

Trajectories, Strategic Formulas and Contingencies: pathways to entrepreneurial success

Alain Asquin, R. Moore

▶ To cite this version:

Alain Asquin, R. Moore. Trajectories, Strategic Formulas and Contingencies: pathways to entrepreneurial success. EURAM, 2003, Milan, France. halshs-00688892

HAL Id: halshs-00688892 https://shs.hal.science/halshs-00688892

Submitted on 18 Apr 2012

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Trajectories, Strategic Formulas and Contingencies : pathways to entrepreneurial success

Alain ASQUIN

Professor of Strategic Management
Euristik-Strategia Upres a 5055 CNRS
IAE- University of Jean Moulin, Lyon, France
asquin@univ-lyon3.fr

Rickie MOORE

Professor of Entrepreneurship

E.M.LYON

Department of Management and Strategy 23, avenue Guy de Collongue 69132 Ecully, Cedex, FRANCE

Tel: +33 4 78 33 78 00

Fax: +33 4 78 33 79 27

Email: moore@em-lyon.com

Euram Conference

Bocconi University
Milano, 2003

Abstract:

Concerned by the high rate of failure in ventures, we embarked upon a process of identifying possible explanations for the failures. Combined literature and field research confirmed that the organizational capabilities of the entrepreneurs have been rather overlooked in comparing the successes and failures of new ventures. By extending and innovativing the RBV approach we formed a 'triptych' (a combined resources—competencies—capabilities approach), which constitutes a new tool for analyzing, facilitating and anchoring the growth of the firm along a given path of evolution (organizational trajectory). This triptych model can also serve as a conceptual grid for defining and improving programs to assist entrepreneurs.

Introduction

Up until recently, the entrepreneur was often presented as someone who was 'destined' to set-up his/her own business. This elitist vision of the 1980's reinforced the myth of an entrepreneur as someone set apart from the norm, and doted with extraordinary competencies and resources that others do not have. He/she was supposedly born with an exceptional 'providential' vision. In retrospect, this commonly referenced myth may have contributed to the deferral and stagnation of research on other relevant dimensions of the entrepreneurial phenomenon, e.g. entrepreneurial intent, entrepreneurial education, aspects of the entrepreneurial organization, etc.. Because there is no way to modify providence or chance, the policies governing assistance in business creation for entrepreneurs at that time, especially in France, espoused the myth. They used to favor financial elements and conditions that enabled the realization of a pre-existing intention, rather than those that favored the undertaking of an entrepreneurial organizational process. It is in recent years that assistance policies and practices have become more comprehensive and complex, and seek to support the elaboration of organizational processes.

In agreeing with Saporta (1994), we believe that one of the most fruitful research attitudes is that proposed by Gartner (1988). The question is not who is an entrepreneur but what does he/she do, what process(es) is undertaken and what organizations result. Prior to the legal act of creation, an entrepreneur implicitly engages in a process of organization the moment he/she conceives his/her project. The entrepreneur is probably already nested in a network of resources, and has perhaps already reflected on the competencies required, how they should be mobilized, as well as the path he/she could take in transforming his/her project within the target environment (Hornsby et al, 1993). If we accept that entrepreneurship is not only the creation of a firm (definition of an offer) but also of the founding of an organization (how to deliver the offer, now and in the future), then the resource-based view (RBV) in strategic management helps in understanding this process. In effect, Naman & Slevin, (1993) advocate that the theory of resources can be used more extensively in entrepreneurship.

The application of an RBV approach to entrepreneurship can better explain the success of a firm, not only by integrating the environmental conditions, but also by taking into account its organizational dimensions, like its management structure, its location, supply chain,

production means, employee training, mastering of technology, ability to join a cooperative network, etc. These dimensions are usually well defined and mobilized for established firms.

For these approaches, the creation of a business is a process in which resources are combined and developed to become specific to the business, thereby creating market 'leverage' (Hamel & Prahalad, 1990) which will enable the business to secure its place on the market. This implies that the creation of a business can be considered as a process during which the entrepreneur must at least, structure the specificity of his/her project to satisfy the short-term requirements of the environment. The entrepreneur needs to bear in mind that the sustainability and survival of a business involves both the development of resources and competencies and an adequate response to the mid to long-term requirements of the environment. The combination of the focus on the short-term and the anticipation of the future implicitly create a dynamic setting for the venture.

Concerned by the high rate of failure in ventures, we embarked upon a process of identifying possible explanations for the failures. Turning first to the literature and then sifting through our past and daily encounters with entrepreneurs, we developed the notion that one element seemed to be undersupplied when comparing the successes and failures - i.e. organizational capabilities of the entrepreneurs. Returning to the literature, we discovered some authors who addressed the concept of organizational capabilities¹, but from what we read, no one had explicitly proposed a combined resources - competencies - capabilities approach to investigating venture failure and success and not much existed on how an organization could incorporate them. Consequently, we formed the opinion (hypothesis) that having integrated some evolutionary concepts, an extended RBV approach would indeed form a 'triptych' - a combination of resources, competencies and capabilities, and could constitute a new tool for analyzing and evaluating entrepreneurship. In addition, these three components seemed necessary for anchoring the growth of the firm along a given path of evolution (organizational trajectory). We further felt that the use of this triptych could also contribute new learning for researchers and practitioners in the field of entrepreneurship.

¹ See HELFAT, C.E., Guest Editor's Introduction to the special issue : The Evolution of Firm Capabilities, Strategic Management Journal, Vol. 21, 2000.

We formalized our hypothesis, defined the principles on which the hypothesis will be evaluated, and formulated a number of propositions that we decided to test on 26 cases (sample) drawn from the public domain. This process led to the classification of the examples according to their strategic formula (product based, technology based or market based), and sub-groups were identified in function of the contingency factors confronting the firms.

As a result, we propose a model of analysis and interpretation which can be used not only to explain new venture creation, but also to serve as a conceptual grid for defining and improving programs to assist entrepreneurs.

1. The triptych and the concept of the "entrepreneurial organizational trajectory"

In discussing the triptych, it is necessary to define what we consider to be an entrepreneurial process i.e. the implementation of the triptych. Put differently, this realization of the triptych is a quest for the integration and adequation of the three components.

Usually, RBV approaches have developed a one-way structuring relation where competencies combine and modify resources. However, we prefer to collude with Teece, Pisano and Schuen (1997) and focus on the principle of co-evolution because of the complex interaction between three the components. All three are linked together in a dynamically interdependent relationship and according to Giddens (1984) and Morin (1986), create a structuring mechanism. For Saviotti & Metcalfe (1991) and Mackelvey (1994), this explains the emergence of the diversity of entrepreneurial organizational trajectories. As an illustration, members of a firm can inherit knowledge previously developed by others and are then able to produce new learning from this base. But, this can also limit the array of opportunities for organizational evolution. Indeed, the ability of a firm to distance itself from current routines depends on its 'absorptive capacity' (Cohen & Levinthal, 1990), which in turn depends on previously acquired organizational competencies. The ability of a business to evaluate and use external competencies also depends on the knowledge it acquired in the area beforehand. This knowledge enables the business to recognize the value of new information, to integrate it and to apply it as a means of sales. It therefore appears fitting to focus on the 'absorptive capacity' of the organization which does not depend on a specific individual, but rather on the quality and

capability of the links between a mosaic of individual competencies. Having comprehended the notion of co-evolution of the components of the triptych, it is easier to understand why an evolution in the venture constitutes an organizational trajectory which is restricted to those competencies that are accessible to the firm (Levinthal, 1994,

Chandler, 1998). The resulting trajectory therefore depends on the nature of the co-

evolution between and combination of the three components (Figure 1).

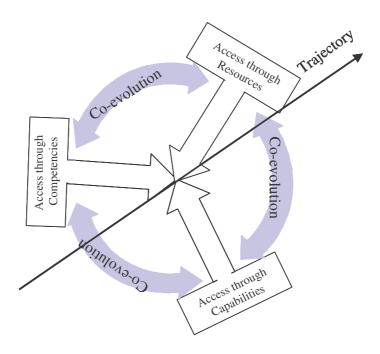


Figure 1: Triptych-driven Organizational Trajectory

Having laid the foundation for the triptych, the issue becomes how should it be implemented or developed within an organization.

We argue that the starting point or access to the triptych for a firm could be its resources, competencies or capabilities depending on its strategic formula. However, all three have to be under control sooner or later in order to fuel a positive organizational trajectory (market entry, survival, growth or development). We propose that the path (success) followed in implementing the triptych is a function of both the strategic formula as well as the contingencies (contingency pathways) that affect the venture.

According to the principle of co-evolution, every component of the triptych is both structuring and structured. The three principles with which the analysis would be conducted are defined as:-

- A trajectory is considered an organizational trajectory only if it contains a combination of the three components of the triptych,
- Each component of the triptych can constitute the basis on which an entrepreneur can start a venture.
- In order to allow the 'structuration' process to occur the entrepreneur should act quickly to control or to acquire the two other components other than the starting one.

Based on this framework, our first two propositions are :-

Proposition 1: Managing the dynamic 'structuration' of the three components of the triptych is a necessary condition for sustainable performance and growth of the venture.

Proposition 2: There is a more 'performant' way to access the triptych depending on the nature of contingencies that confront the entrepreneur and the venture

Before attempting to test the validity of our propositions through their application to the series of case studies, we will revisit the notions of resources, competencies and capabilities in terms of their relation to entrepreneurship. We will then establish the link between the different types of entrepreneurial projects and the strategic formula favored by the entrepreneur.

1.1 Resources, competencies and entrepreneurship

Interest in strategic analyses using RBV approaches increased throughout the 1990's. Several studies focused on the various competitive advantages offered by them (Barney, 1986, Barney & Hansen, 1994; Rowell & Dent-Micalleff, 1997, Hunt, 1997) or the resulting sources of diversification (Chatterjee & Wernerfelt, 1991, Markides & Williamson, 1996).

A number of key concepts on resources pertain to the research conducted for this article. First of all, the entrepreneur needs to identify those resources that are distinctive or to convert generic ones into specific resources. Secondly, the entrepreneur needs to guaranty the exclusivity of the resource either by acquiring or by controlling them through licenses, networks, etc. Thirdly, the entrepreneur has to continually preserve the distinctive nature and exclusiveness of the resource in order to maintain his/her

competitive advantage. One can imagine a new venture principally based on the private control of a rare resource which constitutes a distinctive advantage. Such resources are quite likely very hard to obtain on the market and are probably very costly. Hence the challenge for most entrepreneurs is to find a solution when they can't purchase or negotiate the use of rare resources. It is also possible for an entrepreneur to start a venture without having any distinctive resource and it may be interesting for him/her to speculate on the speed at which he/she can transform readily available generic resources into specific and rare ones. The ability to achieve the latter is itself a competence. Then, services rendered by resources depend on the entrepreneurial aptitude and acuity of those using them. Inversely, the development of such competencies is partly determined by the resources that are used (Penrose, 1959). Together, both elements create a production opportunity for a new venture and they reinforce the notion of co-evolution of the components.

The notion of competence was addressed very early by Selznick (1957) under the theme of distinctive competencies (area in which a business excels). However, it was not until the Hofer & Schendel (1978) study that a connection with resources was made. Today, even though some authors address the notion of distinctive competencies (Hitt & Ireland, 1985, Peteraf, 1993), most of them do so from the point of view of resources. Competencies are therefore considered as distinctive combination of resources. For Reed & De Fillippi (1990), competencies are the result of how a business uses its internal skills and resources in comparison to its competitors. Over the years, it was also commonly believed that the competitive advantage of a venture was considered as being based on competencies (Tampoe, 1994).

For Hamel and Prahalad (1990), competencies are of two types - peripheral or core, and the difference between the two is not in their nature, but in the strategic weight of each competency compared to the competitors of the venture and are formed through a managerial process (Doz, 1994).

Core competencies shape the collective learning of an organization and, more particularly, how various technical skills and multiple technological advances are coordinated and integrated. They are central in the value added of products or services for customers, and are not easy to imitate by competitors. Moreover, these competencies are "core" because they found the next generation of competencies that are potentially accessible by the

venture. In contrast, peripheral competencies are those which do not have these characteristics, but are needed anyway. One of Sony's core competencies is for example, the miniaturization of its products. A peripheral competency for a university could be its ability to optimize the allocation of classrooms when there are potentially more students than chairs.

For an entrepreneur, obtaining the core competencies required in his/her business is critical. Miles & Snow (1978), and later Snow and Hrebiniak (1980), demonstrated that even similar organizations with similar competencies can obtain very different outcomes – one can fail while the other succeeds. For this reason, the ability of the organization to develop these competencies should be a preoccupation for the entrepreneur and would be another demonstration of his/her entrepreneurial capacity.

In developing the core competencies, the entrepreneur engages in the practice of 'evolutionism', i.e. the transformation of a promising peripheral competence into a core one or one that would be specific on the market. Alternatively, the entrepreneur can choose to integrate this competence in their activity from the outside. Even though it is possible for an entrepreneur to start a company without being the owner of core competencies, he/she has to guaranty their existence and control their continuity.

1.2 Organizational capabilities and entrepreneurship

One of the main implications of the RBV approach is that businesses determine their strategy based on their competencies and not primarily on market demands. Competencies enable businesses to replenish basic resources that constitute the very foundation of their success. Inspired by an entrepreneurial attitude taken in its widest sense, a business must experiment with market leverage, so that it is not only reactive but also proactive. It must attempt to shape the market by creating a transaction area for itself. Yet, the vast majority of studies tend to concentrate more on the exploitation of resources than on their creation. Our approach is that is the vital issue is not the optimization of resources but their creation using the relevant competencies.

According to a set of institutional studies on competencies summarized by DeGregori (1987), the question is to understand how competencies are formed through interaction

between individuals. The diversity of new ventures and the conditions of success or failure, also depend on the specific systems implemented by the entrepreneur to build and renew the system of competencies. This specific consideration for the dynamics of resources is based on an evolutionary table of analysis (Fujimoto, 1999) but shares even greater commonality with RBV approaches (Foss, 1997). We consider this situation to be another reason for extending the RBV approaches as they do not sufficiently address nor explain the transformation of competencies inside an organization. This is in spite of the fact that these competencies have a critical impact on the possible and accessible future evolution of the firm.

Chandler (1990) underlined the advantage and fundamental necessity of extending the RBV approaches with the organizational capability component by advocating that the entrepreneurs who succeed are able to make a three-fold investment, in production, marketing and managerial competencies. An entrepreneur is not someone who simply launches an innovation on the market, but also someone who knows how to implement an organizational structure, and a system capable of developing resources. Pivotal to this success is the ability of entrepreneurs to develop strong organizational capabilities, which enhance the performance of the firm in an environment of ever changing technologies and markets. Technologies only offer opportunities and it is up to business managers to identify these opportunities and to transform them into sustainable advantages (Teece, 1993).

Credit must be given to Teece, Pisano and Schuen (1997), and of course Chandler (1998) for their work on dynamic capabilities. They not only look at exploiting resources but also their creation which plays a determining role in development of competitive advantages. These capabilities form a strategic architecture that structures the distinctive resource combination, and the transition from peripheral to core competencies. Thus, if competencies constitute the combination of resources, organizational capabilities are devoted to the implementation of such resources. Competencies enable the entrepreneur to generate an idea, but capabilities can put this idea into operation. Capabilities are similar to the organizational routines described by Nelson and Winter (1982) and may be considered as a second level of learning according to the theory of Bateson (1977).

The literature on capabilities is less abundant than that on core competencies. As a result, the identification of these capabilities is less mapped out and it is difficult to pinpoint all

their dimensions. Therefore, we will only consider the five capabilities identified by Stalk et al (1992) in the analysis of the cases.

- Rapidity: ability to quickly satisfy customer needs and incorporate new ideas and technologies into products
- Quality: ability to manufacture a product that satisfies consumer demands
- Sharpness: ability to have a clear vision of the competitive environment to be able to satisfy the changing needs and desires of consumers
- Agility: ability to adapt to different markets simultaneously
- Ability to innovate: ability to generate new ideas and combine existing elements to create new sources of value.

According to the 'actionalist' view we are developing, the issue for the entrepreneur is to implement, as quickly as possible, an organizational structure that will enable a favorable trend in learning.

A successful business may not be competitive in the short term as it builds up its capabilities in order to develop competencies and to maintain close proximity to the evolving requisites of the environment (Brown & Eisenhardt, 1997). This suggests that an entrepreneur ought to be prudent in reacting to the short-term dicta on the environment. Any attempt to adapt to the market could be potentially jeopardizing because of environment evaluation errors or if the response is late or de-synchronized with the movement (Heiner, 1983).

It is the very understanding of the necessity of this non-alignment that has lead certain researchers to ponder over the relative time it takes for a business to grow and adapt (Stalk, Evans & Schulman, 1992). This 'gap' justifies the fact that the development of resources is performed in anticipation, based on a strategic intention, rather than a posteriori following a jolt in the market. For a business to succeed, it is therefore necessary for the management to have an entrepreneurial attitude, i.e. to be able to anticipate general opinion, predict the direction of history and even change the destiny of the market. We could therefore define the entrepreneur as someone who believes he/she is capable of assuming this gap.

Another factor that also plays a role in the success of the business is not whether it is created with a particularly specific resource, but whether the entrepreneur is able to structure interactive or learning areas within it. The creation of a business would therefore be approached as the creation of an organization (Gartner, 1988). Consequently, it is possible for an entrepreneur to start a venture without any organizational capability, controlling only resource or competencies. As such, his/her competitive advantage will not be sustainable if the environment is evolving or if competition intensifies. Or on the contrary, a new venture can be based entirely on organizational capabilities. Many internet start- ups in France had no money, and their top management had no managerial nor technological core competencies, only a vision of how to market this new business. This was sufficient and enabled most of them to mobilize resources and competencies that other firms couldn't access. The time-based competition in the case of internet offers could be analyzed in terms of the entrepreneur's ability to federate resources and competencies through creative organizational capabilities.

1.3 Accessing the triptych – via the 3 elements of the strategic formula

In our quest to determine if the starting point to gain access to the triptych is significant for success, we decided to investigate the three main basic strategic power forces (Tregoe & Zimmerman, 1980) chosen by the entrepreneurs. These *'strategic formulae'* represent the initial anchoring of the venture:

• Type A: Product-anchoring

Type B: Technology-anchoring

• Type C: Market-anchoring

According to this classification, a type A venture should be developed around a selected product(s) by branching out to new markets and/or by integrating new technologies (Martinet, 1999). The acuity of an entrepreneur to identify a rare resource on the market and to obtain it for a competitive price is one of the major sources of success of entrepreneurial projects. This resource can offer a competitive advantage which will be maintained on condition that the resource is really rare and its exclusive character remains privileged and uncontested (by imitation or substitution). This situation can incite the entrepreneur to protect or to develop his/her resources in order maintain his/her competitive advantage.

Proposition 3: The control of a distinctive resource constitutes the basis for success in product-anchored strategy.

Type B ventures are for entrepreneurs who multiply the application of technologies already under their control. Technological developments usually go hand in hand with the development of new applications. Nevertheless, the ability of high-tech companies, in particular those that are too firmly centered on production, to adapt to a market is usually lacking. This capability can make all the difference between success and failure in the mid to long term.

Proposition 4: The control of core competencies is the first prerequisite to the success of a technology-anchored strategy.

Lastly, type C would satisfy every demand of a given market whatever the product or service that is required.

Of course, future coherent growth is favored by the formation of core competencies, but a SME can found its success on simple peripheral competencies. Indeed, by working on a market segment that is not attractive for large-scale competitors, or by being flexible, the business can build a competitive advantage that is enough to make it successful.

Proposition 5: The market-anchored strategy is the prerogative of the champions of organizational capabilities. (This proposal is somewhat beyond the RBV theory and is more congruous with the evolutionary perspective of our arguments).

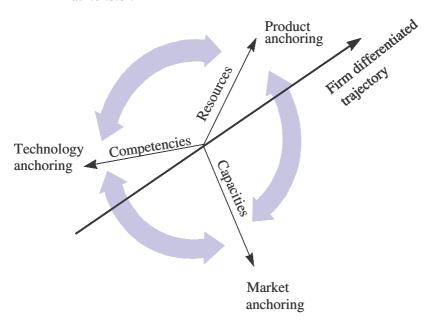


Figure 2: Entrepreneurial organizational trajectory and strategic dimension

As suggested in figure 2, a firm develops its desired trajectory through the triptych. Each components of the triptych could have been the source success if it was in adequation with the strategic formula. In this situation, there are three challenges for an entrepreneur.

- First, he/she has to accede to the two other components, by the better of the two
 possible paths. As suggested by Martinet (1999), even if a firm starts with a single
 strategic formula, it should look to develop the two others because its strategy must at
 least include these three variables (product, technology, market) among those
 identified by Tregoe and Zimmerman (1980),
- Secondly, he/she has to widen the scope of each component,
- Thirdly, the entrepreneur has to facilitate the rapid evolution of the firm along the differentiated trajectory.

Obviously, the dilemma is that these three objectives are, at a given moment, contradictory. Differences of results between entrepreneurs at a given time can be explained by their distinctive ability to optimize one or the other of these objectives. When considered from a dynamic perspective, the difference of performance lies in the entrepreneur's ability to attain the three objectives. To illustrate the difficulty of entrepreneurial management, it is possible that the attainment of a 'desired' performance necessitates restraining the performance in one or the other of the three objectives at a

given time. Then, the entrepreneur has to speculate (bet) on the ability of the market to support him/her even if his/her offer is not fully defined nor competitive as yet. Such an approach is necessary in order to preserve resources, to concentrate competencies or to imagine a collaborative network that will protect the venture against the competition in the future.

2. Insights from a sample of new ventures in France

The framework detailed in the previous sections has been elaborated through numerous and frequent interactions with various authors on entrepreneurship, and with entrepreneurs who recently created firms. In attempting to test our ideas, we agreed that we needed to define a common structure of analysis and to find cases in which none of us were involved so as to avoid any influence on, contamination of or interference with the sample.

Through the cases, we would seek to discover and validate whether the starting point or access to the triptych had an impact on the success of ventures – i.e. is there a more appropriate way to access and to implement the triptych? We believe that the difference in access would depend on the strategic formula on which top management has chosen to base the development of the firm; the success of 'product' type projects at the creation stage would be determined by the control of resources, 'technological' projects by competencies and projects centered around 'market demands', by organizational capabilities.

We would also try to determine the paths to the trajectories and confirm the presence of all three components of the triptych in explaining the success of the ventures.

2.1 Elements of methodology

We decided to work on a series of examples (case studies) of new venture creation that was reported by an external media - *Le Midi Libre*, a French daily local newspaper that covers the Languedoc Roussillon region (2,11 million people) in south of France, boarding the Mediterranean sea, well known for its technical background, its universities but also for farming and tourism activities.

For almost one year the newspaper ran a weekly feature on local entrepreneurs reporting on both their success and failures. The format used for the interviews was the same throughout the year, and the topics covered were within the scope of our research interests. Among the many topics raised by the interview questions, we were primarily interested in what we defined as the 'key sub-set' of elements, i.e. - the history of the entrepreneur (his previous job, his qualification, his competencies), what he/she owned at the creation stage, what were the main difficulties he/she had to deal with and when, the nature of competition, a detailed explanation of his/her offer, the firm's strategic and marketing positions, a statement on the firm's comparative advantage and its competitors, and the evolution of the business in the near future. The sample seemed perfect as the potential contrast of types of ventures, for the most part new ones, covered provided an attractive and vast array of situations where the three different sequences of accessing and completing the triptych could be observed and analyzed.

We selected 26 cases (the sample) from the 45 presented by the newspaper as they corresponded most closely to our analysis framework. The 19 other examples lacked at least one fundamental element from the above-mentioned key sub-set and if included, would hamper a coherent analysis of the cases.

From the sample, we were able to distinguish three categories of entrepreneurial projects, based on their underlying strategic formula, and then to identify a number of sub-groups according to the distinctive contingencies that affect each category. This classification of the sample is summarized in Table 1.

Table 1 : Strategic Formula and Firm Contingency Factors

Contingency factors	Characteristics of the Product		Production system		Nature of Competition		Number of firms
	Common	Differentiated	Standardize	Adapted to	Fragmente	Global	
			d	customers	d		
Product							
Formula							(7)
SG-A1	•			•	•		2
SG-A2		•	•			•	1
SG-A3	•			•		•	1
SG-A4		•		•	•		3
Technology							(4.4)
formula							(11)
SG-B1	_	•	_	•	•	_	8
SG-B2	•		•			•	3
Market							
formula							(8)
SG-C1		•		•		•	2
SG-C2	•		•		•		3
SG-C3	•			•	•		3

2.2 Analysis of cases.

For each sub-group we established the entry component to the triptych and the contingent path followed to construct it.

2.2.1 "Product" anchoring entrepreneurship (Type A)

For the product-based firms, we identified four sub-groups according to contingencies they had to confront.

The first sub-group (SG-A1)

SG-A1 consists of two businesses that have developed core competencies dealing with standardized resources.

- Mr. Chekroun developed a network out of a traditional family-run jewelry business. In order to do so, this entrepreneur gradually formed core competencies by interconnecting various standardized resources, knowledge of the jewelry trade, marketing (Mr. Chekroun has a Ph.D. in management), IT, training center, etc. Several innovations in jewelry have resulted from this combination. As early as 1982, customers were able to consult a computer in store window to obtain

information on jewels. In 1992, he even dared to venture into 18-carat gold jewelry which, although it was still prestigious, became more affordable, thus favoring impulsive buying. He also has organizational capabilities: a computerized system enabled him to successfully manage purchases and deliveries. This entrepreneur has been quoted as saying: a traditional jeweler only reacts after one year. Our stock turnover is five or six times quicker.

The case of Majar SA is somewhat similar. Specialized in agricultural equipment, this business was taken over in 1986. The product was initially highly standardized, as were the resources. Over time this entrepreneur built up core competencies, especially in miniaturization by combining non-specific resources (knowledge of agricultural equipment, design, mechanics). He now offers top of the range equipment for what he calls 'Sunday gardeners'. This turnaround was only possible because of his extensive organizational capabilities and, in particular the fore vision of a gardening trend with high-income customers.

For these two businesses, the contingency path (CP-A1) to the triptych is **resources-competencies-capabilities**. Indeed, it is only when resources were gradually combined in core competencies that the entrepreneur had the idea to serve their market differently, one with 18 carat gold jewelry but with a rapid modification of collection, the second with professional but miniaturized equipment for private gardens.

The second sub group (SG-A2)

SG-A2 comprises a single business offering products with a rather high-tech aspect. In this way, even if the fundamental strategic criterion remains the product, this formulation is close to the technological formulation. This Catana specialist, ranked as the world's second best leader in top of the range catamarans, started his career with a technological formulation by implementing his knowledge of composite materials in the construction of climbing walls (until that time it was a technology based formula). Only after this experience did he specialize in the construction of catamarans where he now has great renown. Over the years, he has enhanced his knowledge around this unique product. He now has a competence that is both marketable and difficult to imitate. The marketable nature of this competence is mainly attributed to his extensive organizational capabilities, i.e. apart from innovation and high quality, Catana has sufficient capital intensity to satisfy the demands of different markets and better understand customer needs.

The contingency path (CP-A2) to obtain the three components of the triptych is resources-capabilities-competencies.

The third sub-group (SG-A3)

SG-A3 also comprises a single business. Specialized in the manufacture of chairs (traditional or designer), this business only has peripheral competencies but optimizes them well through a strong "competence heritage". This heritage enables the firm to benefit from a well-established reputation of reliability. The current top manager of the firm of is the son of the former top manager.

In this case, there is no triptych, but only two elements - resources which needed for the product formula, and competencies. These competencies are considered as peripheral because they are not exclusive, but customers believe these chairs are better than others. As a result, this is an example of the kind of distinctive resource that confirms that this business has to be anchored firstly on the control of its resources.

The fourth sub-group (SG-A4)

SG-A4 comprises three businesses without core competencies or organizational capabilities to give value to their resources.

The case of Xéris is the most representative. This manufacturer of wrapping paper wanted to sell its creativity. However, the production allowed by this competence is so easily imitable that even prototypes are copied. The market is flooded with followers that have no creativity but have sufficient organizational capabilities to serve customers quicker and at a lower price.

The other two companies are in a less dangerous situation but once again neither has core competencies nor organizational capabilities.

- Verfeuille SARL, is involved in the transformation of chestnuts. It has barely attempted to adapt to the market even though it is in direct competition with Italian, Spanish, Portuguese and Turkish chestnuts which are often harvested and transformed at a lower cost. Today, it is gradually attempting to position itself on a strategic niche market of 'sustainable growth'. Indeed, as this transformation can

be qualified as biological and as the partners are very concerned by working conditions of their employees and they believe they can gradually market this specificity.

- Le Fédou SARL produces farmhouse cheese which it found very difficult to optimize at the creation stage. Gradually, it became more aware of customer wishes (switches from round cheese to a block of cheese) and hires a sales agent.

At this stage, it is not yet possible to state that these businesses have core competencies or organizational capabilities but they are gradually growing. The three businesses started with the same resource – i.e. creativity (designs and processing chestnuts and cheese), but followed different trajectories.

- Xeris is two years old and not able to protect its fragile specificity. Its management has not found a way to protect the firm nor how to combine this resource with others to make it less imitable. The management lacks competence, as they are also unable to imagine new ways to service the market differently, e.g. by commercializing their production themselves, or by working for exclusive customers. The situation is static and there is no quest to obtain the triptych.
- Verfeuille is seeking a resources-competencies-capabilities contingency path, like subgroup SG-A1. Its success will depend on the size of the niche and on the price gap with other countries. It is interesting to note that the only difference in contingency factors is the characteristics of the product. Products are of common type in SG-A1 but differentiated in SG-A4. The new attitude of Verfeuille is to react to the erosion of the originality of the product
- Le Fédou is embarking upon a resources-capabilities-competencies path like subgroup SG-A2, by focusing first on its customers' needs. Its success will depend on the effective sensibility of customers to this adaptation. Is there a real potential for a sustainable differentiation in that niche? The differences in contingency factors compared to SG-A2 lies in differentiation of product and the fragmented nature of the competition. The evolution of contingency factors leads to less differentiation and a more global competition when confronted with all kinds of

cheese. Once more, the search for the triptych is coherent with the evolution of contingencies.

2.2.2 'Technology' anchoring entrepreneurship (Type B)

For the technology-based firms, we identified two sub-groups according to their contingency factors.

First sub-group (SG-B1)

In SG-B1, the behavior of its members (high-tech businesses) was first to base their strategy on their core competencies. Some then went on to increase their competitive advantage by their organizational capabilities which constituted the key to their success. For those who did not have these capabilities, their ideas were not developed beyond the design stage. There are many examples in this group but we will only mention a few of them.

- Télédétection et Traitement d'Images (TTI) has a highly specific technology which enables it to offer a topography system with aerial laser shooting. Its non-specific assets are interrelated (such as the laser and telemeters, airplanes) to form a core competence. TTI, has developed a proactive approach through its capabilities. Today, TTI markets satellite images for flood forecasts (e.g. plan of a motorway), soil classification, desert movement, etc. This business is successful due to its specific knowledge and the quality of its products. It combines the technology formula, the market formula and is now exploring multiple applications through a product formula. TTI will have to find new resources for this extension.
- Sodiélec, specialized in UHF directional radio link communication, has core competencies that are highly inimitable, as well as comprehensive capabilities which allows it to combine:
 - Rapidity they say they are 'impressive on deadlines',
 - Innovation,
 - Quality their products are ISO certified.
 - Sharpness they are 'aware of changes and the increasing complexity of the market'.

There are even particular cases where the competence is highly specific and very difficult to imitate but too rare to be seen and therefore marketed. This is the case of a pharmaceuticals business, specialized in artificial nutrition which, despite its position in a strategic niche market, is finding it difficult to make itself known.

L.C.H. is another firm with the same problem of notoriety. A chemist who had worked for hospitals for a number of years created this venture. From his knowledge in chemistry, he developed new solutions to clean infected materials. There is no way for him to compete with the larger firms. Faced with this reality, he decided to develop a partnership and succeeded in becoming a partner of Merck for certain of its applications. L.C.H. was then in a position to focus on the development of its trajectory. It concentrated less attention on technology and more on studying the evolution of the market via the expansion of its organizational competencies. L.C.H. survived because of its flexibility.

Businesses that encounter major problems in marketing the applications of a mastered technology, often do not have organizational capabilities.

This is true for Vigicard (a type of mouse that transmits a patient's cardiogram over the telephone) which was not yet launched despite the fact that it should provide enormous freedom to heart patients. Unfortunately, the designer forgot to resolve the fundamental problems of responsibility and the payment of the cardiologist at the other end of the line.

While the presence of core competencies would appear to be linked to the existence of sophisticated technologies, the success of such technologies is determined by organizational capabilities, and, in particular, the ability to understand the market. The impact of resources should come afterwards.

Thus, the firms in our sample that grounded their development initially on the technology formula, seems to be more successful if their respected the necessity to first control the core competencies and then to complete the triptych through the **competencies-capabilities-resources** contingent path **(CP-B1)**.

Second sub-group (SG-B2)

In sub-group SG-B2, it is interesting to examine the differences between the three businesses that only have peripheral competencies. Their strategy is clearly different from that of high-tech SMEs.

- Biophyderm, a product tester for large cosmetic groups, relies entirely on its flexibility.
 The fact that this business has organizational capabilities facilitates the exploitation of its competencies that are somewhere in between core and peripheral.
- A small specialized-cement business developed its competitive advantage through its reliability and flexibility within a local network. It satisfies very specific customer needs, in particular for small construction sites (e.g. cement supports for arrivals and departures boards for a transportation company based in town of Perpignan). This business only has peripheral competencies but optimizes them thanks to excellent quality and sharpness. The manager has understood that firm has no way to develop core competencies, and as a result, he focuses his efforts not on competencies but in his ability to combine very common resources to serve the market. It is rather striking to note that this business is the only one with standardized technology.

The performance in these contingent condition seems to be related to a contingent path (CP-B2): competencies-resources-capabilities.

- The last firm, Occigerm discovered a procedure, but not a real technology, to transform medical waste into ordinary sterile waste. It did not take into account the necessary conditions to satisfy the market and, namely the required capital intensity. Occigerm is not in a very comfortable situation:- it controls competencies but not all resources needed to serve the market, it does not own the capabilities to find a solution with a partner nor to sell a license. The firm is in a static position and has not found a solution to progress in the triptych.
- 2.2.3 'Market' anchoring entrepreneurship (Type C) In this category, we have identified three sub-groups.

First sub group (SG-C1)

SG-C1 consists of two businesses, one of which is specialized in consulting and the other situated halfway between agriculture and tourism. Both, however, satisfy the overall needs of a target customer.

- The first entrepreneur satisfies the needs of senior management of SMEs: as a consultant, he occupies various roles, from a headhunter of CPAs to a consultant on strategy or corporate recovery. The consultant himself declares that he is unable to define his profession: there is no specific title for my profession. Business managers call on me when they think there is an emergency. The service offer that can satisfy this type of need is therefore eminently sophisticated.
 - 1. Initially, the business only had a peripheral competence, which corresponded to that of an experienced chartered accountant. However, it also had numerous capabilities. As defined in the theories of Stalk, Evans & Schulman (1992), sharpness, rapidity and quality were all present. The entrepreneur was very familiar with the network and the problems encountered by the SMEs. He managed to rapidly satisfy the demand by offering an all-round, renowned, quality service.
 - 2. However, this offer needed to rapidly evolve toward core competencies in order to maintain a predominant position. The business decided to implement an interconnected asset system to satisfy customer needs. This entrepreneur implemented a monitoring system described in a letter to customers containing the main statutory and tax information. He also offered an on-line service for urgent questions.
- The second business satisfies the needs of rural tourism: a couple based in the Aveyron area in the Causse de Séverac region combines production of farmhouse cheese, self-catering cottages and camel rides. Here again it is necessary to satisfy the overall needs of tourists in a rural context. Unlike the previous example, the strategic trajectory of this business was not deliberate:
 - 1. Initially, the couple had specific resources such as the Pérails (farmhouse cheese) but had not combined them into core competencies. These resources were marketable but imitable. Rapidly, their competitors acquired these resources and the market took on such a volume that the capital intensity requirements bypassed the possibilities and aspirations of this neo-rural couple. During this initial

experience, the couple did not have the capabilities to replenish (nor protect) their competencies. Nor did they have the sharpness or agility required. They based their launch on the resources they controlled, but they didn't have a product formula. However, a market formula was necessary to allow them to earn a living in this isolated area.

2. Progressively, the couple formed the conditions of their success. They managed to create synergies that were not as easy to imitate. This resulted in a more sophisticated offer, combining traditional farmhouse cheese production, country cottages for tourists and camel rides. Their sharpness improved, and the couple is now able to understand the needs of their customers and satisfy them with an all-round offer. They developed organizational capabilities to serve their market formula.

In this subgroup, entrepreneurs first had to control capabilities to enhance competencies (to provide accurate information to managers, to make Pérail cheese, and to ride a camel). The contingency path **(CP-C1)** to the triptych here is **capabilities-competencies-resources**.

Second subgroup (SG-C2)

SG-C2 plays its game well by targeting a specific market segment. Of the three businesses making up this sub-group, one provides secretarial services, another is involved in the rubber business and the last in IT. The contingency factors are made of a non-differentiated product, a fragmented competition and a production system that is inadequate to satisfy customer needs (simple formulation of the offer).

Together they maintain a strong relationship with their customers through the implementation of peripheral competencies on a local market. This strategy proved to be a trump card and made them highly successful as the local businesses favor flexibility and a rapid response. In this context, market needs may be more or less sophisticated but are satisfied by a simple formulation in the absence of competitors: success is not so much determined by holding distinctive resources or competencies, but rather by positioning oneself on a niche market not targeted by competitors. This approach provides for a more sustainable success but does not enable the business to protect itself on the market. These three businesses are more or less successful. The entrepreneurs do not make lots of money, but they still survive despite difficult economic conditions.

The contingency path **(CP-C2)** for the triptych here seems to be: **capabilities-competencies-resources**. Indeed, what is the most important is to capture a niche and to evolve with it. A secondary objective is to sell the offer to the wider population of the niche. This would require that the firms have to find the necessary resources if contracts are signed. Only if future and prospects of this market is confirmed, would these firms invest in the development of specific competencies to differentiate their offer for multiple needs.

The third sub-group (SG-C3)

Sub-group SG-C3 is made up of three firms. The first two businesses are more or less in the same situation. One is looking to satisfy the agro-industry equipment market and the other is involved in the steel industry. Both have been oscillating from restructuring to restructuring and from failure to failure. Neither appears to have a vital capability in understanding market changes. This has less to do with a lagging behind factor than a failure to acknowledge the biased advantage held by large groups.

The only non loss-making business in this sub-group is involved in subcontracting. An unemployed secretary and electrician bought the production tool of their former employer and now process the orders (electronic cards) of certain customers. Their contractor supplies them with almost all materials, which facilitates treasury management. The team has flexibility to its advantage (specific organizational capability), mainly from the hiring of seasonal workers. This is a typical case of a standard market demand being satisfied by peripheral competencies.

The two first firms had heavy equipment, strong and tightly related assets and were unable to recombine them to adapt to the market needs. The oldest of all the firms in the sample, but new ventures anyway because of their restructuration, they started by controlling productive resources but are now developing a market formula. This inconsistency is the source of failure. They have no competencies to give value to these assets, and they have no capability to transform these competencies.

The third firm is still in activity because its main resources come from the owners' former employer and current main customer. Their organizational capability has been to avoid the problem of adjustment to the market by being an out-sourced operator. They

narrowed the concept of the market even if they suffer from an inconvenience – they have no real development and are in a fragile position. Because they were able to free themselves of the resources and capabilities problems, they are in a position to concentrate on competencies, and could develop a new offer that can be technology based. They would eventually be able to serve their market with the peripheral competencies that they have developed and then defend their position through their flexibility.

Conclusion

Current thinking and international research on entrepreneurship advocate that the rate of economic growth in a country correlates to its level of entrepreneurial activity (Reynolds et al, 2000). Globally, many countries are actively pursuing strategies that are intended to increase this level. They are launching major programs of sensibilization to entrepreneurship and implementing numerous structures to support entrepreneurs. Today, entrepreneurship has not only made its way into the curriculum of almost all business schools, it has also become a core requirement in some cases. We can imagine that eventually, the 'bug' will bite massively.

An important parallel to such initiatives is the interest in the success and survival of entrepreneurial organizations and newly created firms. We have observed that the rate of failure in the creation of new ventures is very high, and that there is a need to better understand and improve the situation. Answering the question why and when does an entrepreneur succeed or fail, leads us to conduct research on several aspects of the entrepreneurial phenomenon. It goes without saying that it would be considered restrictive to limit the creation of a business to the acquisition of resources. The creation of a business sets-off a transformation process of both resources and competencies through organizational capabilities.

By looking at entrepreneurship from the point of view of the extended RBV approach we underline the fact that the entrepreneur can only maintain a distinctive place for his/her firm if he/she can implement and develop the triptych. In addition, we have proposed a new technique to be used for analyzing and understanding the trajectories of new ventures. We believe that this new approach will be helpful, in understanding more

systematically, the reasons why an entrepreneur fails or succeeds in building a project that endures.

Applying the triptych to the sample has proven very instructive and insightful. From the patterns that have emerged, there is tremendous learning that could be integrated in entrepreneurship support programs to improve their quality and content. Figure 3 depicts a 'roadmap' which can help entrepreneurs to choose a path for constructing their trajectories based on their contingencies. For each contingent situation, in function of the strategic formula, a specific contingent path to the triptych seems to give a better performance than the other solutions. Also, the strategic creation process the strategic creation process can be moderated / fashioned by identifying contingent trajectories that will lead to satisfactory control of all three components of the triptych.

Success **Triptych Components** Strategic Sub-groups **Paths** Capabilities **Formula** Resources Competencies 2) (1)3 SG-A1 CP-A1 **Product** (3)2 SG-A2 CP-A2 SG-B1 (1)2 CP-B1 **Technology** SG-B2 3 CP-B2 2 1 SG-C1 Market CP-C1 SG-C2 CP-C2

Figure 3: Contingency Pathways to Success in New Venutre Creation

Key: C.P.(x) = Contingency Path for Type(x) Ventures

It must be noted that SG-A3, SG-A4, and SG-C3 are not mentioned in Figure 4, as their situations are not considered as being successful.

The encouraging preliminary findings of our study pave the way for the empirical testing of the model. The results could serve to validate our proposals and to help entrepreneurs avoid failure and increase the success of their venture.

Global learning is also a major feature of international encounters in entrepreneurship, as countries attempt to learn from each other and to replicate current 'borrowed' best practices. We hope that from our French study we have contributed to this undertaking and have stimulated interest in the resource-competence-capability triptych of entrepreneurship research and practice.

References

- Band D., Scanlan G., Strategic control through core competencies, *Long Range Planning*, Vol 28, N°2, 1995, pp 102-114.
- Barney J., Organisational culture: can it be a source of sustained competitive advantage ?, *Academy of Management Review*, 11 (3), 1986, pp 656-665.
- Barney J., Hansen Mark, Trustworthiness as a source of competitive advantage, *Strategic Management Journal*, Vol 15, 1994, pp 175-190.
- Bateson G., Vers une écologie de l'esprit, Edition du Seuil, 1977.
- Baum J.A., Singh J.V., (eds) *Evolutionary dynamics of organisations*, Oxford University Press, 1994.
- Black J., Boal K., Strategic resources: traits, configurations and paths to sustainable competitive advantage, Strategic Management Journal, Vol 15, 1994, pp 131-148.
- Brown S., Eisenhardt K., The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations, *Administrative Science Quarterly*, 42, 1997, pp 1-34.
- Chandler A. D., Organisational Capabilities and the economic history of the industrial enterprise, *Journal of Economic Perspectives*, Vol 6, N°3, 1992, pp 79-100.
- Chandler A. D., Hagström P, and Sölvell Ö., *The dynamic firm* Oxford University Press, 1998.
- Chatterjee S. and Wernerfelt B., The link between resources and type of diversification: theory and evidence, *Strategic Management Journal*, Vol 12, 1991, pp 33-48.
- Collis D., Corporate strategy in multibusiness firms, *Long Range Planning*, Vol 29, N^o3, 1996, pp 416-418.
- Dierickx I. and Cool K., Asset stock accumulation and sustainability of competitive advantage, *Management Science*, Vol 35, N°12, December 1989, pp 1504-1511.
- Dosi G., Teece D., Winter S., Les frontières des entreprises, *Revue d'Economie Industrielle*, Vol 1, 1990.
- Doz Y., Les dilemmes de la gestion du renouvellement des compétences clés, *Revue Française de Gestion*, N°97, janvier février 1994, pp 92-104.
- Fujimoto T., Reinterpreting the Resource-Capability view of the firm: A case of the development-production systems of the Japanese auto-makers in Chandler et al. (editors), *The dynamic firm* Oxford University Press, 1998.
- Foss N.J., Overview of themes and contributions, in *Resources, Firms and Strategies*, Oxford Management Readers, Foss N.J (Ed), Oxford University Press, 1997.

- Giddens A., La constitution de la société, Presses Universitaires de France, 1984.
- Grant R., The resource-based theory of competitive advantage: implications for strategy formulation, *California Management Review*, Spring 1991, pp 114-135.
- Hamel G. and Prahalad C.K., The core competence of the corporation, *Harvard Business Review*, May-June 1990, pp 79-91.
- Hamel G. and Prahalad C.K., Strategy as stretch and leverage, *Harvard Business Review*, March-April 1993, pp 75-84.
- Heiner R.A., The origin of predictable behavior, *American Economic Review*, Vol 73, N°4, 1983, pp 560-595.
- Hitt M., and Ireland D., Corporate distinctive competence, strategy, industry and performance, *Strategic Management Journal*, Vol 6, 1985, pp 273-293.
- Hofer S. D., Strategy formulation: analytical concepts, MN West, Saint Paul, 1978.
- Hunt S., Resource-advantage theory: an evolutionary theory of competitive firm behavior? *Journal of Economic Issues*, March, 1997, pp 59-77.
- Hornsby, J., Naffziger, D., Kuratko, D., Montagno, R., An interactive model of the corporate entrepreneurship process in Entrepreneurship, *Theory and Practice*, Vol 17, N°2, 1993, pp 29 .
- Lant T. K., A situated learning perspective on the emergence of knowledge and identity in cognitive communities in Garud R. et Porac J (eds) *Advances in managerial cognition and organisational information processing*, JAI press, 1998.
- Levinthal D., Surviving schumpeterian environments: An Evolutionary perspective in Baum J.A., Singh J.V. *Evolutionary dynamics of organizations*, Oxford University Press, 1994.
- McKelvey B., Evolution and organizational science, in Baum J.A. and Singh J.V. *Evolutionary dynamics of organizations*, Oxford University Press, 1994.
- Martinet A C., La lecture stratégique du diagnostic global, chapitre 10 in Marion Alain (ed) *Diagnostic d'entreprise: méthodes et processus,* Economica, 1999, pp 255-270.
- Markides C., and Williamson P., Corporate diversification and organisational structure: a resource-based view, *Academy of Management Journal*, April 1996, pp 340-367.
- Miles R. E. and Snow C. C., *Organisational Strategy, structure and process*, New York, Mac Graw Hill, 1978.
- Morin E., La méthode (T3), la connaissance de la connaissance, Le Seuil, 1986.
- Naman J.M. and Slevin D.P., Entrepreneurship and the concept of fit: a model and empirical tests, *Strategic Management Journal*, Vol 14, 1993, pp 137-153.
- Nelson R and Winter S.G, *An evolutionary theory of economic change*, Cambridge, MA: Belknap, 1982.

- Penrose E., The theory of the growth of the firm, Oxford University Press, 1959.
- Peteraf M., The cornerstones of competitive advantage: a resource-based view, *Strategic Management Journal*, Vol 14, 1993, pp 179-191.
- Reynolds P. D., Hay M., Bygrave, W. D., Camp, S. M., Autio, E., *Global Entrepreneurship Monitor 2000 Executive Report*, Kauffman Center for Entrepreneurial Leadership, 2000.
- Reed R., and de Fillippi R., Causal ambiguity, barriers to imitation, and sustainable competitive advantage, *Academy of Management Review*, Vol 15, N°1, 1990, pp 88-102.
- Rowell T., and Dent-Micalleff A., Information technology as competitive advantage: the role of human, business and technology resources, *Strategic Management Journal*, Vol 18, N°5, 1997, pp 375-405.
- Saviotti P.P., Metcalfe J.S., *Evolutionary theories of economic and technological change*, Harwood Academic Publishers, 1991.
- Schendel D, Introduction to Summer 1994 special issue Strategy: search for new paradigms, *Strategic Management Journal*, Vol 15, special issue, 1994, pp 1-4.
- Selznick P., Leadership in administration, Harper and Row, New York, 1957.
- Snow C.C. and Hrebiniak L.G., Strategy, distinctive competence and organisational performance, *Administrative Science Quarterly* Vol 25, 1980, pp 317-336.
- Stalk G., Evans P., and Schulman L., Competing on capabilities: the new rules of corporate strategy, *Harvard Business Review*, March-April 1992, pp 57-69.
- Tampoe M., Exploiting the core competencies of your organisation, *Long Range Planning*, Vol 27, N°4, 1994, pp 66-77.
- Teece D. J., The dynamics of industrial capitalism: perspectives on Alfred Chandler's scale and scope, *Journal of Economic Literature* Vol XXXI, March 1993, pp 199-225.
- Teece D.J, Pisano G. and Shuen A, Dynamic capabilities and strategic management, Strategic Management Journal, Vol 18, August 1997, pp 509-533.
- Tregoe B. and Zimmerman J., *Top Management Strategy*, Simon and Schuster, New York, 1980.
- Tyres M and Von Hippel E., The situated nature of adaptive learning in organizations, *Organisation Science*, Vol 8, N°1 January-February 1997.
- Verdin P., and Williamson P., Successful Strategy: stargazing or self-examination ?, *European Management Journal*, Vol 12, N°1, March 1994, pp 10-19.
- Wernerfelt B., A resource-based view of the firm, *Strategic Management Journal*, Vol 5, 1984, pp 171-180.

Wernerfelt B., The resource-based view of the firm: ten years after, *Strategic Management Journal*, Vol 16, 1995, pp 171-174.