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## ON EXECUTIVES' STRATEGIC DECISION PROCESS AND THE MENTAL MODEL PROPOSITION

**FLAVIO BRESSAN**

Pontifícia Universidade Católica de Campinas – PUC-Campinas

[www.puc-campinas.edu.br](http://www.puc-campinas.edu.br)

E-mail: [flavio.bressan@puc-campinas.edu.br](mailto:flavio.bressan@puc-campinas.edu.br)

**GERALDO LUCIANO TOLEDO**

Universidade de São Paulo

[www.fea.usp.br](http://www.fea.usp.br)

[gltoledo@usp.br](mailto:gltoledo@usp.br)

### **Abstract**

*Researchers have long been attempting to understand strategic decisions. This issue may be approached through the mental model, the one's usual working mind pattern, derived from the combination of one's perception pattern with the data arrangement and the decision making models. The relationship between decisions with the mental model is done theoretically by examining the mental model under temperament proposition. The author concludes that mental model – operational or strategic – may explain executives' choices and decisions. The understanding of the executive's mental model can prevent biases in the strategic analysis and promote best strategic choices and decisions.*

**Key words:** decision making process, executive strategic decision process, executive's mental model, temperament.

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### 1. Introduction

Management process is a social, and complex, and multifaceted phenomenon related to the professional running business, the managed company, and business environment. These involved areas in the management process, taken together, bring strategic questions to discussion, and as studies and researches in this area indicate the very nature of strategy takes into account the environment in which business operate, the characteristic of managers' personality (Gallén, 1997; McCarthy, 2003; Michaud et al. 2003) and their choices and decisions.

The search for an understanding of the managerial process – either in managing an existing enterprise or by creating a new, entire business – has itself theoretical and practical values. This is because management is an activity of social importance because management is the lone human activity able to transform human efforts and competences in wealth (Drucker 2007). On the practical view, manager's success, her or his choices and decisions may be a way to the broadening of business, and to technological development, and to development of new business and enterprises because it is a way for developing and introducing innovations to address new products and services that are new solution for the market needs.

On one hand, managers' choices and decisions may enlarge the business frontier (like Google and Twitter) and create new business (like Amazon in the service market), which may be a great way to generate new employment opportunities and to make possible to hire and employ workers dismissed as a consequence of economic crisis. On the other hand, by considering the developing economies, managers' choices and decisions can make possible the creation of new enterprises or institutions, not only as a way to new employment or new working opportunities generation, but also as a way to minimize the social and political causes of poverty (Kamat, 2003), and to the social promotion and integration of poor and marginalized social segments (Alvord et al 2004)

On the theoretical view, the main contribution refers to the identification of the impact of the manager's personal characteristics on the strategic choices and decisions that will determine the enterprise fate. Personal characteristics of the decision maker have a direct influence on the diagnosis, choices and strategic directions of enterprise (Gallén 2006). So, by identifying the type and extension of the personal characteristics influences on the enterprise fate, one may be helped in the effort to build a theoretical proposition in the management field (McCarthy 2003).

The importance of this approach became evident by spotting the role and the manager's personal characteristics impact on the enterprise management process because personal choices and decisions are consequences of these characteristics that affect the perception and understanding of environmental challenges, and opportunities and by consequence, the strategic decision making (Daghir and Zayde 2005). So, the purpose of this paper is to present a basic review of the strategic concept, and the choices and the decision making process and the main concepts of temperaments as a basis for some propositions on this theme and to point out some questions as a guide to the empirical research works.

### 2. Strategy Definition

There are numerous perspectives on strategy and definitions of the term in the literature as well as many approaches to strategy, as it is pointed out by Porter (1998) propositions and by Mintzberg (2000) that emphasizes the need for a holistic view of strategic issues. As an illustration of the need of this holistic view, Mintzberg et al. (2000) refer to the analogy of the blind men trying to describe an elephant. In this analogy, each blind man touches one side of the elephant and describes it as a different animal. In the same way, they suggest that each researcher tends to focus one specific point of view on strategic matter what generates many “thinking schools”, each one proposing a distinctive definition of the strategic term that sometimes are complementary and sometimes are contradictory, which may be an indicative of consensus absence or generic propositions for this business field. As a synthesis, they propose the existence of three strategic schools categories: prescriptive, descriptive and configuration.

When dealing with strategic business issues, one manager may ask: which strategic concept to adopt and what is the best strategy to be taken? For Hax and Majluf (1998), strategy can be seen as patterns that integrate the main policies, norms, rules, goal and the organizational actions as a whole, a coherent and consistent system. The strategy formulation process was not simply an exercise in rationality but also “reflect experimentation, exploration, intuition, instinct and learning” (McCarthy 2003, p. 155) and it becomes a delicate balance between motivation, the learning acquired with experiences and actions and the modeling of new ways for the business to succeed that may have no relations with the past success. In this paper, in spite of many schools of thought about strategy formation, Hax and Majluf (1998) concept is adopted:

[...] a coherent, unifying, and integrative pattern of decision that determines and reveals the organizational purpose in terms of long term objectives, selects the businesses the organization is in or is to be in, attempting to achieve a long term sustainable advantage in each of its businesses, by properly responding to the opportunities and threats in the firm's environment, and the strengths and weaknesses of the organization, engaging all the hierarchical levels of the firm and defining the nature of the contributions it intends to make to its stakeholders. (Hax and Majluf 1998 p 38)

This concept denotes that an enterprise will follow a reasonably coherent and stable pattern in its strategic choices and decision making process, but do not necessarily doing it by the adoption of a formally structured plan. This is specially relevant for understanding the management process, because most of the enterprises usually do not have the tradition for explicitly addressing strategic planning issues, and do not have a routine for the development of a formal strategic planning. The absence of a formal process does not mean the inexistence or absence of any strategy but it may mean that the executive is open, flexible, and responsive and is willing to learn (Hax and Majluf 1998)

### 3. The Decision Making Process

Decision making is a process that involves the selection of a specific course of action that is supposed to bring enterprise desired results (Gibcus et al. 2008). As a strategic activity, it is a process that leads to the choice of goals and means, resources and people and the way which they are effectively deployed. As strategic, they are crucial to the viability of enterprise and may be defined as programmed choices and/or reactions about business and environment issues that affect the survival, thrive, well-being and the nature of organizations (Shoemaker 1995).

Making decisions are a daily executive routine and, in spite of the authority delegation on operational issues, strategic decisions remain under executive direct responsibility. Under the decision process point of view, every time an executive faces the need for making a decision it is expected him or her to adopt a planned and rational approach to decision-making. When running a business, the strategic decision scope is reduced because wrong decisions may put the enterprise under the risk of business failure or in a fatal risk of going bankrupt. Besides, in the case of running a business, decision and its consequences will affect organizational performance and will be the executive total responsibility.

One basic assertion to the preliminary field studies on decision making process is the rational human being, which is coherent with the economy concept and the Scientific Administration. This rational man is, by basic assumption, able to analyze all data and alternatives for a given situation or problem and then makes a perfect rational decision by selecting and choosing the best solution that optimizes the desired results. As Simon put it,

“This man is assumed to have knowledge of the relevant aspects of his environment which, if not absolutely complete, is at least impressively clear and voluminous. He is assumed also to have a well-organized and stable system of preferences, and a skill in computation that enables him to calculate, for the alternative courses of action that are available to him, which of these will permit him to reach the highest attainable point on his preference scale”. (Simon 1955, p. 99)

As a larger stream of research on cognitive biases in decision making process has consistently demonstrate, managers are not perfectly rational but boundedly rational. Bounded rationality refers to the limits experienced by managers in their abilities to perceive and interpret a large volume of pertinent information in their decision making activities (Simon, 1979). In the same way, the challenges or problems an executive faces are complex and made up of more variables one can comprehend. So, in contrast of the rational man proposition there is the administrative man proposition that have the basic assertion that decisions are made in a personalized way by upper echelons, which are responsible for the strategic decisions. By considering that the focus of this paper is the decision making process in highest organizational level and in the case of setting up a new, independent enterprise and managing it in a personalized way (Berry 1998) and that the decision making process is centered on the executive, it may be analyzed two approaches: rational and the bounded rationality.

Under the rationality optic, one executive makes all decisions on a logic basis, by analyzing all the alternatives with the objective to find the best choice in a known and scanned environment. This position does not admit ambiguity and has as a basic presupposition that executive posses or believe to posses the mental capability to know and analyze in a rational way all data and alternatives for a problematic situation that is under analysis (March and Simon, 1967). In doing this, an executive needs to formulate an utility equation that enables him or her to choose the alternative that will result in the best desired consequences and produces the best results.

However, this assumption that considers the decision maker as a full rational already have a strong, opposite argument. As stated by Freud (1971), sometimes we are under conscious control of our mind, many times, our minds and decisions are governed by our unconscious, which influences and distorts our perception. Although one may consider that decisions can be made in a rational way, most situations an executive faces are so complex that involves a large number of facts and contingencies and are made up of far more variables that are relevant for the decision at hand then she or he may comprehend; so, the decision making

process may be characterized as a bounded rationality process and the executive will select an alternative that best fit with some personal values and beliefs system adopted instead of a rational system, being a kind of behavior that is at least boundedly rational (Simon 1955; Tiwani et al. 2007).

As rationality is valued in the educational process and work situations (Pink 2006), there will always be a rational drive in every decision making process, but the executive's bounded rationality will act as an obstacle to a perfect rational decision making process. Furthermore, executive's personal temperament and preferences in conjoint with formal education and experiences may bring meaning and *color* to the problem or context that she or he is facing and act as a strong obstacle to a perfect rational decision making process. This features allied to the executive feelings and expectations may interfere in the perception process in a manner that important facts and data may be considered irrelevant or do not have importance, building a gap between the existing and the perceived reality and which can make different executives face different problems and give different responses to the same situation (McCarthy 2003).

Another factor that acts as a restrictor to the genuine rationality is the occurrence of situation requiring an impulsive or an *ad hoc* decision that may present ambiguity or may contradict values that are espoused by executive and may cause a cognitive dissonance process (Festinger 1957). By the other size, personal differences lead executives, in spite of high intelligence quotient and competence and education level, to perceive the same reality under different angles, with different characteristics demanding different decisions and actions. In this way, for example, people with little focus on concrete and factual aspects of the reality will tend to look at the opportunity from a positive side than a negative one (McCarthy 2003) and to see fewer risks and threats in the decision implementation and be more risk tolerant than others.

By considering this, in spite of having information and the capability to analyze them, it may be said that what will be perceived as the *true* reality by one executive may be very different from the other one because the executive's perception and analysis processes may suffer influences that other don't (Pellegrino and Carbo 2001). These different characteristics may lead different persons to take different strategic decisions facing the same context and information.

Many research on decision making, by focusing on the role of mental model on strategic choices process and by addressing the role of preferred way for perceiving and utilizing information, have pointed out that people act on their mental model and that their preferred mental model may drive to a specific strategic choice. All these factors seem to be a strong cue which shows that perception, organization and use of information – the mental model – are critical in the strategic choice and decisions. So, the next part of this paper will analyze the interaction between the decision making process and the executive personal characteristics.

#### **4. Strategic Choice, Decision, and Mental Model**

Executive management research has established that the perception do play a major role in the decision making process and suggests that an individual's perceptions, rather than objective reality, explain the decision to start a new business, for example (Krueger and Brazeal 1994). Perception directly influences enterprise successful performance because to survive and grow it is necessary to anticipate or react in facing business environment opportunities. Because of this, the search for understanding on executive's way of perception and use information about business environment and how perception may influence strategic choices and decisions

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becomes a relevant issue for developing some propositions to support strategic choices and the decision making process (Gallén 2006).

As many factors influence the strategic decision making process, the fact of an alternative or course of action is perceived as possible or desirable leads us to a question related to the factors leading an executive or manager to perceive the same situation in a different way from others facing the same situation. So, the ways one makes strategic decisions seem to be closely related to the executive's personal characteristics (Korunka et al. 2003). In this case, executive's preferences and particularly his or her way of perceiving and taking information have an effect on strategies she or he tends to prefer.

In other reference to the impact of executive's personality on the strategic choice and decision making process, McCarthy (2003) study suggests that the strategic choice and strategy formation process are driven by the personality of the executive and by their experience in times of crisis; it also suggests that there are two main types of executives, the charismatic and the pragmatist executives, which resulted in different patterns of strategic behavior and that different types of executives faced different problems and that their response to crises varies.

According to McCarthy (2003), the charismatic executive is visionary, risk-taker, highly persuasive, passionate, with ambitious and idealistic goals, and the pragmatist is more conservative and cautious, more rational and seems to have a more calculating and instrumental approach to the venture. Both executives are distinguished according to decision-making style, goals, attitude to risk, degree of commitment to venture and business background (Figure 1).

**Figure 1. Executive's characteristics**

Strategy related variables	Charismatic	Pragmatic
Decision making style	Visionary, intuitive, creative	Planned, rational, reactive
Goals	Ambitious, realistic	Achievable, conservative, down to earth, common sense, slow-growth, consolidation
Attitude to risk	'Bullish', risk-prone.	'Bearish', risk averse.
Degree of commitment to venture	Abiding the commitment. Obsessive, success against the odds	Calculated commitment, pragmatic. Success within reach
Business background	No business	Combination ('mixed')

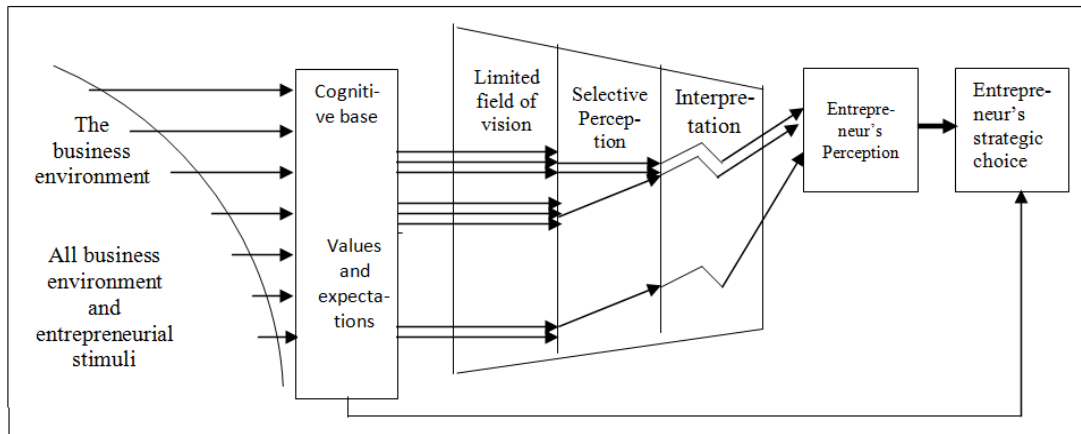
Source: adapted from McCarthy (2003).

A lot of research indicates that executive's way of perception is a main factor in understanding the strategic choices and strategic decision (Gallén 2006). Hambrick and Mason (1984) stated that perceptual process can be viewed under a sequential perspective. First, an executive cannot scan every aspect of the enterprise and business environment. The executive's field of vision is restricted, posing limitations to the perceptual process and on what is perceived. The executive's perception is further limited because one selectively perceives only some phenomena included in her or his field of vision, and finally the data selected for processing is also limited by the values and cognitive model filter (Figure 2).

So one can ask: how one can explain executives' strategic choices and decisions? The answer may be found in the mental model approach that is widely recognized as an important determinant of individual behavior which manifests itself in executive's strategic choices and decisions. These mental model are neither wrong nor right (Keirseey and Bates 1978), but mental model, particularly their way of taking and use information, have an effect on the

strategies they tend to prefer. In this sense, the discussion can be addressed by the relationship between mental model and temperaments, as proposed by Keirse and Bates (1978).

**Figure 2. Strategic choice under conditions of bounded rationality**



Source: Hambrick and Mason (1984)

## 5. Mental Models and Temperaments

Mental models may be described as characteristic models of perceiving, processing and using information gathered and different mental models may lead to different strategic choices facing same business environment. When one knows the mental model of executives, one “can assume that their processes of strategic choice and strategic decision making are different if their perception and judgment are different from each other” (Gallén 2006, p. 119).

There are many approaches on differences about mental models in the literature. As Hambrick et al (1993) put it, some executives are only interested in “what is” than other that are more able to accept the new, untested ideas about “what might be”. This proposition is in according to the temperaments approach as developed by Keirse and Bates (1978), and temperaments are “based primarily on observable extravert behaviors and describe differences in people noticed and registered throughout the history” (Kroeger and Thuessen 1992)

Temperaments are derived from one’s preferred modes of perception and behavior in facing many life situations and are a useful way of grouping preferences, and permit to make consistent previsions on preference and behavior of person, on how one learns, and on how one manages (Kroeger and Thuessen 1992; Nelson et al, 1997).), and about mental models. Differences in perception - concrete or sensorial and global or intuitive (Jung 1991) - are the first to be considered because perceptions are the manner people collect information about the world which influences the other functions. Without some understanding on how people perceive, the communication process becomes highly difficult because people first believe in their own data and information.

The preference for concrete perception mode points to a preference for collecting factual and concrete information and then deciding what to do: organize them or continue to look for more information. The preference for global perception mode means that an executive will prefer to collect abstract or conceptual data and then will organize this information in a rational way or by considering values and ideas and interests of other people. In a synthetic form, there are four temperaments (Keirse & Bates, 1978; Silva, 1992), representing the four mental models (Figure 3).

Figure 3. Mental models according to Temperaments

Perception mode	What one does after?	use of information in life and work	DERIVED OPERATIONAL MENTAL MODEL
<b>Concrete</b> Preference for gathering information by means of the five senses which focus —on the concrete, tangible realities of the present. They also trust their own personal experience	Use the information.	<b>Planned way</b> They prefer to have things defined, arranged and well planed. They plan and do the planned. They appreciate decided, ordered, and well planed situations. They enjoy to plan and to do the planned, because life is to be lived in a planed, ordered way.	<b>O P E R A T I O N A L</b>  <b>Implementer:</b> Traditionalist, stabilizer, consolidator, he or she works from a sense of responsibility, loyalty and industry and learns in a step-by-step way with preparation for present and future utility. She or he prefers the decision over possibilities, concrete over the abstract and order over flexibility, tends to focus on current, and on here and now issues, but lets experience guide him or her in solving problems.  <b>Pragmatist</b> Problem solver, fire fighter, troubleshooter, negotiator, she or he works via action with cleverness and timeless. She or he learns through active involvement to meet current needs. Se or he uses her or his sense of the obvious to scan the environment and determine the best way to outmaneuver an adversity.
		<b>Improvised way</b> They tend to continuously search and apply the information to solve presenting problems. By preferring to live a spontaneous and flexible life, they perceive the possibilities and seem to be open to new events, sudden changing, spontaneous, curious.	
		Use information to make decision in a:	<b>DERIVED STRATEGIC MENTAL MODEL</b>
<b>Global</b> They are more interested in meanings, relationships and possibilities based on facts than the facts themselves and are oriented toward the future. They prefer to look at the big picture rather than details.	To organize data and make decisions.	<b>Logical or rational way.</b> They tend to make logical connections between ideas and facts. When making decisions, they analyze issues logically and impersonally and uses objective data, validity and rationality as the criterion for making judgments	<b>S T R A T E G I C</b>  <b>Strategist</b> Visionary; architect of systems and changes, imaginative and analytical, she or he works on ideas with ingenuity and logic exploring all possibilities inherent in any situation. She or he believes that an organization’s daily activities must be consistent with its mission and directs her or his energy toward building systems for the future.  <b>Energizer</b> She or he values fairness over consistency and ideas over policies; he or she is catalyst, spokesperson, energizer; she or he works by interacting with people about values and inspirations and by searching possibilities for people. Energizer is enthusiastic and passionate in championing people, causes and anything new.
		<b>Valued-based way</b> They prefer to come to decisions by using empathy, personal values to weight data, ideas and occurrences and to make a judgment.	

Source: built on Keirse and Bates (1978); Kroeger and Thuessen (1992); Silva (1992)

By considering those preferred modes of perception and behavior in facing many life situations (Silva 1992) and the Hambrick and Mason (1993) propositions and translating the “what it is” as factual focus on “here and now” and “what may be” as “possibility for the future” it became possible to make a synthetic classification of mental model into two types: operational mental model and strategic mental model.

### 5.1. Operational Mental Model

This mental model is characterized by her or his focus on what is going on and by the search for precision, reliability, efficiency, prudence and discipline, and conformity. She or he is practical (Keirse and Bates 1978) and demonstrates high focus on problem solving rather than finding it and tend to reduce problems occurrence by improving and maximizing the process efficiency, under the existing conditions; she or he has a preference to make plans and is happy with the plan accomplishment. Quick to decide, but once a decision is made, this is not a problem for her or him. The day-to-day activities of an operation-minded person are driven by responsibility, obligation and duty, and he or she rarely challenges the norms and policies. As to this person the next step is to apply the information to daily



activities, she or he may do things in a planned way – implementer – or in an improvised way – pragmatist.

**Implementer** prefers decisions over options; he or she is traditionalist, stabilizer, consolidator; he or she works from a sense of responsibility, loyalty and industry and learns in a step-by-step way with preparation for present and future utility. She or he prefers the decision over possibilities, concrete over the abstract and order over flexibility; he or she tends to focus on current, here-and-now issues, but lets experience guide him or her in solving problems.

**Pragmatist** prefers action over reflection, responding over planning; she or he is a fire fighter, troubleshooter negotiator; she or he works via action with cleverness and timelessness – give him or her a problem to fix and she or he is in his or her element. She or he learns to meet current needs through active involvement. She or he possesses the most pragmatic temperament and uses her or his sense of the obvious to scan the environment to determine the best way to outmaneuver an adversity. She or he is expeditious in handling of the out-of-ordinary and the unexpected.

## 5.2. Strategic Mental Model

This mental model takes information through her or his sixth sense, by focusing not on what is but on what may be, and looks for meaning in all things. A person with this mental model will probably choose to describe himself or herself as innovative (Keirse and Bates 1978), and may be characterized as disorganized person by the low adherence to norms and rules and structures, and many times this person is considered undisciplined.

He or she is able to think strategically and to bring innovative solutions to daily problems and issues. Visionary and architect of change, she or he is imaginative and analytical, exploring all possibilities inherent in any situation and directing their energy toward building systems for the future. She or he is a visionary and works on ideas with ingenuity and logic. She or he learns by an impersonal and analytical process for personal mastery, and may be sensible to people or privileges rationality. As to this person the next step in to use the information in the decision making process, one may know if his or her decision will be taken in a rational way – strategist – or in a value based way – humanist.

**Strategist** prefers to look at the big picture rather than details in search for possibilities to build new systems or to solve daily and potential problems; she or he tends to make decisions based on logic and objective–analyzes and in an impersonal way. She or he is a visionary, architect of systems, builder, and works on ideas with ingenuity and logic, is imaginative and analytical, exploring all the possibilities in any situation. She or he learns by an impersonal and analytical process for personal mastery, and believes that an organization's daily activities must be consistent with its mission and directs her or his energy toward building systems for the future.

**Energizer** tends to make value-based decisions by considering possibilities, and others' interests and wishes. In this way, she or he is catalyst, spokesperson, energizer, and works by interacting with people about values and inspirations; she or he prefers to look at the big picture rather than details in search for possibilities for people, and learns for self-awareness through personalized and imaginative ways. Humanist people are enthusiastic and passionate in championing people, causes and anything new.

In this way, Keirse and Bates' temperament approach appoint for the potential of mental model for future research related to the competitive business environmental analysis and to the executives' strategic choices and decision making process, and, in this way, for

addressing the relationship between the strategic choices and strategic decision process and the executives' personal characteristics, as derived from her or his mental model.

## 6. Conclusion

The main purpose of this study was to make a link between executives' strategic making process, their strategic choices and the influence of executives' mental model as a personal characteristic in the strategy formulation and the way of running the enterprise. Based on the previous studies and researches, it was made possible to point out same theoretical correlations between both mental models and strategic choices.

As it may be noted, the rational model presents limitations to explain executive choices and decisions because, as it is posited, the bounded rationality brings about limitations to the perception process. As a consequence, it brings limitations to the executives' strategic choices and decision making process. As an alternative approach, by emphasizing the role of the perception process in the strategic choices and decision process, this study proposes the mental models, as measured by the Keirsey and Bates temperaments, as having great influence on executives' strategic choices and decisions, and as a better way for understand the executives' strategic choices and strategic decisions.

Theoretically, the development of this propositions signs an interesting research field because many studies on this issue have a main focus on the strategic decision process instead of on the executives' mental model. By proposing the temperament approach as a way to address the strategic choices and strategic decision making process and the influence of the personal preferences, this study presents a model that may help to explain how an executive perceives the business environment and, in doing so, how she or he uses his or her mental model to make choices and decisions.

As the business environment is in a rapid transformation and requires executives to brings forward or reacts to challenges and threats and the opportunities that appear and disappear, by knowing the one's mental model or temperament, it may be theoretically possible to make previsions about her or his chance to succeed in the strategic choice process and in the decision that will be taken in running the enterprise. In this way, this proposition may be an alternative direction for the definition of executives' mental models, as a personal characteristics and their influence in the strategic choice and decision making processes.

In this way, we believe that the proposal made in the study appoints for the potential of Mental Model for future research related to the competitive business environmental analysis and Business Strategic Management. It can be an open door to a new perspective on how mental models may explain executives' strategic choices and decisions and creates avenues for future empirical investigation on this issue. In this way, we also believe the proposal made will inspire others researchers to design and conduct research projects to address the impact of mental model in the executives' success to bring about new insights on executive business management.

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