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STRATEGIC INVESTMENT DECISIONS: INSIGHTS FROM A CASE STUDY

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ABSTRACT

The inherent difficulty of making strategic investment decisions poses significant risks that need to be mitigated. At the same time, decisions on strategic investments should be framed and justified in the company's strategic choices. In this context, one of the biggest problems known may be the excessive reliance on financial tools in evaluating investment projects. In response to this concern, some mechanisms and procedures have been developed and applied that allow the integration of strategic and financial analyzes at the level of strategic investment decision making. Examining a particular case study of a company of the automotive industry, this paper sought to understand to what extent the strategic analysis influences and relates to the business investment policy of the company. The study developed is of an exploratory nature, resorting to semi-structured interviews for data gathering. The main conclusion reached is that the evaluations supported only in financial tools are not satisfactory for the decision making proving the importance of the pre-decision mechanisms and the strategic constraints in the final decision making.

INTRODUCTION

In organizations, investment decisions, and particularly [illegible] kind necessarily have a strategic dimension which must also be taken into account. The strategy consists of formulating and implementing the key decisions of the company. A well-defined strategy should include a list of goals to be achieved, criteria for deciding which activities should be carried out, and an explanatory point of view of the company's internal and external organization (Baker & English, 2011). In fact, making investment decisions without being contextualized with the internal and external environments in which the company operates, will hardly bring success.

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It follows that the investment policy of a company must be a means to implement its strategic options. In fact, it is fundamental to realize that business investment and strategic analysis always work in parallel and that one without the other would lose part of the logic behind them. From the initial moment of the investment it is necessary to perceive the conditions under which it should occur, when, and in what amounts, and this valuation should be perpetuated in the subsequent investment phases. This is because it is crucial to understand, in these later phases, whether the results achieved are in line with the forecasts made at the outset, in order to be able to act according to the strategy of the organization (Carr & Tomkins, 1996).

As Alkaraan & Northcott (2006) point out, the difficulty inherent in strategic investment decisions poses some challenges for managers of new projects, namely, the excessive reliance on financial assessment tools that is seen as a trend contrary to the assessment of strategic projects. In fact, for some time the need to combine the investment decision process with the company strategy formulation has been claimed by some authors (Slagmulder, 1997).

A company's strategic objectives and operating objectives can support a sort of pre-decision in the control mechanisms that shape the evaluation and selection of investment projects. Strategic aspects may also be important elements or constraints for final decision making. Therefore, these decisions should consider elements and information of a financial and non-financial nature.

[illegible] to understand, explain [illegible] considerations in the decision making of any project in a company: strategic planning and investment decision. It is sought to understand to what extent the strategic analysis influences and relates to the business investment policy, in the different stages of the life of an organization. In short, the research question this study tries to answer is: what mechanisms and steps precede a decision-making process on strategic investments, in order to reconcile strategic planning and investment policy?

The rest of the paper is organized as follows. The following section presents the theoretical framework underlying the study. Next, the research method adopted

is presented, making a brief description of the case study analyzed. The conceptual model developed is presented in the next section. Subsequently, the results obtained with the analysis of the case study and respective discussion of the results are presented. The last section presents the main conclusions of the study.

STRATEGIC INVESTMENT DECISIONS

Kaplan and Norton (1996) pointed out that management systems based essentially on the traditional financial tools and historical cost lead to an inconsistency between the formulation and implementation of strategic investment decisions, which leads to the conclusion that a greater emphasis is placed on valuation methods (e.g. NPV, IRR, Pay-back, CAPM) and not so much to the idea of the importance of this type of investment as a matter of the implementation of the business strategy (emphasizing, in particular, the pre-selection mechanisms of investments and management control systems) (Butler, Davies, Pike, & Sharp, 1991; Carr, Kolehmainen, & Mitchell, 2010).

On the other hand, some authors suggest that some practices related to strategic investment decisions reflect the perceptions of shareholders and other stakeholders, which may vary from one another. These perceptions are often taken into account, rather than financial considerations, thus giving rise to different decision-making practices, particularly at the level of financial goals (Carr et al., 2010). This may lead to a mismatch between the strategic planning of a company and its performance and the shareholders' objectives.

In fact, some studies (eg, Butler et al., 1991; Slagmulder, 1997) try to relate the strategies adopted by the controlling department of the company with the company practices regarding strategic investment decisions. The primary purpose of management control will be to ensure that the behavior of managers is consistent with the organization's strategy. The authors suggest that this can be achieved through adequate strategy control, in order to guide decision making at the level of the investments to be made. The suggestion of using pre-decision mechanisms appears here as a way to influence and shape investment decisions before any other analysis technique, establishing limits and criteria according to which projects will be evaluated (Alkaraan & Northcott, 2007). These authors suggest that the formulation of strategic objectives and priorities can be an influential pre-decision mechanism, having a significant impact on investment choices before projects are evaluated, often ending up overcoming the importance of financial analysis results.

Investment decisions have implications on an organization's assets, which are the set of elements that generate future benefits to the company. These decisions, especially those aimed at the achievement of long-term benefits, require analyzes that consider the risk inherent to the decision, the need for long term finance, the need for a decision-making process integrated in the long-term vision of the company, the involvement of different hierarchical levels in the decision-making process and the useful life of the assets. Thus, these decisions integrate the business planning process, both in the strategic scope and within the budget. Hence, decisions involving long-term investments require careful assessments of the elements that affect the firm's long-term return and sustainability prospects, and should be addressed in a prioritized and structured manner (Frezatti, Bido, Cruz, Barroso, & Machado, 2012).

Managers should avoid seeing in the ease and cost of obtaining information a reason to choose or exclude some investment valuation techniques. Strategic investment decisions are too important not to receive thorough attention, even if it involves more time and cost. The value of a company will be affected after decision making, so managers must take into account that what really matters is not the maximization of short-term cash flow but the positioning of the company in the long run (Adler, 2000).

Another factor that managers should consider is that companies can both operate in one industry as well as several. Here, corporate strategy plays a key role. In this case the relevant strategic issues are considered considering the company as a whole, not as a specific business unit. Usually the term corporate strategy focuses on the study of strategy for companies that are in multiple markets, contrasting with the business unit strategy, which applies to single sector companies and narrowly defined divisions within a company (Porter, 2008). The starting point for analyzing corporate strategy is the company's portfolio of resources, rather than marketed products. Corporate strategy allows companies to create value in different markets and industries (Baker & English, 2011).

In sum, as far as strategy and investment are concerned, there already seems to be an awareness of the importance of full use of business strategies when making decisions, whether through pre-decision mechanisms or the literal implementation of their theoretical guides, in any industry or market. However, the practical values obtained through financial analysis tools are often more decisive in the decision-making process than the defined strategic planning, creating complex scenarios and issues in the short- and long-term plans.

In conclusion, the importance of strategic analysis for decision making on capital investments (medium- and long-term) is based on the need for planning. It is not possible to manage without planning, evidencing the various unknowns and variables that influence management and decision making. Thus, contributing strategic analysis to the understanding of the environment (internal and external) in which the company operates, it is perceived that taking decontextualized investment decisions of the same environment will hardly succeed (Papadakis, 1995). It is understood that investment policy must be a means to implement a company's strategic options. Thus, the tools of strategic analysis are used to define these options from

the characterization of the strengths and weaknesses, threats and opportunities that the company faces (Frezatti et al., 2012).
In practical terms, the importance of the strategic analysis for the investment decision process is based, in particular, on the following aspects (Kurowski & Sussman, 2011). On the one hand, the investment expenses forseen must be consistent with the internal and external environment facing the company. On the other hand, the models of strategic analysis help the decision maker to: (a) predict the cash flows of the investment; (b) estimate the useful life of the investment; and (c) have a perception of the risk factors associated with the investment. It is concluded, therefore, that the investment decisions of an enterprise must occur within the scope of its strategic options.

RESEARCH METHOD AND CASE STUDY

This study is of an exploratory nature, trying to understand the integration of the strategic analysis with the business investment policy through the case study method. The choice of this method is based on the reasoning of Yin (2013) suggesting that when the study of a certain phenomenon intends to answer the questions "how?" and "why?", the researcher does not significantly control the events, and when studying contemporary phenomena related to the real-life context, the case study should be applied to research.
The present study was carried out in a thermoplastic injection company belonging to the Plastics division of a larger business group, which in 2015 earned about 200 M€ and which is one of the main partners of important European and world automotive brands (e.g. BMW, Ford, GM, Mercedes, Peugeot-Citroen, Renault, Volvo, VW). In this context, it would be expected to find well defined good practices in strategic management and investment policy decision.
The data collection took place through semi-structured interviews, with a physical visit to the company, with five interviewees as participants in the process.
The study began with the interview with the CEO of the Plastics segment, which helped in the selection of the other stakeholders by listing important departments in the company's decision-making process (Table 1). Thus, the set of interviews was constituted by five elements that provided the necessary information to the elaboration of the study. The elaborated script was provided in advance to the interviewees.

Table 1: Interview information

Interviewee		Date of interview	Duration	Documents
E1	CEO	16/09/2016	1h	Access to documents: Scheme of the company hierarchy; Good practice guide for company employees; Presentation of a project made to a client.
E2	Plant manager	27/09/2016	50m	Observation of the process in the painting and assembly line in the maintenance department.
E3	Director of the Controlling department	27/09/2016	45m	-
E4	Director of the TQM department	27/09/2016	30m	Access to the document described as "Toolkit".
E5	Finance department	28/09/2016	55m	-

The first interview lasted approximately 1 hour and was held in the presence of an Engineer responsible for the Maintenance Department, in order to guarantee reliable and valid information. However, the intervention of this guest was not necessary in any situation, and only the CEO (E1) contributed to the study. The second interview (E2) was with the person in charge of controlling the plant, from the maintenance process, to the proposal and implementation of new production processes. The interview lasted for approximately 50 minutes and scrutinized the first contact that raises the need for strategic investments for the company. The third interview (E3) was with the responsible for the controlling department, and had a duration of approximately 45 minutes. In this department, information about the control mechanisms used by the Group in general and the study plant in particular could be obtained with more precision. The fourth interview was with responsible for the quality control department (E4), since the commitment to continuous improvement is one of the main reasons reflected in the constant renewal of the company's projects. The interview lasted approximately 30 minutes. The last interview was carried out with a collaborator from the financial department (E5), given the relevance of financial tools in the decision-making process, and lasted approximately 55 minutes.

MODEL

The proposed model considers that an interconnection between the strategic management and the investment policy adopted by a company is the main component in a strategic decision making process. In the strategic scope, Porter (1985) affirms that the strategic analysis allows to complete the financial analysis, predominant in the companies. Carr and Tomkins (1998) support this theory by claiming that traditional techniques, such as discounted cash flow, need to be complemented by three other analytical techniques: value chain analysis, cost analysis, and competitive advantage analysis.

A company's strategic objectives and operating objectives can support a sort of pre-decision in the control mechanisms that shape the evaluation and selection of investment projects. These decisions should consider elements and information of a financial and non-financial nature. In fact, Kaplan and Norton (1996) emphasize that management systems based essentially on the traditional financial approach and historical cost lead to an incoherence between the formulation and implementation of the strategy. It is in this sense that the proposed model intends to act, suggesting a balance between these two dimensions in the choice of pre-decision mechanisms, in a project evaluation and selection process. The proposed model seeks to specify the constructs considered influential in the decision making process of strategic investments (Table 2).

Table 2: Constructs associated with the model

Constructs	Explanation
Business strategy	Plan or set of plans and policies, essential in decision-making, aiming to achieve long-term goals, aiming to determine the competitive advantages of the company (Chandler, 1990).
Investment Policy	It includes decisions of great monetary importance with a significant impact on the competitive position of the company (Slagmulder, 1997).
Internal and External Environment	Point of view that helps in the success of the strategic formulation, embracing the essence of the company and its environment (Baker & English, 2011).
Types of Strategy	Choice that allows a company to achieve a competitive advantage, through the proper exploitation of skills, so as to be able to score the best position in the market (Grant, 2016).
Conventional Techniques	Methods relevant to the decision-making process, helping to address the risk inherent in this practice and easily identifying the additional value of an investment (Alkaraan & Northcott, 2007; Van Cauwenbergh et al., 1996).
Investment Restrictions	A process that encompasses the scarcity of resources allocated to desirable projects, necessitating a choice and approach to the capital budget, which encompasses internal and external constraints (Pike & Neale, 1993).
Value chain	A strategic analysis tool that aims to discover the competitive advantages of a company by adding value in the various phases of the production process (Porter, 1985).
Porter Model	Strategic analysis tool that suggests the use of five competitive forces to determine the maximum potential profit in the industry (Porter, 1985).
Balanced Scoredcard	Strategic analysis tool that allows to evaluate the performance of organizations, combining both long-term goals and short-term actions (Kaplan & Norton, 1996).
PEST analysis	Strategic analysis tool that studies four dimensions that qualify and predict the external environment to the company (Teixeira, 2011).
SWOT analysis	Strategic analysis tool that links the internal and external environments of an organization, studying in the first context its strengths and weaknesses, and in the second, opportunities and threats arising from external factors (Santos, 2008).
Cost Leadership	A type of strategy that aims to achieve market leadership by offering goods or services that imply a lower cost than the one faced by the competition (Porter, 1980).
Differentiation	Type of strategy that aims to differentiate itself with the offer of the product or service, in order to create something seen as unique by the industry (Porter, 1980).
Focus	A type of strategy based on a target audience in order to be more effective or efficient than the competitors who are competing with a broader scenario (Porter, 1980).
Discounted cash-flow	Financial analysis technique that assumes the equality between the value of a business and the current value of the expected cash flows (Ferreira, 2002).
NPV	Financial analysis technique that represents the current value of the cash flows of a project, measuring the value created today, when making an investment (Ross et al., 2008).
IRR	Technique of financial analysis that is associated to the NPV, seeking to determine the rate of return with more benefit for the project (Ross et al., 2008).
Pay-back period	Financial analysis technique that provides the necessary time to recover the initial investment, through accumulated operating cash flows (Brealey & Myers, 1998).
Risk	This is an element that managers seek to identify, measure and reduce throughout decision-making processes (Pike & Neale, 1993).
Hierarchy	Position with influence in the choice of the investments due to the great knowledge of the company context and policies of the hierarchical superiors (Alkaraan & Northcott, 2007; Pirttilä & Sandström, 1995).

ANALYSIS AND DISCUSSION OF RESULTS

According to the information gathered in the interview process, and taking into account the overview of the literature previously presented, some important issues can be highlighted.

Concerning strategy formulation, the company seems to have a well defined strategy with the delineation of mission and values, supporting the idea of strategic suitability of Baker and English (2011) and Janczak (2005). That strategy is aimed at a specific market context within the automotive sector, distinguishing itself through differentiation, offering its products and services with the highest quality possible, in order to be considered as unique in the industry, following the guidelines of Porter (1980).

Regarding the investment policy design, the company demonstrated that the strategic definition should be seen as the basis for the selection and evaluation of investment projects, corroborating the suggestion of Alkaraan and Northcott (2007). In this area, the company mentioned a wide range of mechanisms to be applied at an early stage of the decision-making process, contrary to the conclusions of Slagmulder (1997), which suggests that most companies focus on the use of financial techniques, ignoring other contexts that should incorporate the decision-making process.

The company has also revealed to have a well-defined hierarchy, with specified procedures chronologically demarcated, in order to achieve an organized and delineated decision-making process from the beginning to the end. It presented, above all, a hierarchy with great influence in the decision-making process, which, contrary to expectations, can begin with the departments less close to the top. Reproducing the idea of E2, "everything starts with the customer's request ... and then the factory director validates what could be a potential investment for the group", only after mentioning the other departments of the board "the factory management starts with making and justifying the request, then the decision committee analyzes it and evaluates it, tracing the proposal to the approval of the general director", leaving the idea that a proposal can be immediately dismissed without first reach any financial department.

In this sense, the use of financial tools is not associated with such an early stage of the evaluation of strategic investments decisions, as suggested in the study by Van Cauwenbergh et al. (1996). The idea that projects with negative return indicators, but with the potential to become positive, are sometimes accepted emerged as long as the decisions regarding those projects follow the company's strategic tools, such as the Balanced Scorecard, where, as E1 said, "the flow of the process decision making is exposed on the walls, but EBIT is not shown, because I just want that staff worry about how to get there. EBIT value will be the result of that decision process".

In sum, in this case study, the process that anticipates the choice of investing or not in a strategic investment seems to adopt some of the mechanisms proposed by the concetual model, there being a clear first phase of strategic definition, subsequently, the evaluation phase, which, together, lead to the conclusion of the decision-making process.

CONCLUSIONS AND FURTHER RESEARCH

Assuming that managers have a crucial role in any business entity and that their interventions are of great relevance to the future of the company, the performance of these agents will become more important when the issue involves decision making, increasing the burden when the size of choice covers a strategic investment. A strategic investment is defined as a long-term investment that brings future and large-scale benefits to the company.

Although several studies have already tried to evaluate the impact of the use of financial tools in the decision making of these managers, the design of the exact procedure that shapes an investment decision should also include a set of strategic concerns, in order to unite these two dimensions. It is in this sense that the present study sought to intervene, launching a method that can unite a set of essential steps for good practices in decisions on strategic investments, considering these two dimensions: strategic management and business investment policies.

The study began its analysis with the acknowledgment of the main gaps associated with these decision-making processes, raising as primary causes the excessive use of financial tools (Alkaraan and Northcott, 2006; Pike, 1996), reduced emphasis on control mechanisms (Alkaraan and Northcott, 2007) and concerns at hierarchical positions (Janczak, 2005).

The main conclusions drawn from the case study made it possible to see that control mechanisms, used in different circumstances, have assumed a fundamental role for managers in the selection and evaluation of strategic investments. Management control mechanisms appeared here as a method used even before the structuring and financial evaluation, fueling the importance of strategic analysis in the decision making process.

The study revealed that seeking to integrate a strategic investment with the company's own strategy results in the need to construct a formal method that incorporates the essential steps of this process, so that the manager can build appropriate and consistent behavior, from the very beginning of the decision-making process.

The results also revealed that having a defined hierarchy and a division of responsibilities helps the decisions to achieve a better result. Throughout the study, it was clear the existence of a well-established hierarchy with assignment of tasks to each department, so that the decision-making process can be evaluated by the right people at the right time.

According to the literature, the most used financial tools in the decision making process were the NPV and the recovery period. However, contrary to expectations, these tools have had their impact in the final part of the process, and the finance department has a decision to

make only after other steps have also been overcome. The study revealed that concern for EBIT can not be central to the decision-making process, and other methods should be considered at earlier stages, such as planning, organization and, above all, Balanced Scorecard indicators. This data reveals a concern with long-term considerations, seeking to align the company's strategy, defined and replicated in the Balanced Scorecard, with its future objectives, which may reach a certain EBIT. This practice corroborates the definition that the literature suggests about the last mechanism spoken, the Balanced Scorecard (Kaplan and Norton, 1996).

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