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INDIVIDUAL DECISION-MAKING BY TOP EXECUTIVES AS A VALUABLE RESOURCE FOR STRATEGIC MANAGEMENT

A RESOURCE-BASED VIEW
AND DYNAMIC CAPABILITY APPROACH

Strategy is highly important for organisational success and the achievement of competitive advantage. Strategy is dynamic and it depends on accurate individual decision-making from medium and high-level managers and executives. Since managers always formulate strategy, its formulation depends mostly on their assertive decisions. Making good decisions is a complex task, even more in today's business world where a large quantity of information and a dynamic environment forces people to decide without having complete information. As Shafir, Simonson, & Tversky (1993) point out, "the making of decisions, both big and small, is often difficult because of uncertainty and conflict". In this paper the author will explain a basic theoretical framework about top manager's individual decision-making, showing how complex the process of making high-impact decisions is; then, he will compare this theory with one of the most important streams in strategic management, the *Resource-Based View* (RBV) of the firm. Finally, within the context of individual decision-making and the RBV stream, the author will show how individual decision makers in top management positions constitute a valuable, rare, non-imitable and non-substitutable resource that provides sustained competitive advantage.

Keywords: decision-making, CEOs, strategic management, resource-based view (RBV)

Decision-making has been studied by scholars in diverse areas of study, from hard and analytical ones, such as Economics, Finance, and Strategic Management, to softer areas like Psychology. Decision-making can be studied in different scenarios, since everyday activities involve making several decisions. There are a lot of topics that are related with decision-making, and also decision-making could be studied from different angles, for example as individual, as part of a group, starting from risking situations, in simple straight-forward sceneries or in complex ones, depending on the kind of business, etc. What is true nowadays is that day to day operations in a firm are composed by a set of decisions that someone and somehow took. The complex and bigger the decisions taken the more impact in the course of the firm. That's why it is important to take into account the

theory behind individual decision-making in complex and ambiguous sceneries and how they can affect the performance of the firm or even represent a decision that provides a sustainable competitive advantage. In a nutshell, as we shall see, individual decision-making in top management levels is not easy and it can be considered more of an art than a science (Etzioni, 1989).

In the first part of this paper we will briefly show the main issues related to individual decision-making, focusing mainly on the complexity of top-level management decision-making. Bounded rationality will be presented in a special way, relating to the way of non-rational decision-making is made.

After the theoretical framework on individual decision-making, we will relate top manager's individual decision-making to two of the most important streams

in internal resources view of strategic management: the Resource-based View (RBV) of the firm and dynamic capabilities (DC), both of them focus on the optimization of the role of internal resources and capabilities as the principal basis for a sustained competitive advantage (SCA). The RBV is a theory centered on the nature of firms based on its existing resources (Lockett – Thompson – Morgenstern, 2009). The second part of the paper briefly explains the bases of the RBV theory and also dynamic capabilities.

In the third section of this paper, we will continue exploring the difficulties for high-level position decision-making so as to analyse whether these executives could be considered as valuable and unique internal resources for the RBV of the firm and enablers of dynamic capabilities. Several examples and different points of view will be provided. The objective is to show how individual decision makers are internal resources that can provide sustained competitive advantage. As Drucker (1967) said “effective executives do not make great many decisions. They concentrate on what is important. They try to make the few important decisions on the highest level of conceptual understanding”.

Finally, conclusions and future work for the topic of individual decision-making, as well as for the RBV of the firm is proposed, having in mind that top-level management in individual decision-making is core for a good strategy.

Strategic decision-making: challenges of individual decision-making

According to Sieber and Lanzetta (1964: p. 622.) “decision-making situations typically require that one make a selection among alternatives without having sufficient information to make and unequivocal choice. In the face of such uncertainty, the decision maker usually engages in various behaviours (e.g. acquisition of more information, reorganization of known information) instrumental in reducing uncertainty and response conflict”. I found very accurate to initiate with this citation because what it is going to be elaborated in this section precisely correspond to that theory that has to be taken into account in the complexity of individual decision-making. Also in this section behavioural aspects that could affect decision-making will be analysed, in order to help to respond the question “What determines the nature and extent of such “predecision” information processing behaviour?” (Sieber – Lanzetta, 1964: p. 622.).

Making correct decisions is neither an easy nor a quantitative issue, moreover, depending on the extent, the importance, and the magnitude of the consequenc-

es; decisions should be made with different approaches. In this section, let’s explore some particularities regarding to individual decision-making. The aim of this section is to have a general view of the complexity and in somehow the ambiguity of decision-making process.

The more choices and variables related with the decision the more complex to take one of the best ones for the company; also Sieber and Lanzetta (1964) found that in complex decisions or in ambiguous sceneries the effort applied to take one is increased; even more “time devoted to information acquisition and amount of information required are related to the degree of response uncertainty generated by a problem, time pressures, and cost of information. The day-to-day work of a manager is composed by several individual decision-making sceneries, and the sum of all of them and the results (positive or negative) will lead to the performance of the firm. In that way, analysing the way they take decisions is very useful in management nowadays.

In this paper we are most interested in theoretical frame of decision-making but related with strategic decisions. “Central among strategic process issues is strategic decision-making. It is crucial because it involves those fundamental decision which shape the course of a firm” (Eisenhardt – Zbaracki, 1992: p. 17.). But in a firm there are hundreds of decisions that are taken per week, and deciding which decisions are strategic and which are not is not easy. Shivakumar (2014) presents a conceptual framework that clarifies according to two dimension, degree of commitment and the scope of the firm, which decision should be considered strategic and which do not. The degree of commitment is measured by the extent to which a decision is reversible and the scope of the firm is often taken to mean the firm’s choice if products, services, activities and markets” (Shivakumar, 2014: p. 79–80.). This is a way of classifying strategic decisions in a normative frame. Nevertheless, deciding strategic and nonstrategic decisions could be more or less confusing and time consuming, top executives should have very clear that distinction among those decisions is crucial for the future of the firm. What is true is that medium and top level decision makers must have and excel results when doing decision-making, and that any failure could have serious consequences.

Individual decision-making in controlled sceneries

The aim of this paper is going deeply into the topic of decision-making in complex and ambiguous sceneries. But, before that, we will quickly make some comments about individual decision-making in controlled sceneries.

When making decisions, Drucker (1967) points out that breaking down the process in different sequential steps could be useful to diminish the risk-taking judgments. The six sequential steps that the author claims are: classifying the problem, defining the problem, specifying the answer to the problem, deciding what is right, building into the decision the action to carry it out and testing the validity and effectiveness of the decision. This is a rational way of finding the best decision, but as we shall see, it is not always possible to have complete control over the situation, and in several cases it will be necessary to use non-rational methods, moreover in high positions in firms.

The above named methodology is applied to single situations when we are evaluating different possible decisions, but how to decide when we have several options and most of them appear to be convenient? How can we make trade-offs when comparing quite different situations? According to Hammond, Keeney, & Raiffa (1998) this is one of the most difficult challenges in decision-making. They propose a methodology called *even swaps*, that “provides a practical way of making trade-offs among any set of objectives across a range of alternatives”. This method forces us to think and evaluate correct objectives among different options and discriminate those who represent a bad decision in an iterative process until we get the best option. The above *recipe* for individual rational decision-making could be applied in several situations and it represents a good reference frame when working on decision-making. According to Shafir, Simonson and Tversky (1993), a reason-based conception for decision-making has some good characteristics because “thinking of choice as guided by reasons provides a natural way to understand the conflict that characterizes the decision-making”.

Decision-making in controlled sceneries are quite rare in today firm environment. In general, decision-makers are more to use a combination of rational and irrational decision-making because all of the options and information about those complex day-to-day decisions are not available. According to Match (1978: p. 588.), “at first blush, pure models of rational choice seem obviously appropriate as guides to intelligent action, but more problematic for predicting behaviour”. Then several other aspects should be considered when making decisions. Most executives will not have the change to have controlled sceneries when making a decision. Then several considerations should be taken into account, some of them due to lack of information or complex and ambiguous sceneries and other due to the complexity of human behaviour and the “non-rational obscure side of humans”. Let’s explore deeply those considerations.

Decision-making in ambiguous and complex sceneries

But sometimes the situation is not as straightforward as we would want it to be; in a world where the quantity of information available is growing at an ever-increasing rate, decisions should be taken in short periods of time; therefore, complementary approaches must be available to support rational methods. Decisions in such sceneries do not obey to the concept of “economic man”, which according to Edwards (1954) is a man who has three properties: (a) He is completely informed, in the way that he knows not only all the probable actions, but also what the outcome of any action will be; (b) infinite sensitivity; and (c) rationality, that is one of the most important concepts and that means that “he can weakly order the states into which he can get, and he makes his choices so as to maximize something” (Edwards, 1954: p. 381.). Keep in mind this kind of men with such exceptional characteristics that will not apply for many situations in complex decision-making. In normative economics it is expected that persons assume more an “economic man” behaviour, assuming that the economic actor is rational; normative economics “does not need a theory of human behaviour: he wants to know how people ought to behave, not how do behave” Simon (1959: p. 254.).

In complex situations, strategic decision made by top and medium level executives take a special relevance. Several dimensions about decision-making should be taken into account. In the next paragraphs, different and complementary approaches for decision-making will be examined, some of them combining the rational and non-rational dimension.

Rational versus non-rational: Decision-makers limited by their bounded rationality

The way top executives make decisions has been a broad field of study. According to Jones (1999: p. 318.), “the behaviour of a fully rational decision maker would be completely determined by the task environment. If we know the environment and the goals of the decision maker, then we may deduce the decision maker’s actions. If, however, the decision maker intends to be rational but may fail, then we will need to know something about the cognitive and emotional architecture of the decision maker”. The answer arising here is that: Is it appropriated that decision makers under ambiguous and complex situations attached to 100% rational procedures? Are there other variables that must be taken into account? How is it supposed to deal with those situations? Next some considerations about behaviour and limited rationality in individual decision-making will be addressed.

In ambiguous and complex sceneries, some authors disagree with 100% rational and well-structured processes in decision-making. They alleging that decisions are made not only with the left rational side of the brain, but also with the right side (Mintzberg, 1976) and sometimes even trusting in gut (Hayashi, 2001). “In uncertain, ambiguous, or contradictory task environments, behaviour is a function of goals, processing limits, and the connection between the decision maker’s problem space and the task environment (objectively characterized). In this far more complex situation, problem-space representations may interact nonlinearly with goals and processing limits” (Jones, 1999: p. 319.). According to Hayashi (2001), business executives support their important decisions using intuition and trusting their gut, both could be considered non 100% rational approaches. Gut and intuition are directly correlated with experience. It is quite difficult to define what gut and intuition mean, but hearing what important CEOs say could help us to figure it out. According to Lutz, CEO of Exide Technologies in 2001, the most critical decisions are made “with subconscious, visceral feeling. And it just feel right” (Hayashi, 2001).

Non-rational decision-making is not a bad procedure or something that belongs to a small set of firm environments. At the end, decisions are going to be taken to satisfy certain necessities or variables, and doing in optimal way does not mean that they are necessary satisfying the decision maker. According to Eisenhardt and Zbaracki (1992: p. 35.) “strategic decision-making is boundedly rational in that strategic decision makers are cognitively limited and engage in a cycling among rational decision-making steps”.

Greenhalgh (2008) shows a very good qualitative analysis about how business occupiers do decision-making when deciding whether and where to relocate. Findings are very interesting because they support the non-completed rational way of thinking and also quoting Greenhalgh (2008: p. 122.) conclusions, “Rational choice equilibrium economics’ notions of rationality and optimality rarely prevail in the complex and varied environment within which business occupiers go about making locational decisions. Some business occupiers do adopt approaches, strategies and decision-making processes that seek to reach optimal location decisions, subject to the constraints and conditions that any particular organization may find itself exposed to at a given time.” Moreover in the same article, the author concludes that at the end decision-making is influenced by individuals and the higher the position in the firm the greater the influence.

Why is that some persons do not act as rationally expected when doing decisions? Why is that that they fails occasionally not demonstrate conformity to the classic expected utility model? That questions have been addressed mostly since the point of view of behavioural organization theory, then coming up with a very important concept in decision-making, *bounded rationality*. Jones (1999: p. 299.) claims that “bounded rationality is a school of thought about decision-making that developed from dissatisfaction with the “comprehensively rational” economic and decision theory models of choice”. According to Jones (1999: p. 297.) “bounded rationality asserts that decision makers are intendedly rational; that is, they are goal oriented and adaptive, but because of human cognitive and emotional architecture, they sometimes fail, occasionally in important decisions. Limits on rational adaptation are of two types: procedural limits, which limit how we go about making decisions, and substantive limits, which affect particular choices directly”. Cecil and Jungren (1974: p. 600.) who cites Simon (1947) point out that “individuals and organizations cannot maximize decision-making in an objectively rational way.

In most complex decision-making situation, an individual not possesses the knowledge of alternatives or the consequences or alternatives to select the one alternative that maximizes utility. Instead, the individual seeks an alternative that is satisfactory – one that is better than his level of aspiration”. More precisely, Simon (1957) referred in Jones (1999) attribute the bounded rationality behaviour to 4 specific characteristics of humans: (a) limitations due to the bounded cognitive ability and the complexity of the environment, (b) satisfying personally rather than optimizing behaviour, (b) “the tendency to set aspiration levels for each of the multiple goals that the organism faces, (c) the tendency to operate on goals sequentially rather than simultaneously because of the bottleneck of short-term memory. As it can be inferred, decision makers are bounded not just because the lack of complete information for a rational evaluation of all possible options, but also because emotions and personal path dependence.

How much thinking is optimal when making decisions?

Decisions can be classified according to the amount of time dedicated to the analysis of the problem, and the notion of thought required; the difficult thing here is how to use the “correct amount of thought required for a given decision” (Ariely – Norton, 2011). In general, these authors point out that thinking too little and

thinking too much have both advantages and disadvantages. Thinking too little could be dangerous and could lead us to poor decision-making when relying just in our knowledge and perpetual bad habits, “this can lead to suboptimal behaviour, as when people mindlessly continue to engage in habits even when those habits are costly” (Ariely – Norton, 2011).

Thus, if thinking too little has many advantages, we could conclude that the obvious solution would be to think more. But sometimes, thinking too much results in some problems, especially when considering too many attributes or, even worse, when we are willing to consider all attributes. According to Ariely & Norton (2011) “the general impact of considering attributes at all, of breaking decisions down into their consequent parts, can have deleterious consequences for decision-making”. Even more, we can consider that when making decisions, introspection, which is directly related to thinking too much, is not always a good thing; even more it can derive us to make bad decisions (Wilson – Schooler, 1991). As we will see further, introspection and thinking too much could be unbeneficial, especially when decisions are made in medium and high-level positions.

Depending on the context, the situation, the complexity of the problem, and even in the personality, knowledge and experience of the decision maker, a good balance between thinking too little or thinking too much must be considered. The important thing when making decisions is to be aware of pros and cons of both positions.

How many options could be optimal when making decisions?

Thinking too much or thinking too little are not the only factors that can affect a good decision; also, an optimal compromise among the number of options must be taken into account. When it should be considered one or two options, choosing is not a challenge, but most of the cases are not such simple and multiple choices are available. When there are five, six or more options depending on several variables we could wonder: Is it convenient to consider all of them? Is it convenient to look for more options? Could it be a good practice for improving decision-making? Choosing the wrong attributes is a bad decision as well as considering too many options. According to Ariely and Norton (2011) considering many options can have a negative effect for executives because of the complexity of reevaluating all those options. As they point out “even aside from considering too many options, the mere act of choosing between options has been shown to have potential negative consequences for

the decision maker, given the regret and dissonance that can result” (Ariely – Norton, 2011).

There are also consequences on evaluating multiple attributes of stimuli in decision-making. There is evidence that when individuals decompose an evaluate stimulus in many different attributes, it “causes people to moderate their evaluations. This moderation effect is most likely to occur when the different attributes people consider are uncorrelated, so that some are positive and some are negative” (Wilson – Schooler, 1991). Again, it seems that thinking too much has some important disadvantages.

Decision-making in medium and high level positions (policy makers)

When talking about top executives and policy makers, not all problems are that simple, there is always a subset of critical, complex problems that must be solved. That kind of decisions are critical and most of us could think that they should be treated with the rational left side of the brain, but reality is quite different. Intuition, gut and the right side of the brain is needed; maybe this kind of magic could be the secret piece.

Quoting Etzioni (1989), “old-fashioned decision-making does not meet the needs of a world with too much information and too little time. So-called rational decision-making, once the ideal, requires comprehensive knowledge of every facet of a problem, which is clearly impossible today”. Everyday simple decisions are prone to be solved using rational methods, where the simplicity of the problems invites us to solve them using a deep analysis of all the solutions. But making complex decisions require different skills and perspectives of the problem, and success will depend mostly on the people who are involved in decision-making.

As Hayashi (2001) points out, according to Ralph S. Larsen, chair and CEO of Johnson and Johnson, there is a huge difference in the way middle and high management make decisions. He points out that decision-making in middle management levels is mostly quantitative and requires special brilliant management skills. The difference arises in the fact that, often, complex problems cannot be solved applying the same level of quantitative analysis that is typically used in middle level managers’ less complex problems.

Distortion of biases when making decisions

When making decisions, there are several biases that can affect the process. As human it is almost impossible that we can take decisions taking out of our head all of our history and all experiences that shaped

us. Path dependence is an important factor in the performance of managers. But not all experience we carry and not all the time.

But why is so difficult to avoid biases and other traps that could push us to take not the best decision? Maybe the response has to be with one of the characteristics of Resource Based View, the Path Dependence. According to the Resourced-Based View theory of the firm, it is path dependent because firm resources are directly related to firms' past activities, this can be determinant on increasing or decreasing growth through time. Resources differ in their impact on the firms' ability to generate profit or differentiation advantages, and hence, performance. When someone is making a decision several past experiences will shape that decision. Even more interesting, and supporting the importance of past experiences, is the fact that according to cognitive scientists, there are two modes of thinking: intuitive and reflective."

Executives behaviour, basic values and interpersonal skills in decision-making process

We have heard the phrase that an enterprise is as good as the people working in it. In the case of top and medium level executives, those who have people in charge, the behaviour of them into the decision-making process is related with the performance of the firm. Sometimes, the pattern of behaviour tends to create decision-making processes that are not very effective. According to Argyris (1966: p. 59.) "the actual behaviour of top executives during decision-making meetings often does not jibe with their attitudes and prescriptions about effective executive action. The gap that often exists between what executives say and how they behave helps create barriers to openness and trust, to the effective search of alternatives, to innovation, and to flexibility in the organization". In the same article, the author claims that most of the top executives that were considered for the study (more than 165 top executives in six different companies) agree that there is the need of an environment that can provide executives to be confident about innovation, flexibility, risk taking and where trust reign.

Interpersonal barriers and emotions can play a crucial role in making decisions among executives and the persons in charge of them. According to Ariely & Norton (2011) study of 165 executives, behaviours that inhibit innovation and trust are classified in two different patterns: Pattern A those who are thoughtful, rational and middle competitive and that were the most observed. These persons are always trying to post their ideas and just "simulate" to be interested in others ideas

just for taking information and discredit them. Type B Pattern are those competitive first, thoughtful and rational second; in these cases conformity to ideas is more important by far that the ideas per se. Moreover, antagonism to ideas prevails and is notorious, much more than openness to ideas. Executive belonging to this pattern ends with conflict among partners. In both patterns executives are rarely observed: taking risks of experimenting with new ideas or feelings, helping others to take risks and express feelings.

Last in this section lets discuss a topic that is more relevant now than ever in those executives or directors who are in charge of a group or persons, or even in those employers that belong to different work-teams regarding they have not personal in charge. I am referring to basic values in interpersonal and effective human relationships. According to Cohen (2008) Peter Drucker always emphasizes the importance of ethics behaviour and values of managers. In the chapter of the same book named "Ethics, honor, integrity and the law" Cohen (2008: p. 181.) mention this: "I think Drucker's lessons on ethics, honor and integrity as the most important and relevant. They are even more important today because the world has shrunk to the point that many of the businesses must deal with foreign cultures that work with principles and systems very different from our values". According to Argyris (1966), regarding different problems and contexts and different industries that possess different technology and varying greatly in size, the author is stunned with the importance of the role played by the values or assumptions of decision makers (top executives) and also by the effective human relationships. According to him three basic values were isolated as the research result: the first one is related to the fact that human relationships are the ones just based in achieving organizations objectives and getting the job done without taking care of the people; the second are related with the facts that feelings and emotions are played down, considering interpersonal discussions as irrelevant or immature; and the third one consider that "human relationships are just influenced in unilateral direction, and using coercion and sanction as a way of control". The impact of those values and the suppressing of interpersonal and emotional aspects are significant in the operation of the firm and also will shape the way decision-making is doing. According to Argyris (1966: p. 66.), "such a defensive reaction in an organization could eventually inhibit creativity and innovation during decision-making. This would reduce the probability of experimentation, thus decreasing openness to new ideas still further and constricting risk tak-

ing even more than formerly. We would thereby have a closed circuit which could become an important cause of loss of vitality”.

Executives are always leading and their leadership can be questioned if values and integrity is not the appropriated; in order to lead and people to trust in you your behaviour, thoughts and values must be aligned. But the most important, you must be able to create good interpersonal relations with your team, colleagues, partners, and all of them are going to be your allies in decision-making process.

Trusting in your gut

As we saw, when referring to high level decisions and complex problems, not only instincts are key to problem solving, but also a correct balance in emotions and feelings is required. According to Damasio (Hayashi, 2001), “decision-making is far from a cold, analytic process. Instead, our emotions and feelings play a crucial role by helping us filter various possibilities quickly, even though our conscious mind might not be aware of the screening. Our intuitive feelings thus guide our decision-making to the point at which our conscious mind is able to make good choices”.

But your gut is shaped by your past and experiences, which at the same time create rules and patterns that are immediately applied in decision-making. Those patterns are valuable in the decision-making process, and as Hayashi (2001) points out, “the instinct genius that enables a CEO to craft the perfect strategy could require an uncanny ability to detect patterns that other people either overlook or mistake for random noise”. Moreover, creation of patterns is related to two ideas: the varied and diverse backgrounds of the person, and the way they combine and make analogies of the varied fields of knowledge, to come up with excellent ideas and decisions, Hayashi (2001) calls this cross-index. “As people gain experience with a particular type of decision, they optimise the thought process they bring to bear” (Ariely – Norton, 2011).

In the same line of clever decisions there is another combination that is critical for a good performance, the use of both the left and right side of the brain. It is common that managers and executives privilege the logical and rational left side of the brain, but practice leads us to a different perspective. According to Mintzberg (1976), it is acceptable for planners to have a well-developed left side of the brain, but for top managers, a good balance and a well-developed right hemispheric process is critical for accurate decision-making. Planning and execution are systematic activities that demand capacities found in the left side of the brain, while the right

hemisphere is in charge of other important abilities for top managers.

Finally, I would like to introduce two interesting approaches for *decision-making* that are related to non-rational decision-making in today’s world. The first one is the *decision-making* approach, where Etzioni (1989) points out that decision-making is more an art than a science, where executives need to make decisions with just partial information, due to the lack of time for a thorough analysis or the lack of information, and trusting their knowledge and intuition. The second approach refers to unconscious thought in complex decision-making that occurs when direct and conscious attention is directed elsewhere while trying to solve the problem in the unconscious level. According to Dijksterhuis and his colleagues (Payne – Samper – Bettman – Luce, 2008), “unconscious thought (a) is good at forming global or holistic impressions of alternatives, (b) weights the relative importance of different attributes of objects in a relatively objective and natural way, and (c) is less capacity constrained than conscious thought”. These approaches combine the best of two worlds: the rational side of the brain and gut or intuition in order to make conclusions without all the information.

Personally, I do not think that everything or the highest weight is attributed to gut and “the feeling” of the decision maker in gut based decision-making. A mental process and a hierarchical discarding process of different options for a decision should be applied, and the knowledge and “rational boundary” that everyone holds is what will shape part of the decision. As it was already mentioned, according to Alice Gast business leaders should think like scientist; “a scientific minds et can inform and benefit the decision-making process outside of the laboratory” (Gast, 2015). Maybe the part that is most influenced by what we called “gut” is the fast we take decisions and the good that we perform when choosing among very similar decisions or those that lacks of information but has to be taken. In those situations gut and feeling of every one could be different and really represent a difference in the way of decision-making is done.

Individual decision-making and sustained competitive advantage

Resourced-Based View (RBV) of the firm and Dynamic Capabilities (DC) are two of the main streams in strategic management. Next, some basic theory about RBV and DC will be provided, then, several cases will be briefly mentioned regarding to decision-making and decision makers.

Some generalities about the resource-based view approach for strategy

Let's start with a brief review of the resource-based view (RBV) of the firm, which is one of the several streams in strategy that appears in the late 80's and acquires importance in the 90's. This stream focuses on the optimization of the role of resources and capabilities as the principal bases for a sustained competitive advantage (SCA). The RBV is a theory that centers on the nature of firms based on its resources, as opposed to theories such as transaction cost economics, which seeks to explain the reason why firms exist (Lockett – Thompson – Morgenstern, 2009).

The RBV has had a major impact on strategy because the typical product/market orientation is no longer suitable nowadays, due to the constant and rapid change of the external environment and customer preferences. It is easy to understand this if we consider that it is more feasible to control internal resources and capabilities to face the real world, than changing the world to adapt to the firms' needs. The RBV of the firm allows us to answer significant questions such as: On which of the firm's resources should diversification be based? Which resources should be developed through diversification (Wernerfelt, 1984)?

The relationship between firm resources and competitive advantage is highly correlated. Resources must be *heterogeneous* and *not perfectly mobile* in order to be competitive (Barney, 1991). In addition, resources should have specific features that allow us to measure or probe their heterogeneity and immobility levels. Barney defined the following attributes or characteristics of a resource: (a) it must be *valuable*, in such way that it is capable to exploit opportunities and beat threats, (b) it must be *rare* among other resources, in such way that it happens to be *quite difficult to find the same resource in competition*, (c) it must be *imperfectly imitable* and (d) it must *not* have equivalent *substitutes*, this means that rare and valuable resources can only be sustained resources (Barney, 1991). Due to the initials of each characteristic, these are called VRIN (Valuable, Rare, Inimitable, and Non-substitute) resources, and this framework sets out the broad necessary conditions for a resource's comparative scarcity to become a strategic significance (Lockett, 2005).

Any resource that is considered a SCA must have a VRIN framework in order to exploit differences and create heterogeneous and immobile scenarios for the firm. When used in the correct way by the organization, VRIN resources can offer competitive advantage to any firm, due to their ability to provide unique and inimitable internal assets.

Some generalities about dynamic-capabilities approach for strategy

Dynamic Capabilities is one of the most important topics in Strategic management. As Vogel and Güttel (2013: p. 426.) mention this topic has become in one of the most vibrant topics in the domain of strategic management. Let's move further on explaining quickly the concept of dynamic capabilities and how are they related with Resourced-Based view. The aim of this section is to provide the basic information to understand why RBV and DC are related to individual decision-making.

RBV strategy could see like a static approach because it is about a bunch of resources that contribute for the good performance of the firm. That is not bad, but as world move faster, ubiquitous information, complexity and new technologies have challenged enterprises to renew the set of resources and procedures faster than ever. In that sense, the static approach of RBV will not be sufficient it is needed to find a way to constantly achieving competitive advantages. The static characteristic of RBV does not provide explanations on how successful firms endure over time with an increasing competitive environment. In spite of that, there are firms like IBM, Texas Instruments, Philips among others that stick to RBV approach accumulating valuable technological assets as VRIN resources (Teece – Pisano – Shuen, 1997). Nevertheless, for those firms to survive they need to demonstrate timely responsiveness and rapid adaptation mastering the management capability change and adapt as fast as needed the bunch of resources and procedures (Teece – Pisano – Shuen, 1997).

This ability to achieve new forms of competitive advantage through the renovation of based resources and competences belongs to dynamic capabilities approach. In that way, it is natural to be seen that Resource-Based view of the firm precedes Dynamic capabilities Barney (1991). As a matter of fact, DC can be seen as a complement to RBV approach. This is clear when referring to Teece, Pisano, & Shuen (1990) who claims that according to Ambrosini and Bowman (2009: p. 30.) “is not only the bundle of resources that matter, but the mechanism by which firms learn and accumulate new skills and capabilities, and the forces that limit the rate and direction of this process”.

There are several excellent articles about generalities and definitions of Dynamic Capabilities so it is not worth going deeply, some of those articles are: (Ambrosini – Bowman, 2009), (Eisenhardt – Martin, 2000) and (Teece – Pisano – Shuen, 1997). Considering that Dynamic Capabilities are associated with internal resources of the firm, and that they could pro-

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vide competitive advantage in nowadays turbulent environments one of the most appropriate definition of DC and relevant for this article is the one that (Teece – Pisano – Shuen, 1997) propose: “dynamic capabilities are defined as the firm’s ability to integrate, build and reconfigure internal and external competences to address rapidly changing environment”. DC refers to internal resources, is about differentiation and competitive advantage through internal resources; they “act as a catalyst and spark off the mechanisms of operational capability development” (Ellonen – Jantunen – Kuivalainen, 2011: p. 459.).

Dynamic capabilities are not capabilities by themselves neither are they resources. When referring to the term dynamic capabilities, we always must use both words together; otherwise the meaning surely is not going to be the correct. When used in the context of dynamic capabilities, the word “capabilities” emphasizes “the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organisational skills, resources, and functional competences to match the requirements of a changing environment” (Teece – Pisano – Shuen, 1997: p. 515.). Very different meaning from the one that has when for example is used alone in the context of RBV, where capabilities are just processes or routines that arises from VRIN resources. On the other hand, dynamic refers to the change in environment, but not to the capability of being dynamic. The word *dynamic* when used in the context of dynamic capabilities, refers to the capacity to renew competences and resources to have congruence with the changing environment and it is future oriented because it refers to processes that *change* the based VRIN resources, instead of just using and combining them in different ways (Teece – Pisano – Shuen, 1997). That’s why one of the main and unique characteristics of dynamic capabilities consists of “the firm ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Ambrosini - Bowman, 2009: p. 30.).

According to Ambrosini and Bowman (2009) empirical studies of dynamic capabilities remains relatively rare. There are several issues related with the formal study of DC. First, another issue, that also applies with RBV theory is concerned with the lack of evidence of dynamic capabilities; this is due mainly to two factors: because these capabilities have been poorly specified and because the difficulty to observe and measure of the dynamic capabilities.

To conclude this section, some annotations regarding to the issue of Dynamic Capabilities are going to be treated. Vogel and Güttel (2013: p. 440.) claim that

it is possible that Dynamic Capabilities are a field in the “adolescence” because the continuing exploration of fundamental issued and the lack of empirical validation. In fact theory concerned to this topic is relatively young, as it started in the middle 90s, so it is difficult to achieve a strong and irrefutable theoretical framework. Due to the dynamic characteristic of DC, quantitative analysis could be not the strongest methodology for observe and study them. It seems that Qualitative Analysis could be an excellent tool for addressing research related, not just to DC but also to RBV; in such way dynamic capabilities will remain popular but abstract and not usable the number of qualitative field investigations is not augmented (Ambrosini – Bowman, 2009). To reinforce, as Ambrosini and Bowman (2009: p. 37.) cited in Lockett and Thompson (2001: p. 743.) “it may be necessary to sacrifice some of generality of quantitative investigation for a more qualitative attention to detail”.

Individual decision makers as vrin resources and enablers of dc: achieving performance through decision-making

Now that individual decision-making theory was addressed, we can realize that individual decision-making for top executives is not a trivial process. It comprises a qualitative and a quantitative process and requires people with abundant experience, intuition, and brilliance in analytical abilities, among others skills. Thus, it seems that good top executives or managers that excel in the art of making decisions could be very valuable for strategy. Then good decision makers are valuable, rare, non-imitable and non-substitutable resources that can provide a sustained competitive advantage to the firm. Put in this perspective, it could be considered that good decision makers and their leadership could be a VRIN resource in a firm strategy according with the Resource-Based view of the firm. Let’s explore and expand the last core idea, identifying why good leaders and decision makers in top-level management could be crucial for enterprises.

In this section there are going to be presented several cases that show how individual decision makers, since the point of view of internal resources strategy (RBV and Dynamic Capabilities), could represent VRIO resources or enablers of dynamic capabilities for achieving the final goal of strategic management: Sustainable Competitive Advantage. Diverse cases belonging to quite different kind of firms will be briefly presented. Citations could be used to going deeply in those cases.

Top executive decision makers as VRIN resources

Let's explore the result of merging the theoretical framework on individual decision-making with the theory of the RBV, to show why good individual decision makers in top executive positions could constitute a VRIN resource that can provide a sustained competitive advantage. What we are trying to show is how difficult it is to find characteristics of good decision makers in top positions.

As it was already discussed, making good decisions in top positions involve several qualitative and quantitative characteristics from executives. They need to have great analytical abilities and an appropriate intuition that allows them to process a large quantity of information in a short period of time. In this sense, it is not easy or factual to find too many well prepared individuals that can have a great performance in different situations. Good balance in emotions and assertiveness is necessary (Hayashi, 2001). It is possible to find out if an individual tends to use more the left side of the brain than the right side or vice versa. But using both sides on the right situation is essential for top executives when making a decision (Mintzberg, 1976). Moreover, great executives should know how to combine and use in the optimal way the left side or the right side, depending on the nature of the process or decision that they are examining.

Decisions are just one dimension, as Drucker (1967) points out "the most time-consuming step in the process is not making the decision but putting it into effect". In this sense, a good decision maker could not only be a VRIN resource that generates competitive advantage, but could also generate more advantages when combining or using the different resources in the appropriate balance. Lockett, Thompson, & Morgenstern (2009) point out that by combining resources; firms are able to add value.

Lastly, path dependence and heterogeneity are crucial for VRIN resources in the resource-based view of the firm. Path dependence provides knowledge learned through years to the firm and heterogeneity ensures that any source of competitive advantage is simply a rent conferred by one or more imperfections in the resource market (exogenous variables) that prevent an equitable input allocation among competitors. According to Eisenhardt & Martin (2000), there should be an adequate amount of experience, because in some situations experience that comes too fast can overwhelm managers; on the other hand, infrequent experience can cause forgetting of what was previously learned. The fact that a manager's perception affects resource allocation assures that resources have plenty of different usages

among different firms, supporting the heterogeneity theory that Barney (1991) held. In this sense, every decision maker in top positions depends on his path, his experiences, past jobs, and previous learning, that provide him with a unique characteristic that allows him to be different from others in the way he makes decisions. If we accomplish that, we can assure that unique experience of each person constitute a VRIN resource.

Top executive decision makers as enablers of dynamic capabilities

There are several studies that aim to explore the role of dynamic capabilities in developing new ways of differentiation. Firms are facing rapidly changing environments and they need to move on as quick as they could improving product developing methods, marketing strategies, vertical scopes of integration, networks with competitors and partners, etc.; this occur specially in those firms that are somehow related with technological business where new technology continually change abruptly; Lavie (2006) mentioned in (Ellonen – Jantunen – Kuivalainen, 2011: p. 459.). In this way they need to reconfigure resources, moreover those which are VRIO resources. In such a way, Dynamic Capabilities could be developed in hundreds of different ways, next we will analyse some ways of developing dynamic capabilities and how they are related with individual decision-makers.

Innovation and changing as Dynamic Capabilities are very important for achieving sustained competitive advantage. As seen in previous section, behaviour and decision-making process of top level executives could activate or inhibit innovation in the firms. According with the natural hierarchical nature of companies, two kinds of capabilities could be found. Those set of capabilities are: first-order capabilities that comprises all that are done for the day-to-day operation (accountability, marketing, sales, and others that are operational routines and secondary capabilities, those that are needed for changing or renew the first orders (Ellonen – Jantunen – Kuivalainen, 2011: p. 460.). Appropriated changes in correct time and correct form are needed with the rhythm of environment changing and are essential for adaptation. Dynamic capabilities represent the abilities of the firm to build new operational-level capabilities (Teece – Pisano – Shuen, 1997). In most enterprises the day-to-day operation (first-order capabilities) are essential for achieving objectives and surviving, but the second-order capabilities or operational routines are the ones that can set a big difference in the firm, because changing in the right time could represent the next competitive advantage.

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In real estate business, after a qualitative study about how small and large business decide whether and where to relocate, Greenhalgh (2008) concludes with such interesting finding that is related with one of the main concepts in decision-making, the concept of bounded rationality; according to Greenhalgh (2008) determination of whether and where to relocate the business is one of the more complex problems and it differs from big to small business, but at the end individual decision makers in different positions in firms influence the process of decision-making. According to him “It is concluded that, not only are the factors and variables that most influence location decisions of large companies different to those dominating the thinking of smaller firms, but also the processes they employ to arrive at such decisions. The evidence suggests that business occupier relocation decision-making rarely holds to the neo-classical assumptions that are required to fulfill the requirements of rationality and profit maximization. Small firms are more prone to making sub-optimal decisions based on bounded information and constrained choice, but differences in the behaviour of firms and organizations when seeking to relocate can also be attributed to their organizational status, culture and structure. To understand business relocation decisions we must recognize the influence that key individuals exert over both the decision-making process and its outcome. One more time, and in a complete different business among those treated in this paper, individual decision-making plays an essential role in getting competitive advantage for a firm.

In regenerative dynamic capabilities, those that are needed to change and renew the firm’s resource base, decision-making on top-level management is crucial (Ambrosini – Bowman – Collier, 2009). Certain traps in decision-making could be inhibitors of the deployment of this DC. Anchorage, framing and biases for example could represent three big enemies for decision that are intended to renew the base of resources (Hammond – Keeney – Raiffa, 1998); if decision makers are not open to new possibilities and are “anchor” or “framed” to past experiences he could be afraid of taking decisions or moving quickly when needed. Sometimes new people means new form of doing things and new ways of decision-making. “For instance a new CEO could be brought in, who has experience of transforming other firms, or strategic change consultants could be deployed. For such CEOs what they do within the firm is habitual – capabilities that they may have previously honed in different firms and contexts – and therefore these are not one-off performances. So for the CEO this is nothing new, only the context is new, but for the firm this would consist of a change in their dynamic capa-

bilities, i.e. an instance of the exercise of regenerative dynamic capabilities (Ambrosini – Bowman – Collier, 2009: p. S19.).

We could document more and more cases related with decision makers and decision-making processes as VRIN resources or as dynamic capabilities enablers. But it is not the purpose of the section. The purpose is to show how this is a reality and how the fact of doing research can throw valuable information that could be used for similar firms. In conclusions section, scholars are encouraged to apply qualitative methods to identify more of those cases in different industries. Decision-making is complex, but it can greatly influence internal resources and hence the performance of the firm.

Conclusions and future work

As we already saw, individual decision-making is not trivial, particularly, in top positions it is not just about analytical approach, but of the combination of several factors and abilities. Abilities such as the right combination of the left and right sides of the brain, the correct use of intuition and gut, the effective application of logical and rational methodologies such as even swaps and the effective steps for taking decisions that Drucker (1967) proposes. Even more, effective decision makers need to go beyond conscious processes, looking for the holistic idea of every situation through unconscious processes that allow executives to take systemic decisions. Dijksterhuis, Bos, Nordgren, & Van Baaren (2006) resume the idea of making the right choice without deliberate attention, pointing out that “contrary to conventional wisdom, it is not always advantageous to engage in thorough conscious deliberation before choosing”.

All the experience and knowledge are also crucial for top managers when making decisions, this implies that decisions are “path dependent”, as valuable and rare resources are path dependent to the experience of the firm. “One interesting possibility is that experience with making decisions helps people to find the right balance of thinking too much and thinking too little, and thus experience may be a way to improve decision-making” (Ariely – Norton, 2011).

Regarding future work, I encourage scholars to deeply study the non-quantitative side of individual decision-making: intuition, gut and the unconscious side of individual decision-making process, which in my opinion can only be studied through empirical research. In the same line of thought, Lockett, Thompson, & Morgenstern (2009) point out that scholars need to work and reflect on the methodological approaches to empirical research of the RBV. I am pretty sure

that executives who have an outstanding performance in decision-making will be more likely to represent a VRIN internal resource for their firms, and hence, provide sustained competitive advantage to their firms.

I also encourage scholars to address researching related with identify decision-making as enablers of dynamic capabilities. Different industries could need a different approach in decision-making process, then identifying good and bad practices in different kind of industries could be very valuable for understanding such complex topic.

Assertive decisions made in high positions are crucial for the development of sustained competitive advantage. Good experience, combined with gut and the ideal handling between left side of the brain and the right side will provide this assertiveness. Finally, as Drucker (1967) said “an effective executive is expected to make decisions that have significant and positive impact on the entire organization, its performance, and its results characterizes the effective executive”.

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