
INTERNATIONAL BUSINESS DECISIONS AND MANAGER'S COGNITIVE STYLE: OPENING UP RESEARCH AVENUES FROM COGNITIVE BEHAVIOURAL STRATEGY

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ABSTRACT

The topics of internationalization and cognitive styles have been investigated extensively in an unrelated manner over decades. From the latter psycho-sociological approach, it can be stated that the decision maker cognitive characteristics have an impact on the organization's strategic decisions. Meanwhile, the former perspective has emphasized the issue of internationalization as a process that strongly relies on gaining experiential knowledge. This conceptual paper aims to enlighten the influence and interaction of the manager's cognitive style on international business (IB) decisions of small-and-medium enterprises (SMEs). Two main theoretical approaches explaining the internationalization process of SMEs are compared: the Uppsala gradual model and the International New Ventures-INV approach. The main research question is whether there is a cognitive style that always outperforms the others when it comes to the internationalization pattern the SME follows, or whether the optimal style is dependent on the task and the context (i.e. the pattern of the internationalization the SME chooses). Some propositions and research avenues are suggested as new findings are continuously emerging relative to how the human brain works in this promising intersection labeled as organizational neuroscience in the quest of the micro-foundations of the theory of internationalization.

KEYWORDS

Cognitive style, intuition, international business, Uppsala model, International New Venture.

INTRODUÇÃO

This conceptual paper is positioned at the intersection of three big research fields, namely international business (with an emphasis on knowledge-based features), studies pertaining to social and cognitive psychology applied to managers and a taste of neuroscience (i.e. how the human brain works when making decisions). The ability to outperform competitors in the international arena is strongly dependent on the adequacy of international decisions made (essentially entry mode, foreign market, competitive strategy). These decisions are highly influenced by the manager's cognitive abilities, which s/he uses to make judgements on the context, the decision to be made and to adopt the best approach to make it (i.e. the cognitive style). Therefore there is room for further investigations in this intersection of the manager's cognitive style and the internationalization process. This research is framed in the knowledge-based process such as internationalization is. The research question revolves around the lowest level of knowledge-based micro-foundations for organizational behaviour within the emerging domain of "organizational neuroscience", which is a promising research avenue from all the investigations conducted around knowledge (Sinclair & Ashkanasy, 2005; Lee, Butler, & Senior, 2010; Powell, 2011; Cropanzano & Becker, 2013).

In order to define the importance of the manager in the organization, we have adopted the Upper Echelons perspective developed by Hambrick and Mason (1984). It states that the manager represents the central factor in order to explain the firm's behaviour: the organization mirrors the manager's style. It is proven that, depending on the environmental influences, the same individual might develop different individual cognitive styles to approach the decisions that are to be made. Such individual styles might be a predictor of the manager's success when making decisions (Kozhevnikov, 2007).

The constant changes in the business environment are decreasing the manager's opportunity to make decisions under what is usually labelled as economic rationality, which is bounded in terms of the manager's ability to acquire and interpret the excess of information. Therefore, the decision making process with limited rationality and the time pressure to consult with others have become one of the major issues in international business (Patton, 2003). The extensive literature on strategic choice and managers traits present strong arguments that individuals matter and are at the heart of any strategic decision. Strategic decisions are influenced by the manager's experiences and traits (McDougall, Oviatt, & Shrader, 2003). Particularly, when managers are

evaluating the motives and influencing factors of their internationalization decisions, they often think about firm's characteristics, size, age, human and financial resources (Child & Hsieh, 2014). Decision making in SMEs seldom means an individual making a discrete choice, but involves complex judgments that have consequences beyond the manager and the organization. The whole decision environment of the firm has psychological influence on the characteristic of strategic decisions (Powell, 2011).

Furthermore, managers cognitive style has been investigated in general business management studies, while it is virtually absent in international business (Hodgkinson & Healey, 2011; Akinci & Sadler-Smith, 2012). The cognitive style has been defined as a psychological dimension representing consistencies in an individual's manner of cognitive functioning, particularly with respect to acquiring and processing information. It is important to note that cognitive styles are not simply inborn structures, dependent only on an individual's internal characteristics. They are rather interactive constructs that individuals develop in response to social, educational, professional, and other environmental requirements (Kozhevnikov, 2007).

The research question is whether there is an optimal cognitive style or whether the optimal one is dependent on other situational factors. In

this paper, this issue is addressed in the context of international business decisions. The process followed by new firms to become international has been defined as a knowledge-based process. There are two main theories widely accepted for explaining the process of internationalization of new ventures, namely the International New Ventures (INV) (Oviatt and McDougall, 1994) and the Johansson and Vahlne's (1977, 2009) Uppsala gradual model (U-model). The latter posits that the firm increases its commitment of resources to foreign markets gradually as it gains experiential knowledge, while the former claims that some new ventures may enter international markets jumping to more advanced stages of commitment since the very early beginning. The organizational behaviour is strongly influenced by the ethos impelled by the organization's managers. So it must be that the ultimate unit of analysis should be the manager and its context.

The first part of the paper is devoted to review the background of cognitive styles and their potential correlation with international business decision making within the context of the process of internationalization. In the discussion section we evaluate the potential influence of key constructs stemming from both research fields (cognitive science in business management and IB) on the internationalization process the SME's manager may decide to

follow. The conclusion outlines research avenues and propositions that should address these questions.

**CORRELATION BETWEEN COGNITIVE STYLES AND
INTERNATIONALIZATION DECISION MAKING
THROUGH PERSPECTIVE OF LEARNING PROCESS**

**REVIEW OF COGNITIVE STYLE PERFORMANCE IN
INTERNATIONAL BUSINESS ENVIRONMENT**

The research on cognitive style is rooted on to the investigation of intuition in the Jung's book: "Psychological types" published in (1923). Later on, Bernard (1938) published: "The Functions of the Executive", and he was one of the first management writers who defined the nature and role of intuition in management. Afterwards, a dearth of research had occurred until Mintzberg (1976) published "Planning on left/managing on right" Research of intuition in the field of management continued to gain the attention of academics and achieved a great expansion in 1990 with particular emphasis on the role of intuition in the management of modern organizations (Akinci & Sadler-Smith, 2012).

Empirical studies have increasingly drawn the attention to cognitive aspects as explanatory factors of the firm's decision making process. It has been found that a decision is reached in the complex interaction of two cognitive systems, namely System-1 (or sometimes called System-

X) and System-2 (or System-C). In order to define immediate judgments that are mostly based on feelings, humans use System 1 (System-X) which is named as "intuitive", "experiential", or "impulsive" reasoning. System-2 (System-C) is known to be more "logical", "rational", or "reflective" (Epstein, 1994; Kahneman & Frederick, 2002; Strack & Deutsch, 2004; Evans & Stanovich, 2013; Healey & Hodgkinson, 2014). Figure 1 shows the core dimensions of strategic cognition. According to Hodgkinson and Healey (2011), the vast majority of research has been conducted in the lower right hand quadrant. It is time, therefore, to widen the perspective so we should include additional cognitive styles other than just the rational thinking.

Over the years of inquiry, intuition became an element of personality (and one of the poles in the continuum of cognitive styles) (Behling & Eckel, 1991; Allinson & Hayes, 1996; Hayes & Allinson, 1996). Because of the importance of the decision making as an inherent part of the managerial activity, intuition has also been investigated under the label of decision-making style (Khatri & Ng, 2000). These approaches made intuition measurable, as well as generalization and verification of its effects feasible. There are two approaches toward definition and use of intuition in decision making: Heuristic and Biases (HB) and Naturalistic Decision Making (NDM) approaches

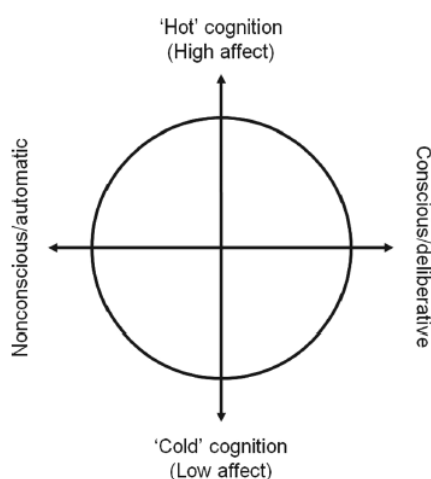
(Kahneman & Klein, 2009). Furthermore, the distinction between Systems 1 and 2 plays an important role in both of the approaches. In the HB approach, System 2 is involved in the effortful performance of some reasoning and decision-making tasks as well as in the continuous monitoring of the quality of reasoning. When there are cues that an intuitive judgment could be wrong, System 2 can impose a different strategy, replacing intuition by careful reasoning. In the recognition primed decision (RPD) model the performance of experts involves both an automatic process that brings promising solutions to mind and a careful analytic process in which the decision is finally developed. The HB and NDM approach assumes that intuitive judgments and preferences have the characteristics of System 1 activity. Sinclair and Ashkanasy (2005) defined intuition as “a non-sequential information processing mode, which comprises both cognitive and affective elements and results in direct knowing without any use of conscious reasoning”. Intuition is defined similarly by Dane and Pratt (2007) as “affectively charged judgments that arise through rapid, no conscious and holistic associations”. Intuition is most importantly rooted in what we learn from our experiences (Simon, 1987). According to Khatri and Ng (2000) “intuition can be developed most rapidly through repeated exposure to the complexity of real problems”. Glöckner and Witteman (2010) suggest four

categories of intuition: associative intuition based on simple learning–retrieval processes, matching intuition based on comparisons with prototypes or exemplars, accumulative intuition based on automatic evidence accumulation, and constructive intuition based on construction of mental representations. In order to develop the skill which leads to structured intuition there are two necessary: high-validity environments and an adequate opportunity to learn them.

Data limitations surrounding managerial opportunities typically require that judgments be exercised as a complement to any formal decision analyses conducted in evaluation of those opportunities. Sometimes intuition can wholly substitute for formal analysis, while analytical decision making is best suited to highly structured tasks, while intuitive decision making is more effective when decision makers are domain experts who are facing tasks that are poorly structured. Expertise represents a mixture of analysis and intuition. According to Allinson and Hayes, (1993) there are two types of managers: intuitivists and analyst. Intuitivists are managers who prefer an open-ended approach to problem solving, rely on random methods of exploration, remember spatial images most easily, and work best with ideas requiring overall assessment. Analysts are managers who tend to be more compliant, favour a structured approach to problem

solving, depend on systematic methods of investigation, recall verbal material most readily and are especially comfortable with ideas requiring step by step analysis. Analysis refers to judgement based on mental reasoning and a focus on detail. Intuition refers to immediate judgement based on feelings and it is related with the adoption of a global perspective

Figure 1 - Core dimensions of strategic cognition.



Source: Hodgkinson, & Healey (2011: p. 1503)

Meanwhile, little is known about the degree to which individuals rely on intuition in their decision making versus simply believing that intuition is informing their decisions (Blume & Covin, 2011). In case managers have relied on intuition at beginning of career and it was regarded as successful, future reliance on intuition will be encouraged as a basis for decisions making. This is mostly because managers will believe that their intuition has served them well in the past, so the perceived need for other evidence in support of a future

decision will be diminished. RPD appears to be appropriate when the decision maker has considerable expertise relevant to the situation at hand and is under time-pressure, and when there is uncertainty and/or goals are ill-defined. Gigerenzer & Todd (1999) assumed that non-conscious cognitive processing is a basic characteristic and success factor of human beings. The expert begins to see how the problems and challenges that arise are not always new and independent of each other. Broadening manager knowledge ensures the ability to respond intuitively and often very rapidly. As (Shanteau, 1992) suggested "experts are operationally defined as those who have been recognized within their profession as having the necessary skills and abilities to perform at the highest level".

THE ROLE OF LEARNING AND THE EXPERIENCE-BASED KNOWLEDGE ON THE CHOICE OF THE INTERNATIONALISATION PATTERN

Internationalization research has started as early as the 1950`s. For several decades, it focused on large multinational companies and their international activities. All SMEs internationalization theories could be categorized into three groups: market-oriented perspective, firm viewpoint, and entrepreneurship perspective (Sommer & Haug, 2011). Buckley and Casson (2009) showed the differences, advantages, and disadvantages of possible entry modes that a firm can perform in

order to carry out products to foreign market. The Scandinavian “stages” model of entry suggests a step by step pattern of entry into successive foreign markets, coupled with a progressive deepening of commitment to each market. Increasing commitment is particularly important in the thinking of the Uppsala School (Johanson & Wiedersheim, 1975; Johanson & Vahlne, 1977). Location costs, internalization factors, financial variables, cultural factors, such as trust and psychic distance, market structure and competitive strategy, adaptation costs (to the local environment), and the cost of doing business abroad are all identified in the literature as playing a role in determining firms' foreign market entry decisions (Buckley & Casson, 1998). The U-model sees internationalization processes as involving time consuming organizational learning processes (Madsen & Servais, 1997). Learning represent the process within the organization by which knowledge about action-outcome relationships and the effect of the environment on these relationships is developed (Duncan, 1979). Concurrently, research has identified an increasing number of firms which certainly do not follow the traditional stages pattern in their internationalization process. In contrast, they internationalize right from their birth. With assistance of Internet as well the ease and opportunity to gather information and interact among people by developing social networks all around there is increase of firms that from the

inception establish a global perspective. These firms are called “Born Globals” (BG). According to Knight and Cavusgil (2004), a great majority of successful BG firms believe in the importance of international orientation. These firms progress to internationalization rather rapidly. The ability to internationalize early and succeed in foreign markets represent a function of the internal capabilities of the firm (Autio, Sapienza, & Almeida, 2000; McDougall & Oviatt, 2000). These firms begin with a global view of their markets and develop the capabilities needed to achieve their international goals (Harveston, Kedia, & Davis, 2000; Knight & Cavusgil, 2004; Fatehi & Ghadar, 2014). To be classified as BG, firms needed to have internationalised within 3 years of inception and derived at least 25 % of total sales from foreign markets (Knight, 1996; Knight & Cavusgil, 2004; Trudgen & Freeman, 2014). BG is categorization for the company that, from its inception, discovers and exploits opportunities in multiple countries. BG starts their internationalization process by simultaneously using multiple and different internationalization modes (Melén & Nordman, 2009). Entering psychically distant markets allowed BGs to take advantage of internationalization speed to performance, survival and continued growth conceptualised a learning-based model which was found to reflect a longer-term perspective. INV are defined as a business organization that, from inception, seeks to derive significant

competitive advantage from the use of resources and the sale of outputs in multiple countries (Oviatt & McDougall, 1994). According to the INV theories, the manager does not always "choose the lowest cost location for each activity the firm performs (McDougall, Shane, & Oviatt, 1994). Madsen and Servais (1997) argued that the rise of BGs may be attributed to at least three important factors: new market conditions, technological developments in the areas of production, transportation, and communication, and finally more elaborate capabilities of people due to modern technological improvements.

An important issue that is addressed in the literature is the lack of more comprehensive studies examining how different decision maker characteristics affect SMEs international strategic decisions (Francioni, Musso, & Cioppi, 2015). Internationalization theory is still a black box to some extent, in particular when it comes to how the strategic decisions are made by international firms (Dabic, González-Loureiro, & Furrer, 2014). We need to know more about the role of the top management team's experience, in terms both of maturity and of learning, in triggering strategic choices among newly international SMEs. Managers may (and often do) learn from dealing with international issues, and, therefore, may see opportunities to embark on strategic choices to better position their newly international SMEs (Zahra,

2005). Firm features (i.e., technology, alliances, flexibility, and transaction complexity) are increasing in importance relative to tacit managerial knowledge of foreign markets as determinants of the speed, breadth, and mode of internationalization, and the role of emerging firms (Oviatt & McDougall, 1999). According to Buckley and Casson (2009) foreign market knowledge is one of the key factors in order to establish a successful market entry: the faster the knowledge is acquired, the faster the company will obtain a successful post-internationalisation performance.

COGNITIVE SHIFTING STYLE AND ITS INFLUENCE ON THE SMEs INTERNATIONALIZATION PROCESS

Managers may view the intuitive mode of decision making as a practical, efficient default approach to decision making which precludes the need to expend scarce resources on formal and more costly decision-making processes. Of course, not all managers' decisions must be supported by formal analysis. The combination of formal analysis techniques and intuitive judgments may be the optimal approach to managerial decision making. Managers should think of their intuition as a complement rather than substitute for formal, empirically-based decision-making approaches (Sadler-Smith & Shefy, 2004; Hodgkinson & Clarke, 2007).

Agor (1984) introduced three broad types of management styles: the intuitive, the analytical, and the integrated. He defined that analytical

style like to separate problems and break them into more manageable parts with their analytical and cognitive skill. On contrary intuitive style which rely more on feelings to make decisions, prefer unstructured situations, and solve problems holistically. Finally integrated style uses both analytical and intuitive decision depending on the requirements of the situation. More importantly was the fact that one's style of decision making includes stable individual characteristics; it applies to interpersonal relationships, and spreads throughout whole organizations.

Although management scholars now recognize that intuition is both an important and necessary cognitive tool for managing an organization, they also recognize that it is not sufficient. Effective managers have to employ a combination of intuition and analysis, as appropriate to particular situations. The effective manager does not have the luxury of choosing between analytic and intuitive approaches to problems. Behaving like a manager means having command of the whole range of management skills and applying them as they become appropriate (Simon, 1987).

Louis and Sutton, (1991) created the phrase 'switching cognitive gears' to characterize this vital competence, arguing that effectiveness may be as much a function of an individual's capacity to sense when such a switch is

required, as to process information in one mode or another. What is ultimately required in organizational decision-making is the ability to switch back and forth between 'habits-of-the-mind' and 'active thinking', a process referred to as 'switching cognitive gears'. In practice, however, the ability to switch from one approach to the other is often difficult, because of individual differences in preference for the way in which information is gathered, organized, processed and evaluated. According to Eisenhardt (1999) effective decision makers create strategy by:

- Building collective intuition that enhances the ability of a top-management team to see threats and opportunities sooner and more accurately;
- Stimulating quick conflict to improve the quality of strategic thinking without sacrificing significant time;
- Evaluating a disciplined pace that drives the decision process to a timely conclusion;
- Defusing political behaviour that creates unproductive conflict and wastes time.

In the conducted empirical study of Kalinic and Forza (2012) the choice of the internationalization country never followed a systematic approach; the choice was led by the managers' personal connections or intuitions and their taking advantage of a favourable situation. Their research has also extensively analysed the mechanisms that explain the pace of SMEs internationalization. Nevertheless, neither the mechanisms identified for the

gradualist models' firms nor those for BGs fully capture the traditional SMEs that rapidly internationalize operations in new and unknown markets despite limited market knowledge, limited use of international networks, and limited entrepreneur's international experience.

DISCUSSION

Cognitive biases are deeply embedded in routines, automatic behaviour, psycho-physical distortions, and executives' knowledge structures. In practice, emotional, social, and political realities nearly always influence decision judgments in international business (Powell, 2011). Major strength of intuitive approaches to strategy-making is that they enable managers to rapidly perceive a wider perspective from its surrounding detail, but at the same time those managers might overlook hidden data that might be seen by their competitors with highly developed analytical capabilities (Clarke & Mackaness, 2001). However rationality's limits have long been recognized (Simon, 1987). One of the main downsides of rational analysis is manager's incapability to let go of a particular problem until they have as much data as possible (Sadler-Smith & Shefy, 2007; Becker, Cropanzano, & Sanfey, 2011). In order to develop skilled intuition manager must fulfil two conditions: the manager environment must provide adequately valid cues to the nature of

the situation and managers must have an opportunity to learn the relevant cues (Kahneman & Klein, 2009). Managers, including experienced professionals, sometimes have subjectively compelling intuitions even when they lack true skill, either because the environment is insufficiently regular or because they have not mastered it. Although it is important to note that absence of skill managers may produce incorrect intuition which will only operate due to lack of skill or expertise. It is important to keep in mind that intuitive decisions are not necessarily instantaneous but that there can be, and often is, an intuitive component in carefully considered decisions. A decision maker, who is aware of intuitive influences and their impact on the choice of alternatives, is likely to strike an effective balance between consideration of analysed data and alternatives, and the intuitive component. According to Patton (2003) there are three sources of intuition: innate response, general experience and focused learning. Since innate response is component that could not be changed the other two components can be sharpened and enhanced in order to improve international business decisions. To make general experience more effective requires heightened sensitivity to the situations, events and decisions that are encountered. Therefore, managers can and should manage their experiences in order to educate their intuition (Hogarth, 2003; Hogarth, 2010). Developing the

habit to regularly analyse successful and unsuccessful outcomes of decisions can bring such greater awareness. If, at the same time, the assumptions, which prompted the decision, are also examined, the impact of general experience on future decisions will automatically be more beneficial. Developing habits that are causing improvement in intuitive decision making will at the end improve internationalization process of firm.

Kahneman and Klein (2009) agree that most of the intuitive judgments and decisions that System 1 produces are skilled, appropriate, and eventually successful. But not all intuitive judgments are skilled, although our hunches about the frequency of exceptions differ. The determination of whether intuitive judgments can be trusted requires an examination of the environment in which the judgment is made and of the opportunity that the judge has had to learn the regularities of that environment. Task environments are described as "high-validity" if there are stable relationships between objectively identifiable cues and subsequent events or between cues and the outcomes of possible actions. Validity and uncertainty are not incompatible. Some international environments especially are both highly valid and substantially uncertain. High validity environment does not imply the absence of uncertainty. The high uncertainty condition had a greater intuitive-inducting

effect at the end, because it is difficult to control something when there is a lack of clues and evidence (Mahan, 1994). An environment of high validity is a necessary condition for the development of skilled intuitions. Other necessary conditions include adequate opportunities for learning the environment (prolonged practice and feedback that is both rapid and unequivocal). If an environment provides valid cues and good feedback, skill and expert intuition will eventually develop. Executives who possess greater overall cognitive ability to shift between two systems of decision making can probably more quickly perform internationalization decisions. The manager therefore is the central unit of analysis to understand the internationalization decisions made by organizations.

Propositions that arise from paper are:

- Uncertain environment requires intuitive manager to be a leader in internationalization decision making process.
- Intuitive managers are more applicable leaders in INV and BG type of companies.
- Intuition can be seen as a distinct and very different mechanism for information processing and decision making in case of internationalisation.
- Deliberate system learning followed by much practice can lead to intuitive behaviour which will allow company to have better post internationalisation results.

- Higher previous knowledge of manager and better education increase international competitiveness of company.
- Managers with high level of experience acquired through international high valid environment will be able to use intuition more accurate in international business.
- Effective learning process increase level of knowledge which leads toward higher internationalisation commitment mode.
- Speed of internationalization depends on cognitive style of the manager influenced by a priori experience acquired.
- Companies that are required to or that wish to follow a rapid process of internationalization should hire managers with a higher tendency to adopt the intuitive style.

CONCLUDING REMARKS AND RESEARCH AVENUES

Managers most often attempt to collect the information necessary to form expectations about various alternatives, and the use of this information in the final decision. Internationalization as a learning process represents a matter of learning from experience. Decisions related to internationalisation process can be related to the process of learning. The changing nature of work practices and structures creates environments where human information processing capability is exceeded by the volume and complexity of the information that humans have to process there by making intuition a more widespread strategy for decision making

(Hodgkinson et al., 2009). It is argued that increased time pressure, rising work pressure and ambiguity, high decision costs, inadequate information, and fast-paced change have undermined the utility and effectiveness of rational decision-making models (Sinclair & Ashkanasy, 2005).

Internationalization requires adaptation of the routines to the conditions in the foreign market, and SMEs that stay longer in the home market, irrespectively of their age, are likely to be forced to make more extensive adaptations of their structure and routines when they begin to enter foreign markets than those that begin to enter foreign markets at younger age (Autio, Sapienza & Almeida, 2000). It is proven that firm which begins to internationalize at early stage, when it usually lacks rigid routines and organizational structures, tends to develop routines that are consequences of operating internationally. Less rigid routines promote the transformation of experience into experiential knowledge, which is the case at the beginning of a rapid internationalization process. According to the U-model, learning from experience is a key change mechanism in a firm's internationalization. The more extensive that the foreign market knowledge is, the bigger the commitment in the market. It is proven that the internationalization commitment and knowledge (learning) are positively related. The major source of INV international competitive

advantage is based on knowledge intensity (either product/service and/or market). INV rapid internationalization mode has been categorized as more complex than U-model and with higher amount of factors and information to be processed by managers prior to decision making (Bell, McNaughton, Young, & Crick, 2003; Oviatt & McDougall, 2005).

In case that firm want to change mode of internationalization or increase speed of entering foreign market due to changes in strategy, the unlearning process must occur to make way for new mental maps that would improve current state of decision making. Unlearning is simply the process by which firms eliminate old logics and knowledge that has no further use in order to make room for new ones (Prahalad & Bettis, 1986; Walsh, 1995). Some managers have so improved learning processes in order to make effective decisions that they can apply the relevant knowledge automatically, without conscious thought at great speed (Patton, 2003). It is evident that firm's with the capability to absorb, integrate, and transform experience into useful knowledge are likely to display stronger performance than those lacking this ability. Understanding internationalization entry-modes is essential, because maximal firm performance is the ultimate goal of international entry. Because entry-modes are very difficult to change once established, the

choice of entry-mode and it can mean the difference between firm success and prosperity or firm failure (Brouthers, Brouthers, & Werner, 1996). With perspective to initial entry into an international market, knowledge intensive service firms would prefer higher control entry modes as compared to capital intensive service firms (Sanchez-Peinado & Pla-Barber, 2006). In line with these studies, it is proposed that differences would continue in post-entry resource commitment stages and variations would exist in the pattern (pace and type of change) of resource commitment between capital intensive and knowledge intensive service firms. Knowledge intensive service firms generally target international markets because their specialization necessitates fast international expansion to exploit the narrowly defined market niche (Shukla & Dow, 2010). Knowledge intensive service firms increase their resource commitment in the host market at almost double the pace of capital intensive service firms; knowledge intensive services increase their resource commitments.

By initiating operations in a foreign market, an internationalising company develops experience of operating in that market. This experience is based on a company's interactions within foreign business relationships, such as relationships with foreign customers, suppliers, and competitors (Blomstermo, Eriksson, Lindstrand, & Sharma, 2004). In its interaction

within these relationships, a company develops experiential knowledge of foreign markets, which, in turn, influences the company's perceptions of the costs, risks, and benefits of operating in the specific foreign market (Melén & Nordman, 2009). A rapid increase in the number of subsidiaries leads to better performance because of an increase in knowledge stock. In addition, fast expansion of geographic scope increases the diversity of knowledge that can be learned and hence leads to better performance. Therefore the speed of international operations depends on the type of accumulated experience in the course of past international process.

According to Wally & Baum (1994), the manager cognitive ability, use of intuition, tolerance for risk and propensity to act are associated positively with speedy decisions such as internationalization is. This implies that intuitive managers are capable of making decisions under complex situations. Resolving task complexity often leads to creating of variable solution to the problem. Walsh (1995) noted that in case when managers receive a wider range of information, they are potentially able to spot problems they would miss if their vision were narrower. However, multi options create a fall back for the manager, in case that one option fail, it is quite easy to shift and look for an alternative option. Fast decision makers create multi-alternatives but evaluate them

rapidly, since they understand that decision has to be made even if there is disagreement. It is important to notify that there are individual differences in how managers perceive, acquire, interpret, and use information, according to development of their cognitive capabilities, which could be improved as noted above.

Executives who are up to real-time information are better at developing effective intuitive talents. These managers aided by well-developed and highly skilled intuition can react quickly and accurately to changing stimuli in their firm or its environment. Intuitive managers are more creative and capable of problem solving, the implication of this is that intuition with thinking outperforms other decision making styles (Andersen, 2000). By knowing their own cognitive styles, and those of others, managers can acknowledge their strengths, recognize their weaknesses, and understand the strengths and weaknesses of other styles and how each contributes to the organization's effectiveness. More than that, they can use this knowledge to improve their effectiveness by either overcoming their weaknesses or compensating for them.

Future research on cognitive style therefore should investigate whether intuitive and analyst decision mode work on parallel or exclusive mode and to which extent intuitive managers are achieving better post decision results. In addition, research avenues towards the

promising land of organizational neuroscience should be opened, i.e. how we can investigate further the issues around knowledge from the individual unit of analysis in the socio-technic context of the firm. Future developments should investigate how we can train managers to be more intuitive since this style has been revealed as outperforming the analytic style when the decision is more complex and under time pressure. In particular, we provided some suggestions for those managers and firms willing to go international in order to apply the optimal style to each situation. These avenues follow those initially suggested by Healey et al. (2015), when reflecting upon the micro-foundations of dynamic capabilities (see figure 2).

Essentially, we expect that those firms that are required to or that wish to follow a rapid process of internationalization should hire managers with a higher tendency to adopt the intuitive style. This is essentially due to the fact that this style outperforms the analytic style in situations where the level of complexity is high and there is a higher pressure on speed. Meanwhile, those managers with higher natural tendency to adopt an analytic style are more likely to perform well in those firms that should develop a more slow gradual and sequential process, mainly because those firms tend to emphasize caution instead of speed or quick results. However, from the field of cognitive

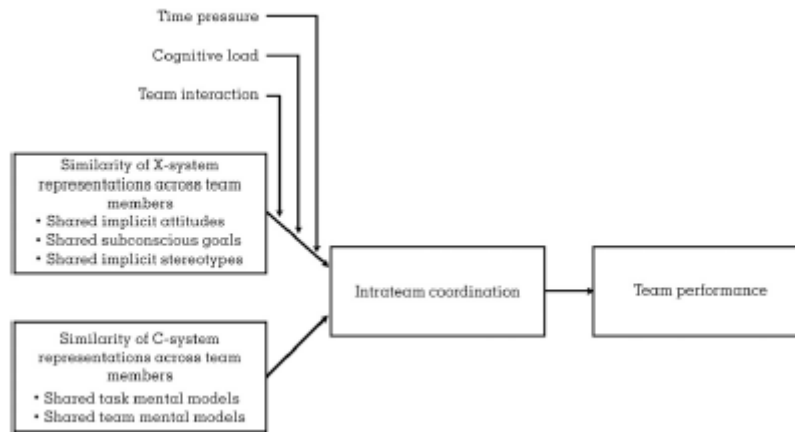
psychology, the results contradict the latter assumptions: intuition performs well in low uncertainty contexts where there is a prior knowledge from past experiences. Therefore, further empirical research is needed from both quantitative (extent to which cognitive style has an impact) and qualitative (how it influences decision-making in IB) approaches.

These research avenues should combine the strategic management process and the psychological process of decision making (see figure 3). X- and C-systems will affect every stage in the process of options selection, evaluation and the final choice. Emotions, past experience and similar X-System issues will modulate the process. Every individual is affected by both systems when making decisions so the small venture manager will be influenced by a variety of emotions, uncertainties and gut-feelings that will bias his/her decision conscious or unconsciously. We should devote time and effort to provide the answers to the big questions: whether we can control the X-system when making decisions and whether we can train this system to help making the right decision. A next issue is how we could know ex-ante that the choice selected by the X-system in an intuitive manner will affect positively to the subsequent organizational performance ex-post. We can only provide some answers while new questions will be opening as long as we apply the new

discoveries from how the human brain works to the behavioural strategy in international business. To date, only Maitland & Sammartino (2015) have advanced some hints following the Gavetti's (2015) behavioural drivers of superior

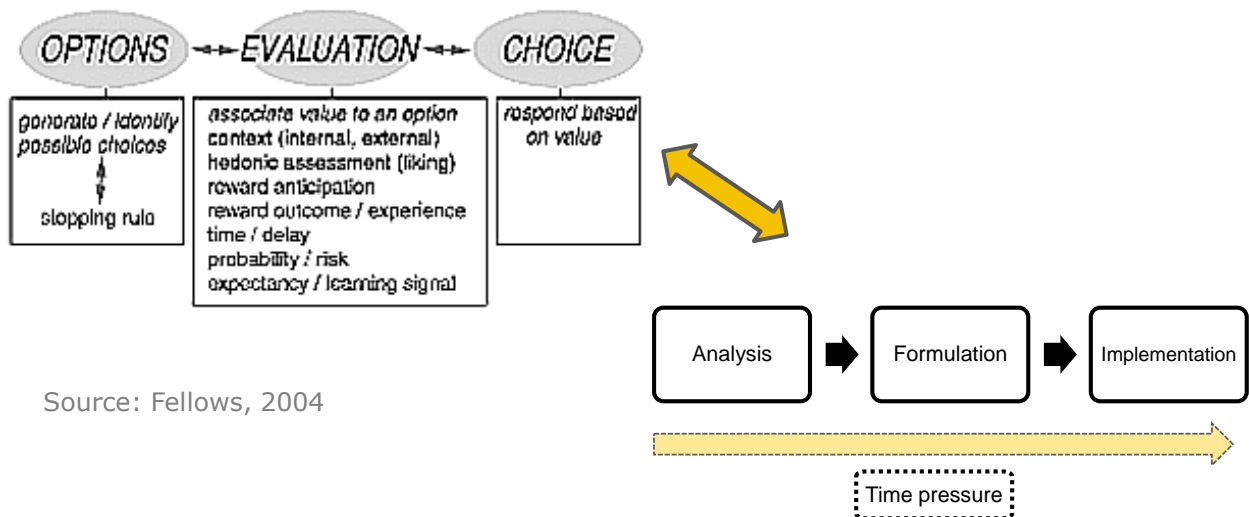
performance: the issue is about how the international business manager can cognitively distinguish between attainable opportunities and simple facts happening out there.

Figure 2 -Potential effects of shared X-System and C-System cognition on Team Coordination and performance.



Source: Healey et al. (2015: p. 406)

Figure 3 - Approaches to decision-making for further research avenues



Source: Fellows, 2004

Source: Adapted from Narayanan, Zane and Kemmerer, 2011

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