# Strategy, Innovation and Internationalization in SMEs: The Implementation Issue

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Abstract: Innovation and internationalization, along with strategy formulation, due to their relationship of mutual interdependence, are widely referred to as decisive factors for the sustainable growth of SMEs. In this article we aim to study the relationships between strategy, innovation and internationalization and its effects on business competitiveness, filling a gap in terms of the knowledge concerning these interactions, which is diffuse or inconclusive. Failure rates related to strategy, innovation and internationalization are high, with correspondingly high costs for companies, and we postulate that they are linked to aspects of implementation. As companies enter or consider each one of these dimensions of the business, they will incur in increasing costs if there is a poor implementation of strategy, innovation and internationalization. However, despite their importance, many SMEs do not have structured processes of strategy, innovation and internationalization. This may be particularly true in micro, entrepreneurial enterprises, which are the subject of this study. The determination of the causes and determinants, as well as the tools that companies use in designing their processes of formulation and implementation of strategy, innovation and internationalization, are extremely important in order to identify the factors and determinants that have major impacts on business performance, and explain how these effects occur or act. The importance of this issue is increasing, namely at the European level, because the market in each country is generally too small to allow the return on the investment made in developing a new product, so internationalization comes as a natural path to follow, once the innovation process is properly consolidated, based on a coherent, visionary and sustainable strategy. Many new firms initiate their activity with an explicit eye on internationalization and products designed for foreign markets should be prepared to compete at a global scale, supported by a clear differentiation strategy. This article is a case study of fifteen Portuguese micro enterprises (less than ten employees). The share of micro enterprises in the total business sector in Portugal is approximately 95,59%. Entrepreneurship has been encouraged by several policies, and new firms, with new approaches and skills, have surged. Our sample includes new firms and firms that were created several years ago, and spans several sectors of activity. We will examine, in the light of the main literature about the issue and in a critical way, the strategy, innovation and internationalization processes of these firms, and interpret them under the assumption that implementation aspects are critical to their performance and hence to their survival in a hyper competitive global industry. The results of the study provide the ground for the proposal of a diagnostic assessment tool, which aims at performing an enquiry into the firm's existing methodologies and practices related to strategy, innovation and internationalization, and thus allowing a more rigorous and systematic interpretation of the interactions of those processes. The diagnostic tool provides the basis for the proposal of adequate tools that the can be implement to better coordinate those processes. This assessment tool may be applicable to more mature SMEs as well, helping organizations improving their strategy processes.

**Keywords:** strategy, innovation and internationalization management, entrepreneurship, diagnostic assessment, scoring model, organizational change

# 1. Introduction

In this paper, we intend to provide an overview about the interaction between the processes of formulation and implementation of strategy, innovation and internationalization, since there are few studies that integrate these issues and analyze the interdependence between these areas of knowledge, despite the explicit recognition that the three areas are closely related and that it is difficult to understand one of the processes without understanding the interrelationships with the other processes.

Despite the recognized importance of these areas, particularly on the issue of competitiveness based on smart specialization, Portuguese business practices in those three areas are largely deficient, due to a high orientation of Portuguese firms to domestic demand. This orientation has proven disastrous for many companies, due to the constraints that the small internal market crosses, associated with the fact that almost all of the Portuguese firms are SMEs, particularly micro enterprises. The share of micro enterprises in the total business sector in Portugal represents 95,59%, and the phenomenon called "entrepreneurship" is very present.

Managers have at their disposal several tools for planning, but nevertheless, the implementation process reveals itself as the decisive factor for the success or failure of a company's performance, and it turns out that there is a lack of understanding of the interaction between the components of strategy, innovation and internationalization and the use of appropriate tools

The development and structuration of a diagnostic assessment tool applied and experimented in those enterprises, in terms of existing methodologies and practices related to strategy, innovation and internationalization, could allow a more rigorous and systematic interpretation of the interaction of those processes. Hence, the proposal of adequate tools for the management of SMEs to coordinate those processes, helping organizations to improve their strategy, innovation and internationalization processes, which are critical to increase their competitiveness.

We begin this work with a critical review of the existing literature about the concepts related to strategy, innovation and internationalization. Then we identify the methodology adopted in this work and finally the results are analysed under the light of the research questions.

## 2. Conceptual framework

A common interest between academics and practitioners is to try to understand why an organization has success in their interaction with its environment and how they can manage this process (Axelsson & Easton, 1992).

This issue is visible in the concept of strategic management (also called "policy" or "strategy") defined by Rumelt, Schendel & Teece (1994), which is related to the course of an organization, including the issues that are at the heart of top management preoccupations and those who are associated with the reasons why a business succeeds or fails. Hitt, Ireland & Hoskinsson (2011) states that "the strategic management process is the full set of commitments, decisions, and actions required for a firm to achieve strategic competitiveness and earn above-average returns", or in other words, it is the successful formulation and implementation of a strategy that creates value.

Behind those definitions, there are three key strategic questions that each firm asks herself and that need an answer: (1) Where are we today?; (2) If nothing will change, where will we be in one, two, five or ten years? Will the answers be reasonable? (3) If the results are not satisfactory, what actions should management take? What are the advantages and risks involved?

Thus, we can resume strategy as set of management decisions and actions that determine the long-term performance of a company. The basic elements constituting the cycle of strategic management are the analysis of the environment, the formulation and implementation of strategy, assessment and monitoring. In the case of the analysis of the environment, the elements that compose it are the analysis: of the general environment, of the industry, of the competition, of the organizational structure, of the corporate culture and of the resources that the company has at its disposal.

The process of strategy formulation is closely linked to the progress of long-term plans in order that a company deals effectively with the opportunities and threats that it faces in its environment, in light of its strengths and weaknesses. Strategy formulation is then made by the mission, objectives, strategies (comprehensive description of how the company will achieve its mission and objectives) and policies (which are lines of action that will support decision making).

Strategy Implementation is related to the execution/implementation of strategies through the explanation of programs (activities necessary for the completion of a plan), budgets (programs in financial terms) and procedures (sequential steps that describe in detail how to perform a specific task or function).

Assessment and control are processes that allow the tracking of activities and results of the company in order to be able to compare the actual to the desired performance, allowing the introduction of measures to mitigate the observed deviations.

Hitt, Ireland and Hoskinsson (2011) argued that the strategic management process has three strategic dimensions: strategic inputs, actions and outcomes. After a company determines its key competencies, resources and capabilities, based on internal and external environment analysis, it defines its mission and vision statements (strategic inputs). Then, in order to achieve profitable results (strategic outcomes) it must establish a set of actions, integrating strategy formulation and implementation (strategic actions).

Strategy formulation issues are related to competitive rivalry and competitive dynamics, business and corporate level analysis, the international dimension, and cooperative issues and mergers and acquisition strategies. Strategy implementation issues are related with corporate governance, organizational structure and controls, strategic leadership and strategic entrepreneurship.

Furthermore, to define and implement a structured process of strategic management and innovation, it is important that the organization defines how it creates, delivers and gets value, which is generally accomplished by drafting a business model. The business model is like a plan for a strategy to be implemented through organizational processes and systems structures (Osterwalder & Pigneur,2010 ). To Afuah and Tucci(2003) is a "system that is made up of components, linkages between the components, and dynamics [...] a set of which activities a firm performs, how it performs them, and when it performs them". According to Hamel (2000), the model of an enterprise can be simply described as the "way of doing business" or his "business concept" so that it can sustain the survival and/or growth of the firm. According to Morris (2009) "a business model is therefore a description of a whole system, a combination of products and services delivered to the market in a particular way, or ways, supported by an organization, positioned according to a particular branding that, most importantly, provides experiences to customers that yield a particular set of strong relationships with them. Further, a business model describes how the experiences of creating and delivering experiences and value may evolve along with the changing needs and preferences of customers. And it says how you make money, what people are willing to pay you for."

But strategy and innovation are distinct concepts both in terms of definition and function, being innovation a source of competitive advantage (Dobni, 2010). The continued growth of the importance of innovation is also related with is capacity to make changes in the competitive position of firms. Thus, innovation and strategy are complementary (Dobni, 2010), and feed on each other.

Innovation begins with signs of changes in the organizational environment. The major challenges faced by institutions are related to the comprehension of the factors that are behind them and to develop appropriate response strategies (Tidd, Bessant & Pavit, 2008; O'Sullivan & Dooley, 2009). The selection and adoption of innovation is a fundamental process of strategy implementation.

Research on adoption of innovation is scattered, since there are few comparison studies or innovation experiences (Cooper, 1998), particularly regarding the return of inputs and reportedly underutilized technologies, since the adoption and efficient use of new technologies is an important aspect of the development process and the existing knowledge about the different characteristics of the process is unstable (Foster & Rosenzweig, 2010).

Small companies use preferentially product innovations to achieve competitive advantages, while large firms use other tools, such as economies of scale, learning curve effects, diversification and investment in new projects (Salavou, Baltas and Lioukas, 2004).

The entry mode choice in a foreign market is a challenge and a critical decision, and will have a great impact in the company's performance. Researchers have identified a large number of practices and models concerning the entry choices modes that a firm could adopt, but there is not an agreement on which is the best entry strategy in foreign markets (Nakos, 2011).

A widely known model on internationalization processes is the Uppsala process model developed by Johanson and Vahlne (1977). This model reveals two patterns of the internationalization process: (1) the establishment of a chain, which represents the gradual order that firms follow in their international operations: no regular export; independent representative; sales subsidiary and manufacturing; (2) Companies make their investments in the markets that they can better understand in order to reduce the uncertainty in new markets — the notion of psychic distance. This concept is related to factors that hamper information flows between

firms and the market, such as differences in language, level of education, business habits, cultural environment, legal environment and political systems.

The Uppsala model was updated by the authors (Johanson and Vahlne, 2009) to incorporate the effect of networks on the internationalization process, acknowledging that learning processes of companies, and their commitments, are as much linked to the network of relationships as to national institutional aspects.

According to Alem & Cavalcanti (2005), another behaviourist model is suggested in the literature, the IModel (Innovation – Related Internationalization model), originally developed by Bilkey and Tesar (1977), and with contributions from other authors such as Czinkota (1982), Andersen (1993), Cavusgil (1980) and Reid (1981). This model points to various stages of the export process, in which each one is an innovation for the company by anticipating the trends, whether in the foreign markets, or in the domestic markets.

Another important model that explains the shape of internationalization is the Eclectic Paradigm of Dunning (1980), or the OLI model (Ownership, Localization and Internalization) which is based on a rational approach in which companies, on their approaches to foreign markets, are looking particularly at three types of competitive advantages, associated according to the highest probability of economic profit (Barcellos, 2010): (1) Companies (Ownership) Advantages, including the access and /or ownership of resources that create value, (2) Advantages of Location, including those provided by the places where they settle and finally, (3) Internalization Advantages, which are those related to intramural production advantages, instead, for example, of advantages related to association agreements with local companies.

The identification of organizational characteristics and the strategy that enable companies to improve their innovative approach are nowadays, with the challenge to internationalize their activities, essential to increase their competitiveness.

## 3. Methodology

We use the case study methodology as valid way of exploring existing theory and as a exploratory way to provide an integral vision and a general understanding of a phenomena (Yin, 2009). This study relies on data collected from the study of fifteen micro enterprises (less than ten employees). These micro enterprises are start-ups or early stage companies that entered a business incubation program. They are from different sectors, whose activities ranges from media, software development, construction, 3<sup>rd</sup> sector services, human resources services, marketing, surveillance and safety services, to biosciences and touristic web services platform.

In this research, we analyze the strategy, innovation and internationalization processes and their relationships. Following a literature review, forty five in-depth interviews were conducted with managers of those companies, which constituted the main instrument of data collection. It was possible to relate the empirical data with several ideas advanced by the literature.

The methodology is not prone to generalizing the results, due to the specificity of the context, but it highlights a set of good examples concerning the actual state of the art about the business practices on strategy, innovation and internationalization activities.

This paper presents only some preliminary results that support our arguments. Work is in progress regarding the experimentation of a diagnosis assessment tool, the development and structure of a framework for analysis that allows a more rigorous and systematic interpretation of the interaction of those processes, as well the proposal of adequate tools for the management of SMEs to coordinate those processes.

## 4. Analysis and discussion

Seen as a critical success factor to increase the economic development of any nation, policy directives have led to an almost generalized adoption of specific measures, including the implementation of organizational structures (science parks and start-up incubators near the university premises) in order to promote the so called entrepreneurship phenomena. After successfully applying to a business incubator program, companies have at their disposal a range of services provided by the incubators, in order to provide expertise to accelerate the growth of the business, by enhancing and developing the skills of entrepreneurs, and especially,

helping the entrepreneurs to expand their vision of the market. This is the main distinguishing feature of incubators regarding the services provided to start ups.

The business program incubator, besides providing administrative support services (physical spaces, logistics, information, communication, broadband), also provides management support services (business creation, business plan, business vision, training, facilitating access to financial instruments, expert advice), in order to create management competences and network contacts. In the present case the elected areas of management support and intervention were: strategic management, innovation, business plan, marketing and internationalization.

As we mentioned before, through this work we aim to analyze the strategy, innovation and internationalization processes and their relationships, and to achieve this objective we created a framework that integrated those concepts. The objective of this framework was to support the generation of innovative business ideas, testing their potential and viability, based on the development of entrepreneurial attitudes and skills of the participants, with the use of specific tools and methodologies to provide the creation of sustainable and innovative businesses. The framework is presented in Figure 1.

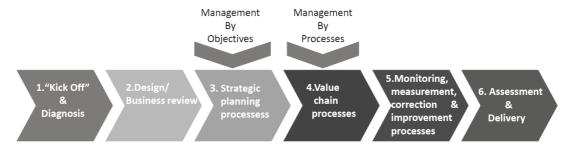
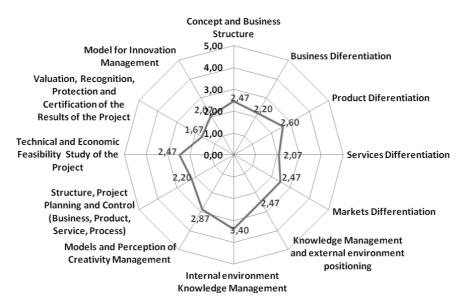


Figure 1: Innovation framework for SMEs (authors)

The first step on this framework was the phase called "Kick Off" and Diagnosis. This is an important phase, because the intention here is to establish the adequate conditions to the beginning of the process, namely: (1) Getting the final alignment on objectives and scope of the project; (2) Defining and mobilizing the Team Project; (3) Mobilize stakeholders; (4) Planning the work and resulting products in stages; (5) Conducting a Preliminary Diagnosis; (6) Introducing the diagnostic results to Team Project. In order to review the operations of the companies, a first diagnostic assessment tool for business, products and processes innovation was developed to help Top Management in their business evaluation, identifying the Top priorities areas of the intervention. This tool covers the twelve following areas: (1) Concept and Business Structure; (2) Business Differentiation; (3) Product Differentiation; (4) Services Differentiation; (6) Markets Differentiation; (7) Knowledge management and external environment positioning; (8) Internal environment knowledge management; (9) Models and perception of creative management; (10) Structure, project planning and control; (11) Technical and economic feasibility study of the project; (11) Valuation, recognition, protection and certification of the results of the project; (12) models for innovation management. The aggregated results of a first in-depth interview with all the firms included in the case study are presented in Figure 2.

As the net graph in Figure 2 shows, and according to the perspective of the evaluator, with the exception of the internal environment knowledge management, all areas questioned had poor/negative results on a scale 1-5.

The poor score in the variable related with the valuation, recognition, protection and certification of the results of the projects (1,67), combined with the other dimensions, seems to indicated that the firms do not have the criteria and the potential that investors and the literature values, such as competitive advantages, promoters profile, a structured strategic plan, markets and market segments well identified, among others. Some Business Models must be redefined. Some firms do not have funds to invest in growth. Business ideas, competitor analysis and proof of concept were also rather underdeveloped and a perhaps excessive focus in the domestic market dominates the picture. After the presentation of the results of the diagnosis and the presentation of the intervention plan, only six firms continued to the second phase.



## Five point Likert scale:

- 1: incipient/no analysis/no differentiation
- 2: poor/occasional analysis/attempts at differentiation
- 3: moderate/infrequent analysis/some differentiation
- 4: good/regular analysis/differentiation not stabilised
- 5: well structured/systematic analysis/with differentiation

Figure 2: Diagnosis aggregated results

The second phase, The Design/Business review is designed to allow support for reflection, and the specification and implementation of practices and procedures for: (1) Selection of Ideas and Value Proposition; (2) Strategic Analysis (3) Strategy and Costs and (4) Business Model.

This phase begun by reviewing the business models through the process of strategy formulation, but after the initial consultancy sessions, it was found that besides not having structured practices of strategic management and innovation, there was a huge lack of knowledge related with those areas, including related areas like marketing, cost management, project management, project evaluation, knowledge management, business models and internationalization. This is a situation that many new start up firms face.

In the meantime six new firm entered the process. Their fields of activities ranged from medical devices, energy management, consultancy and implementation of projects in the areas of geology, hydrogeology and geophysics, media, ships repair and jewellery. In order to promote a deep reflection and provide the key concepts to all the companies, a new diagnosis assessment tool was developed, which integrates those concepts. Particularly, we adapted the Business Model Canvas, developed by Osterwalder & Pigneur (2010), and integrated in the base model strategy, creativity management, project management, costs management, internationalization, project evaluation, knowledge management, technological surveillance, cooperation and foresight, intellectual property and organizational structure issues. The Business Model Generation (BMC) is a widely used tool on entrepreneurship labs, whose concept aims at sharing a common language that allows easy describing and manipulation of business models as a way to create new strategic alternatives. The model is formed by nine basic blocks, based on four main areas of a business: (1) customers; (2) supply; (3) infrastructure and (4) financial viability. Those blocks are constituted respectively by: (i) Customer Segments; (ii) Value Propositions (iii) Channels; (iv) Customer Relationships; (v) Revenue Streams; (vi) Key Resources (vii) Key Activities; (viii) Key Partners and (ix) Cost Structure. The building blocks of a business model give origin to the so called Business Model Canvas, which is a practical tool that fosters clarity, debate, originality and assessment of new and existing business models (Osterwalder & Pigneur, 2009).

Our Diagnostic assessment tool consists on a scoring model of eleven components, were each component is composed by fifteen questions, in a total of one hundred and sixty five questions. We label nine of our blocks with the same terminology of BMC, adding in each one of these blocks more questions in order to promote business reflection by the part of the firms and a better comprehension of their actual situation and desired

situation. We also added two new blocks: Strategy and Project Management. So, this diagnosis model is composed by the following blocks: (i) Strategy; (ii) Customer Segments; (iii) Value Propositions (iv) Channels; (v) Customer Relationships; (vi) Revenue Streams; (vii) Key Resources (viii) Key Activities; (ix) Key Partners, (x) Cost Structure and (xi) Project management. The key areas of this assessment tool are: (1) Strategy; (2) Creativity management; (3) Customers; (4) Supply; (5) Infrastructure; (6) Project Management and (7) Internationalization.

At this moment, we are testing and experimenting this tool, so work is in progress and at this moment there is no reliable data in order to properly analyze the tool.

The third stage of the framework, called Strategic Planning, will consist on the support for reflection, the specification and implementation of practices and procedures for: (1) The Mission, Vision and Policy Organization; (2) Strategic and Operational Objectives;(3) The Strategic and Operational Planning; (4) Organizational Structure; (5) Communication; (6) Involvement of the Management on Analysis, Improvement and Innovation.

The fourth stage of this process, called Value Chain Processes will consist on support for reflection, the specification and implementation of practices and procedures: (1) Customer Relations; (2) Relations with Suppliers and Key Partners; (3) The Implementation/Provision of Product/Service; (4) Interfaces Management and Knowledge Production; (5) Ideas and Opportunity Management and Evaluation; (6) Project Risk Assessment; (7) Planning Project; (8) Relationship with Employees; (9) Infrastructure and Work Environment.

The fifth stage of the framework, called Monitoring, Measurement, Correction and Improvement processes will consist on support for reflection, the specification and implementation of practices and procedures for: (1) The Product/Service Monitoring; (2) Monitoring Operational Performance and Innovation; (3) Data Analysis and Performance and Corrective and Preventive Initiatives.

Finally, the last stage, called Assessment and Delivery, will consist on the evaluation of the degree of achievement and final delivery of the initial objectives.

## 5. Conclusion

One of the main results of this research was the realization that entrepreneurial managers need an appropriate conceptual framework to guide them on the design or review of their Business Model.

New firms face, generally, important entry barriers, such as the lack of credibility by the market, the lack of financial and human resources and the lack of strong partnerships. In addition, the internal management practices are also deficient in many respects. In order to circumvent this difficulties, firms probably will have to act on the factors that they can manipulate, and these include the products and services offered by the firm, that ideally must be prepared to compete on a global scale, based on a strong differentiation strategy with an high innovative content, and the systematization and structuring of the innovation process inside the organization, which is an extremely important factor that increases considerably the probability of success.

The insufficient knowledge of evaluation methodologies and techniques is often a constraint in the decision processes of SMEs. Small firms say that a major barrier to implementation of an innovative idea is the lack of an appropriate valuation technique and, very often, are guided by intuition and experience (Ordoobadi, 2006). Thus, it assumes significant importance the establishment of appropriate metrics for evaluating investments in new technologies and a systematic process of technology management (Drucker, 1993) according to the nature of the technology and its level of maturity.

As we see in this case study, by the Diagnosis Aggregated Results, it seems that the lack of a strong differentiation strategy is a main issue missing in almost all inquired start-ups, and a key barrier that hampers the growth and competitiveness of these firms. The little importance given by managers to the innovation process, which is reflected in the number of companies that have renounced to the innovation consultancy (after the initial diagnosis) and the lack of knowledge in related areas such as strategy, marketing, project evaluation, cost management and internationalization activities, seems also to be factors that contribute to the aggregated results achieved.

Companies seem to be mostly concerned with short term profits, rather than creating long-term value. The lack of resources, namely financial and human resources, could explain the managers' focus on short-term profits but the failure may also be related to internal implementation issues (Barbosa and Romero, 2013).

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