

AND MERLIN HAS TRANSFORMED LITTLE ARTHUR IN A BIRD SO THAT HE COULD PERCEIVE THAT THINGS SEEN FROM THE SKY ARE SO DIFFERENT OR ON STRATEGIC THINKING AND MENTAL MODEL: AN INTRODUCTORY STUDY

Abstract

The competence for strategic thinking is a management core requirement for the success and managers are required to ground their daily actions toward strategic objectives. Professors claim that professionals attending MBA courses to have more difficulty in dealing with strategic matters for defining alternative futures and possibilities and to prefer dealing on subjects more focused on here-and-now operational issues. This paper presents results from the study of preferred thinking patterns –mental models - among professional attending Marketing MBA and concludes that one of the causes of the difficulties faced by them with the demands of strategic matters is the preferred thinking patterns

Key words: MBA Programs; Strategic Thinking. Executives' Mental Model

1. - Introduction

Enterprise is supposed to operate in a world that is always in change and this change presents new strategic challenges and opportunities. To build success in a fast changing business world, the enterprise need a strategic business management model and it requires the managers and professionals to be creative and skilled and have high level of strategic thinking. This kind of thinking will be necessary and of great value for the enterprise and their strategic business unit to the development of credible business scenarios in the search for reducing the uncertainties on its business decisions (Barnet & Berland , 1999).

The skill for the strategic thinking will be important as well as when the company need to innovate - an imperative for eventually every enterprises (Doroty & Straus, 1997) - especially when they operate in highly competitive environment or in a industry or market where it is very difficult or impossible to build and maintain structural or operational competitive advantage without being imitated by its competitors.

This need demands the MBA programs have as one main purpose to help the professionals attending these programs in developing the skills for the strategic management. But, teachers

and professors report professionals having problems in coping with strategic business issues in their disciplines. This may be a cue for these professionals having difficulties in developing this skill and that these difficulties may be tied to skill for think strategically.

In facing this, to address the capacity for strategic thinking and its occurrence among professionals in development in MBA programs may be insightful and utile for design learning programs and to understand the difficulties appointed by teachers when they are working with strategic matter at learning situations

2 - Paper Objectives

The main objective of this paper is to verify, in an exploratory way, if the assessed professional in MBA programs have the personal characteristics – mental model - that indicate the skill for strategic thinking as measured by temperaments, to verify the occurrence of characteristics that are related to difficulties of these professionals to face and work with strategic issues. The research was done as an exploratory study (Révillion, 2001) because there were no existing studies that focused specifically on MBA professionals' mental models and their difficulties to lead with strategic issues as appointed by teachers. This assessment had the intent to estimate how many of them have these basic competence for strategic thinking for trying to link this occurrence with the possible causes of difficulties in dealing with strategic questions and, in doing so, give some cues for planning actions and exercises to develop the ability or competence for strategic thinking they will need in professional world.

3. Literature Review

3.1. Strategic Thinking

Strategic thinking or "strategic mind" (Barner & Berland, 1999, p. 120) may be related to the ability to collect and process a very high amount of information and, form this mass of details, to select what really is important and necessary to make effective strategic decision that may be differential for the company success. According to Liedtka (1988) strategic thinking has an

imprecise definition and an anecdotal use. One reference to strategic thinking may be founded in the Katz (1991) seminal work: *On the Skills of an Effective Administrator*. As like one may concludes that, in this HBR classic, Katz by naming the Conceptual Skill, in fact, was naming strategic thinking competence:

“As used here, conceptual skill [strategic thinking] involves the ability to see enterprise as a whole; it includes recognizing how the various functions of the organization depend one another, and how change in any one part affect all the others; and it extends to visualize the relationship of individual business to the industry, the community, and the political, social, and economic forces of the nation as a whole. Recognizing these relationships and perceiving the significant elements in any situation, the administrator should be able to act in a way which advances the over all welfare of the total organization.” (KATZ, 1991, p. 26)

Looking at this way, strategic thinking may be summarized as the capability for thinking in terms of importance and priorities, between divergent objectives and criteria, relative tendencies and possibilities but not certainty, correlation and imprecise patterns between elements instead of exact cause-effect relationships (Liedtka, 1988). Davis (1992, p. 710) define strategic thinking as the ability to “understand the global scene – past, present, and future – for defining possibilities and alternatives, associated with the capability for considering simultaneously a long range of factors inside-outside the organization in the problems solving and decisions making and action implementing” for defining critical and high return strategies for driving the team efforts in a consistent way according then, in a way that decisions have their focus adjusted to attend to the business critical strategic questions.

As stated by Haycook et al (2012, p. 5), “analysis of strategic thinking reveals common themes about the interconnectedness of ideas and a regard to new possibilities”. In a revision of the writings on strategic thinking concept, Liedtka (1988) summarizes its five major attributes:

1. A system or holistic view: strategic thinking is built on the system perspective that recognize how each parts of organization functions and how they influence each other

2. Intent-focused: “strategic thinking is intent driven” (p. 31) and conveys a sense of direction and purpose and provide the focus that allows individuals to marshal energy and resources and to concentrate for as long as it takes to achieve organizational objectives.
3. Thinking in time: it is not solely driven by the future. It link the past, the present and the future or defining possibilities and alternatives for the business.
4. Hypothesis driven: as a scientist, it deals with hypothesis formulation and testing as basic activities, being both creative and critical in its nature.
5. Intelligently opportunistic: it invokes the capacity to be open to new and emergent opportunities and strategies that are better suited to the changing business environment

Strategic thinking is, by its definition, highly creative, innovative and unconventional mode of thinking, and it should be viewed as a core competence for creating and sustaining competitive advantage (Liedtka, 1988). It is the tool to get done the what is needed to move an organization forward, innovate, streamline. And evoke grater productivity. According to Heracleous, it deployed with thought to envisioning the organizations future. In this way, it may be said that strategic thinking is also general knowledge based and instantaneous, because ir just happen in the strategic thinkers’ mind.

Looking at this way, strategic thinking may be summarized as the capability for thinking in terms of importance and priorities, between divergent objectives and criteria, relative tendencies and possibilities but not certainty, correlation and imprecise patterns between elements instead of exact cause-effect relationships and as the Ability to “understand the global scene – past, present, and future – for defining possibilities and alternatives, associated with the capability for considering simultaneously a long range of factors inside-outside the organization in the problems solving and decisions making and action implementing” (Davis, 1992, p. 710) for defining critical and high return strategies for driving the team efforts in a

consistent way according then, in a way that decisions have their focus adjusted to attend to the business critical strategic questions.

3.2. Strategic Thinking and Mental Model

Once defined and characterized what strategic thinking, the next question is about how to assess people skill to think strategically. Many are the ways to assess the capability for strategic thinking (Robey & Taggart, 1986) and for this search, the choice is the temperament derived from psychological types, which has been used in a broad range of business applications. This approach is useful by giving information about personal characteristics related to mental model and by doing this, it gives information about the skill for the strategic thinking.

3.3. Mental Model and Temperaments

Mental models may be described as characteristic models of perceiving, processing and using information gathered. Everyone has his or her proper mental model. Different mental models may lead to different strategic choices facing the same business environment. 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, allowing to make consistent previsions on preference and behavior of a person, on how one learns, and on how one manages (Kroeger e Thuessen, 1992), 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 ways people collect information about the world which influences the other functions. 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 keep looking for more information. The preference for global perception mode means that one will prefer to collect abstract or conceptual data and then organize this information in a rational way or by considering values and ideas and interests of other people. In summary,

there are four temperaments (Keirsey & Bates, 1978; Silva, 1992), representing the four mental models. By considering those preferred modes of perception and behavior in facing many life situations (Silva, 1992) it became possible to classify the mental model in two main types: operational and strategic mental models.

Operational Mental Model: 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 (Keirsey & Bates, 1978) and she or he has a preference to make plans and is happy with the plan accomplishment. As to these people the next step is to apply the information to daily activities, they may do things in a planned way – **implementer** – or in an improvised way – **pragmatist**.

Strategic Mental Model: this mental model takes information through the sixth sense, focusing not on what it is but on what it may be, and looking for meaning in all things. He or she is able to think strategically and to bring innovative solutions to daily problems and issues; she or he is imaginative and analytical, exploring all possibilities inherent in any situation and directing their energy toward building systems for the future. As 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 – **Energizer**.

In analyzing mental models one will find that the strategic thinking model and the capability to deal with strategic thinking requirements and strategic planning questions will better match the strategic mental model – **the strategist** (Nelson, et al., 1997; Tieger & Barron-Tieger, 1995, Hirsh & Kummerow, 1998)

4. Strategic Thinking and Professionals Attending MBA Programs

Once characterized strategic thinking and its contributions for dealing with strategic business issues and defined the temperament as a tool for the assessment of preferred mental model, the next step was the measurement of MBA Marketing professionals preferences

4.1. Methodology

For this project, mental model is the usual working mind pattern of one person, derived from the combination of his or her perception pattern with hers or his mental data arrangement and her or his decision making models, that are inferred and operationally defined by the temperament definition, assessed by the Questionário de Preferências Pessoais – QIP - developed by Silva (Silva, 1992) in studying preferences and vocational choices in undergraduate courses at USP. Drawing on The Keirsey Temperament Sorter (Keirsey & Bates, 1978), the questionnaire provides a useful measure of temperaments and mental models by looking at psychological functions that all people use at different life times (Silva, 1990). Silva (1990) reports that qualitative and quantitative testing conducted during the development of the QIP suggested the questionnaire had good content validity and adherence to population.

The sample for this study was for convenience. The respondents for this study included administrators, engineers, physicians, advertising and publicity, physicists, and others professionals (miscellaneous), all interested in mastering in business administration by attending MBA programs. Participation was voluntary for all professionals attending MBA classes, and confidentiality of responses was assured.. The questionnaire was completed by all 203 professionals attending MBA programs at São Paulo and Campinas Metropolitan Region, and 197 (97%) are considered valid to the research objectives. These professionals attending MBA programs are 101 Female (51,3%) and 96 Male (48,7%) (Table 1).

Table 1 – Respondents Grading Programs

	Grading Programs												Total	
	Business Administration.		Advertising & Publicity		Engineering		Physicist		Physician		Miscellaneous		F	M
	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Count	28	43	40	18	4	16		2		1	29	16	101	96
%	39	61	69	31	20	80		100		100	64	36	51.2	48.7
Total	71		58		20		2		1		45		197	
%	36,0		29,4		10,2		1,0		0,5		22,8		100	

Source: Research data

4.2. Results and Data Analysis

The assessment results (Table 2) show that the most frequent temperament among MBA professionals assessed in this exploratory study is **Implementers** (100 = 50,8%); the second is **Pragmatists** (47 = 23,9%). The third is **Energizers** (28 = 14,2%) and only 22 (11,2 %) assessed professionals indicate the most appropriated temperament for strategic thinking, the **Strategist**.

Table 2 - Respondents' Mental Model / Temperament sorted by gender

MENTAL MODEL	Female		Male		Total	
OPERATIONAL						
Implementers	53	26,9%	47	23,9%	100	50,8%
Pragmatists	26	13,2%	21	10,7%	47	23,9%
STRATEGIC						
Energizers	17	8,6%	11	5,6%	28	14,2%
Strategists	5	2,5%	17	8,6%	22	11,2%
Total	101	51,3%	96	48,7%	197	100,0%

Source: Research data

According to mental model description the data analysis show that the natural incidence of strategic thinking favorable capabilities among MBA professionals assessed - **Strategists** - is the minor and represent only 11,2%. These data indicate the most of these MBA professionals - **Implementers** (100 = 50,8%) plus **Pragmatists** (47 = 27, 9%), and indicate that these professionals (147 = 78,7), in not attending appropriated training and development programs, may have troubles in dealing with business strategic questions and may consider, in many

times, these strategic questions as theoretical issues without importance, not related to the practical business objectives and results, and letting them out of their professional focus and interests.

These data, analyzed under professional consequences, lead to the conclusion that most of the professionals attending the MBA programs assessed need to attend specific training and development programs for developing strategic thinking capabilities if it is supposed they succeed in executive business positions, that are each time more and more strategic thinking competencies form her or his managers. These found data seem to indicate that the difficulties denoted by professionals and perceived by professors of accessed MBA programs show positive correlation with the indicated preferences by QIP (Silva, 1988).

This positive linkage may indicate a low predisposition and preference for strategic thinking or to a "strategic mentality" among assessed professionals and to appoint the need for including in MBA programs exercises and activities directed to the development of these capabilities. On the academic focus, this may be a strong indicator that the professors difficulties in working with strategic concepts, issues and cases in classes and troubles found by professionals to deal with strategic questions or disciplines because they need to develop capability in:

- Collecting and processing a high amount of information, and selecting from this amount of details what is important and making interconnection among them in a multidisciplinary way.
- Seeing each-and-all disciplines as an integrated development program, understanding the interdependencies among them, the relationship of each discipline with others and with the stated mission of the program.
- Considering external variables to the enterprise – political, economical and social forces – and the stakeholders and theirs relationship with the business for identifying strategic

opportunities for the problem solution and decision-making and taking action process for the success.

- Thinking in terms of importance and priorities, between divergent objectives and criteria, relative tendencies and possibilities but not certain, correlation and imprecise patterns between elements instead of exact cause-effect relationships.
- Understanding the global situation and seeing the big scene - past, present and future - in order to define future alternatives and possibilities by considering a wide range of internal and external factors in problem solution and decision making processes.
- Showing a sense of strategic purpose and direction in her or his own professional education process as a guide to the daily academic choices and decisions;
- Extrapolating the understanding of each discipline of the program - objective and contents - to an understanding of the whole development program and understand the interconnection and the interdependence and the interworking inside the forming process.

5. The Developing Strategic Thinking Competence

By analyzing survey data, it may be said that address the strategic thinking competence is a mandatory issue to MBA programs. But it is not an easy task. Katz in dealing with the question for developing strategic thinking competence, points out that “a number of methods have been tried to aid in developing this ability with varying success” and that “some of the best results have always been achieved through the coaching of subordinate by superiors” (1991, p.32).

According to his proposition, other ways to develop this skill is through trading jobs or job rotation, that is, by moving promising young men through different functions, and special assignments, particularly that one which involves interdepartmental problems, and works with cases involving broad management policy and interdepartmental coordination, and by presenting a series of detailed description of specific complex situations (Katz, 1991, p. 32).

He stated that conceptual skill or strategic thinking must become a natural part of executive makeup and “different method may be indicated for developing different people, by virtue of their background, attitudes, and experiences but, in every case that method should be chosen, which will enable the executive to develop his own skill in visualizing the enterprise as a whole and coordinating and integrating the various parts.

But things seem not to work this way. These recommended methods seem not to be effective in developing the capability for strategic thinking. In his retrospective commentary, Katz points that the conceptual ability – his name for strategic thinking – depends on a specific way of thinking, one’s mental model, and its development is more complex than he has been thinking. As he states:

I am now less sanguine about the degree to which this way of thinking can be developed on the job. Unless a person has learned to think this way early in his life, it is unrealistic to expect a major change on reaching executive position. Job rotation, special interdepartmental assignments, and working on case problems certainly provides opportunity for a person to enhance previously developed conceptual abilities. But I question how easily this way of thinking can be inculcated after a person passes adolescence. In this sense, conceptual skill should perhaps be viewed as an innate ability”. (pg. 34)

Katz statement was based on what was known at that time when he did his work, and one may say that imbed in his proposition conceptual skill should be viewed as an innate ability she or he may see the fixed-brain myth, that stated we are born with a full complement of neurons and produce no new neuron during our lifetime

Something that now is known and that may not be implicit in his work and that recent research results are pointing is that everyone is capable for operating either on operational mode or strategic mode. Research has shown that, by one’s own preference, like right and left hand, she or he operates on a ‘preferred’ mental model instead of other and the mental model ‘not preferred is’ was not developed and stay primitive and not developed.

It is by just this that King Arthur legend (White, 2004) does make sense to the development of strategic thinking competence. When the story tell us Merlin “has transformed little Arthur in a bird so

that he could perceive that he could perceive that things seen from the sky are so different” it shows that it is possible to address the strategic thinking competence development is not only possible but also mandatory for the executive success.

In this way, research have given neuroscientists and neuro-psychologists opportunities to remarkable discoveries on brain like the growth of new brain cells even in adult brain, destroying the fixed-brain myth (Katz & Rubin, 1998; Douglas et al. 2005). Another discovery refers to the brain plasticity and the possibility to establish new brain connections. Discoveries show that it is still possible to improve one’s mental faculties, and optimize the brain functioning, and get the best out of one’s brain cells and maintain it by adequate stimulation, and exercises, and activities. Something that now is known, and that recent research results are pointing out is that every one is capable of operating either on operational mode or strategic mode. Research has shown that, by one’s own preference, like right and left hand, she or he prefers one mode instead of the other and the mode not preferred is not developed and stay primitive. But, how to do it?

Fortunately, research and development on brain knowledge such as neuroscience, allied to researches results on Cognitive Psychology like Structural Cognitive Modifiability (Feuerstein; Feuerstein & Falik, 2010), and on brain plasticity made possible to abandon the fixed-brain myth and the conception of the brain as a definitive structure, and bring about the possibility to one have her or his mental model modified, or developed by enhancing the natural level of strategic thinking capability. Recent researches and discoveries also point out some methods that can help in developing and maintaining new brain connections. As appointed by Dawes (2006), Feuerstein's experience was that people's cognitive functioning could be challenged and changed and by considering that there is a link between cognitive flexibility and the ability to respond favorably to the challenge of change, this approach may be used as one of basic tools with both those who were struggling to come to terms with their changing and challenging business environment and with executive teams that needed to be

able and flexible enough to lead initiative for organizational transformation (Dawes, 2006); in others words, as a tool for developing strategic thinking competence.

All of this research brings about the basis for the development and the proposition of a series of activities that are designed to help people improve the mental capability, power and flex and develop a mental model that are propitious to the strategic thinking. But researches in this area are only beginning and a lot of efforts are needed.

6. Conclusion

This introductory study indicates the relative low frequency of the thinking preferred model that is appropriated to the strategic thinking among assessed professionals attending MBA programs. The most frequent mental model found among these professionals is a thinking model that is characterized by focusing here-and-now issues and by trusting facts, proven data, and previous experience, and the information their five senses brings. These professionals are conservative and tend to focus on current questions, and to be practical and utilitarian, and to let past experiences guide them in solving problems. By considering these issues as theoretical and as with no practical utility for immediate results, they may miss the strategic issues and the big picture or future possibilities. These data appoint that most of the assessed professionals in MBA programs as having a mental model other than that appropriated to strategic thinking. Collected data also appoint these assessed professionals as not having the basic characteristics that indicate the skill for strategic thinking, needed for a successful executive career.

By the other hand, this appointed low frequency of a strategic mental model among assessed professional may be correlated to the professional's difficulties in dealing with strategic issues as reported by MBA professors. This also indicates the need for programming activities to help these professionals in developing capability for the strategic thinking that are basic request for strategic business management and strategic business issues of enterprise.

The first thing one may propose is the assessment and the understanding of one's mental model characteristics and its needs, and his or her learning style, and his or her preferred job as one preliminary action to be done. Other helpful action for these professionals may be to plan activities that lead then to develop the capability for strategic thinking by dealing with situations where they are supposed to be imaginative and analytical and by exploring all possibilities inherent in any proposed problem or situation or business case forward building systems for the future. By the other side, it seems to be of value introduce experiences that address the cognitive structure development and its modification. This may be done in order to help these professionals attending MBA programs to enhance their strategic thinking competence, and to be more strategic minded, and lead then to do their daily job and make their daily decisions consistent to the business mission and strategic objectives.

Another recommendations that one may suggest is related to the need for a step-by-step explanation of how strategic mental model works (metacognition) as a way for they experiment this kind of thinking style and develop some capability in strategic thinking.

In doing this – planning and carried out these activities - they must consider that the main objective of these activities is to develop, guide, and facilitate the strategic thinking skills of all MBA professionals attending the program. It need to be done because in the global business environment we operate, what executives and organizations can do may quickly became less important than how they can think. This may be were MBA programs need to put out their attention if they are to be of value in developing or enhancing strategic thinking competence needed not only for innovation and creativity, but also for organizational flexibility, a positive approach toward change and taking risks with definite objectives needed to build and maintain a sustainable business competitive advantage.

This is not an easy task and it demands hard work because it demands to let people out of their comfort zone related to their personal preferences. The challenge imbedded in this

objective is improve the ability “to see the forest without getting lost in the trees”. Perhaps, these fields may offer us new directions: we might go ahead with this in mind.

Finally, it is necessary to take into account that the main limitation of this study is its exploratory characteristic. In this way, the results appointed by this study may be an indicative of the need for a more extensive research to confirm that the lack of appropriated thinking model – the strategic thinking model – is causing the MBA professional difficulties to lead with business strategic issues, as claimed by MBA professors.

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