weinzimmer, 2000; Kangasharju, 2000; Wijewardena and Tibbits, 1999). The fourth one is added for two reasons: (1) because cognitive characteristics affect change processes (Barr, et al., 1992; Rajagopalan and Spreitzer, 1997) and (2) because of the relevant role developed by the owner-manager in SME strategy design and implementation (Hitt, et. al, 2001; Wasilczuk, 2000; Gundry and Welsh, 2001).

In addition, it is necessary to consider feedback flows -links 9, 10, 11 and 12-. Changes in firm strategy, structure, behaviour and culture can modify the conditions of internal and external environment -links 10 and 11-. Also, managerial learning processes can affect change in their managers’ cognitive structures as a result of a strategic change –relation 9-. Finally, changes in
economic performance may alter the content of strategy, structure, behaviour and culture -relation 12- (Rajagopalan and Spreitzer, 1997).

**Links between external context variables and firm growth**

Evolution of the main national and international economic variables as well as changes at industry level directly or indirectly influence the probability of growth. First, neoclassical authors suggest that changes in macro-environment conditions affect the relationship between national differences and company performances (Porter, 1990). Second, industrial economy approaches argue that industry characteristics influence firm performance. (Porter, 1980; Rumelt, Schendel and Teece, 1991). The relationship between geographic/industrial properties and firm growth can be direct or it can be intermediated by other variables.

The direct link between environment changes and performance changes is suggested by Rajagopalan and Spreitzer (1997), although this influence is not derived from their review of literature about strategic change. In relation to the influence of environment changes on strategic change, Rajagopalan and Spreitzer (1997, pp. 51-53) found a wide range of investigations establishing three variables: munificence, uncertainty and specific shifts such as deregulation. The literature about firm growth is used to consider environmental variables on numerous occasions. Birley and Westhead (1990) considered two dimensions: (1) product market structure and (2) localization. So, the following general proposition can be enunciated:

*Proposition 1: Differences will exist in the variability of firm growth and the proportion of high-growth companies, depending on industrial and localization characteristics.*

**Links between internal context variables and firm growth**

Many studies have examined links between changes in the internal company context and the processes of strategic change. Rajagopalan and Spreitzer (1997, p. 54) mentioned six dimensions: firm size, age, prior performance, prior strategy, top management characteristics and governance structures. These variables had been analyzed in at least two empirical studies about strategic change. All these dimensions are internal factors that influence the strategy, structure, behaviour and culture of the companies. In this sense, the ideas of Penrose (1959) on internal determinants of firm growth come up intensely again.

Most of the mentioned dimensions are proxies of managerial resources and capabilities. Size and age are good examples of this. Firm size tries to represent how many available resources company have (Evans, 1987; Barkham *et al.*, 1996; Johnson *et al.*, 1999). Age tries to measure the experience. In addition, experience is an approximate indicator of specific knowledge stocks related to the business (resources) and the capability of exploiting them in an efficient way (Evans, 1987; Dunne and Hughes, 1994).
Something similar happens to managerial characteristics and government structure. These dimensions try to measure the quality of managerial resources, an essential determinant for enabling firm growth, according to the Penrose thesis (1959). The relationship between managerial characteristics and key resources and capacities of firms has been exposed in the Borch, Huse and Senneseth paper (1999). In this sense, Haneman, Tansky and Camp (2000) defend that company growth is positively related to certain top management capabilities. In short, in recent years, some research are developing models oriented toward connecting firm growth with learning capability, and orientation with the acquisition of new knowledge by top management (Hitt, Ireland and Lee, 2000; Sadler-Smith, Spicer and Chaston, 2001). Also, Boeker (1997) suggests that manager characteristics are related to strategic changes.

Finally, consideration of prior performance and strategy is related to the proposition about path-dependence hypothesis (Barney and Zajac, 1994) because these two variables measure the mix of resources and capabilities that the company possesses (generated over a long time).

The investigations published about strategic innovations remark the relationship between the development of abilities and unique capabilities (or core competence) and the possibilities of growth (Chaston and Mangroves, 1997). Strategic innovations consist in a redefinition process of a whole business (Markides, 1998). Company simultaneously modifies two or more dimensions of its product-market position (Hamel, 1998). This type of innovation promote the destruction, creation and reorientation of traditional industries and suppose a source of high-growth. In this sense, Meyer and Mugge (2001) suggest the creation of “innovation platforms” as a tool to reach high rates of growth over time.

To summarise, changes in firm resources and capability stocks influence the processes of strategic reorientation and growth (Penrose, 1959; Pettus, 2001), and they can even explain this growth without a conscious strategic change. So, we suggest the following propositions:

*Proposition 2:* There will be differences in growth rate depending on company resources and capability stocks.

*Proposition 3:* A high growth of the gazelle companies will be preceded by changes in the combination of company resources and capability stocks.

**Context, cognitive dimensions and strategic reorientation.**

According to Cognetics reports (1994), most gazelles companies are SMEs. In this type of firm, the owner-manager plays an essential role designing and deciding the content of firm strategy and behaviour (Birley and Westhead, 1990). In their double condition of entrepreneur and strategist, they are the people who identify and exploit opportunities (Shane and Venkataraman, 2000; Hitt, et. al, 2001).

Entrepreneurship literature remarks the relevance, not only of the managers’ demographic characteristics, but also of cognitive dimension (Busenitz and Barney, 1997). A good manager is
characterized by possessing a special capacity to perceive opportunities in a common environment. Any person can detect these opportunities but only entrepreneurs perceive them (Sarasvathy, Simon and Wash, 1998). As a consequence, to grow quickly, the existence of change in external environments is not enough (source of opportunities) and internal contexts (strength to exploit these opportunities) rather it is indispensable to perceive them.

One of the main approaches of the strategic change phenomenon -cognitive lens perspective (Rajagopalan and Spreitzer, 1997)- emphasize the managerial cognitive dimension, defined as structures of knowledge, beliefs, causal maps and mental schemes, used to understand the interpretive processes that guide individual behaviour. Barr et. al, (1992) suggest that processes of strategic change usually occur related to environment changes, but these changes are more intensive when changes also take place in a managerial mindset and in cognitive structure of the top management team. Relationship between the firm growth and the cognitive structure of the owner-manager has been specifically analyzed in several papers (Huck and McEwen, 1991). In summarise, we suggest the following generic propositions:

*Proposition 4: There will be differences in growth rate depending on cognitive structure characteristics of the owner-manager or top management team.*

*Proposition 5: A high growth of the gazelle companies will be preceded by changes in cognitive structure characteristics of the owner-manager or top management team.*

4. CONCLUSION

The present paper has studied high-growth firms (also known as “gazelles”) in the light of three different theoretical focus: (1) model about firm growth; (2) literature about strategic change and renewal; and (3) entrepreneurship field. The concept of “gazelle” has been defined by consultants. This paper provides an academic basis for future research, in which conceptual richness and theoretical rigor are combined, offering an integrative model of determinants of high-growth firms. However, this is the first step on a wider research process. We are building constructs and detailing variables in order to propose testable hypothesis through empirical investigations. The main difficulties comes from indicators related to cognitive dimensions, intangible resources and capabilities, strategic innovation, etc.

To summarise, the analysis of high-growth firms opens a wide range of research questions. We hope that more researchers, consultants and manager share our interest in this topic in order to improve the understanding of such an important type of companies for the employment rates increasing.
REFERENCES


