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Constraints to the efficacy of risk management process in entrepreneurial companies

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Abstract. This paper highlights potential factors that affect the degree of efficacy of a formal risk management framework in entrepreneurial organisations.
The understanding of entrepreneur's self-schemas, entrepreneurial organisational culture and working environment is crucial to evaluate the efficacy of a risk management process.
This research pointed out two main issues: i) the entrepreneurial decision making process with presence of biases and heuristics in judgement under uncertainty; and ii) the entrepreneurial organisational context that might create constraints to the implementation of a risk management framework.
Key words: Entrepreneurs self-schemas, decision-making process, entrepreneurial organisational environment and risk management.

1. Introduction and Problem Statement

According to Turner (2000:3), a project is an «Endeavour in which human, material and financial resources are organised in a novel way, to undertake a unique scope of work of given specification, within constraints of cost and time, so as to achieve unitary, beneficial change, through the delivery of quantified and qualitative objectives».

In the changing world of projects it is critical to understand: i) if there is a clear relation between the project objectives and those of the businesses involved on it, ii) the importance of alignment between stakeholders is recognised and addressed, iii) if effective teams are developed and used in delivering the project, and iv) that projects are all about change and transformation which, in a whole, implies uncertainty (Hartman, 1997).

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Moreover, Morris and Kuratko (2002) point out that the purpose of entrepreneurship is generally to turn innovative ideas into organisational realities. It is about creating new processes or market development (that brings value to the organisation) by the unique combination of money, people, technologies, and others (Timmons, 1999).

Uncertainty in projects is commonly related with i) external factors, ii) interaction between the project and the global strategy of the organisation, and iii) within the project (Waring & Glendon, 2001).

Moreover, it can be defined as the «imperfect knowledge about the individual aspect of a system as well as the overall inaccuracy of the output determined by the system» (Christensen et al., 2003:194).

As a consequence of uncertainty, risk is the exposure to loss/gain, or the probability of occurrence of loss/gain multiplied by its respective magnitude (Jaafari, 2001).

Therefore, Risk Management is a collective term for a variety of different activities to reduce both the probability and impact of serious damage and loss (in both pure and speculative risks[1]) and to increase the probability of potential gains in speculative risk areas (Waring & Glendon, 2001).

To assess the efficacy of the process it is necessary to understand deeply the generic frameworks of risk management and also to evaluate the readiness of the organisation (organisational context) to incorporate a new process (that undoubtedly interacts with several layers of the organisation: culture, structure, decision-making process, and others).

Therefore, in my research I will combine the literature about these two topics – entrepreneurial companies and risk management – to raise some conclusions mainly about the following research questions:

- How do entrepreneurs evaluate risks and perceive the value of formal risk management frameworks and, consequently, evaluate risks?
- What factors of the entrepreneurial organisation context have an impact on the adoption of a risk management framework?

Conclusions are drawn with the help of a case study.

2. Literature Review

2.1. *Entrepreneurship*

According to the functional approach (Casson, 2003), focused on the *context of the entrepre-*

[1] *Pure risks* are associated with hazards where success with risk control can never be better than reduction or removal of the hazard. On the other hand, speculative risks are associated with business where success is always relative to that of the economy as a whole (the market sector, competitors, and the power attributes of others). Moreover, because pure and speculative risks interact, creating boundaries between them may be inappropriate (Waring et al., 2003).

Table 1
Seven Perspectives on the Nature of Entrepreneurship

Creation of Wealth	Involves assuming the risks associated with the facilitation of production in exchange for profit
Creation of Enterprise	Entails the founding of a new business venture where none existed before
Creation of Innovation	Is concerned with unique combinations of resources that make existing methods or products obsolete
Creation of Change	Involves creating change by adjusting, and modifying one's personal repertoire, approaches, and skills to meet different opportunities available in the environment
Creation of Employment	Is concerned with employing, managing, and developing the factors of production, including the labour force
Creation of Value	Is a process of creating value for customers by exploiting untapped opportunities
Creation of Growth	Is defined as a strong and positive orientation towards growth in sales, income, assets, and employment

Source: Morris and Kuratko (2002, p. 23).

neurial activity and usually related with the creation of something that previously do not exist (Carland et al., 1984), Table 1 presents seven perspectives on the nature of entrepreneurship.

Supporting this functional approach, Schumpeter (1965) defines entrepreneur as "a man of action who possesses the ability to inspire others, and who does not accept the boundaries of structured situations". The author argues that an entrepreneur is a "*catalyst of change*", searching for innovation in different domains (technology, products, process, organisation and others).

This functional approach focuses on the entrepreneurial process itself and identifies five key elements that contribute to the process (Morris et al., 1994) (Figure 1).

The functional approach of entrepreneurship is also applied to the strategic orientation of a company ("corporate entrepreneurship"). The focus here is on the integration of entrepreneurship throughout the entire organisation (Morris & Kuratko, 2002).

Like individuals, a company has inputs (external environment, leadership, organisational context, and resources) that together explain the entrepreneurial behaviour (Guth et al., 1990). Furthermore, the model developed by Covin and Slevin (1991), suggests that the *entrepreneurship intensity* (measured by the *degree of innovation*, *risk-taking* and *proactiveness*) influences the organisational vision and strategies, and consequently produces on-going changes in the companies' structures, culture and performance (Figures 1 and 2).

Figure 1. Entrepreneurial Process

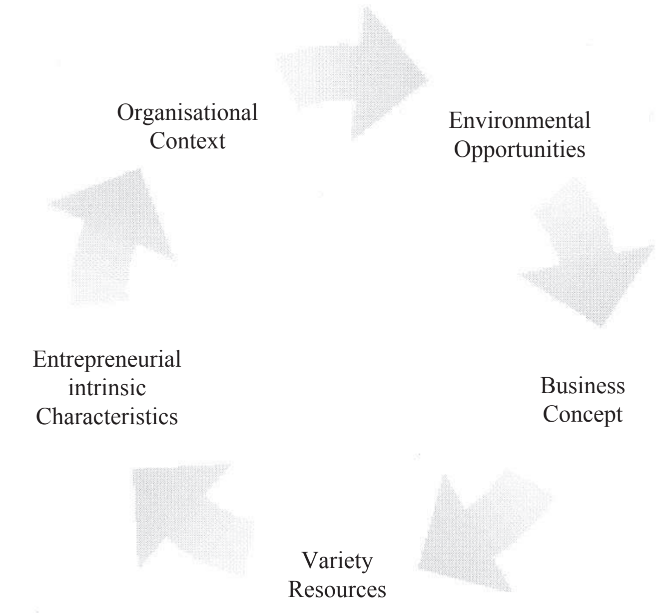
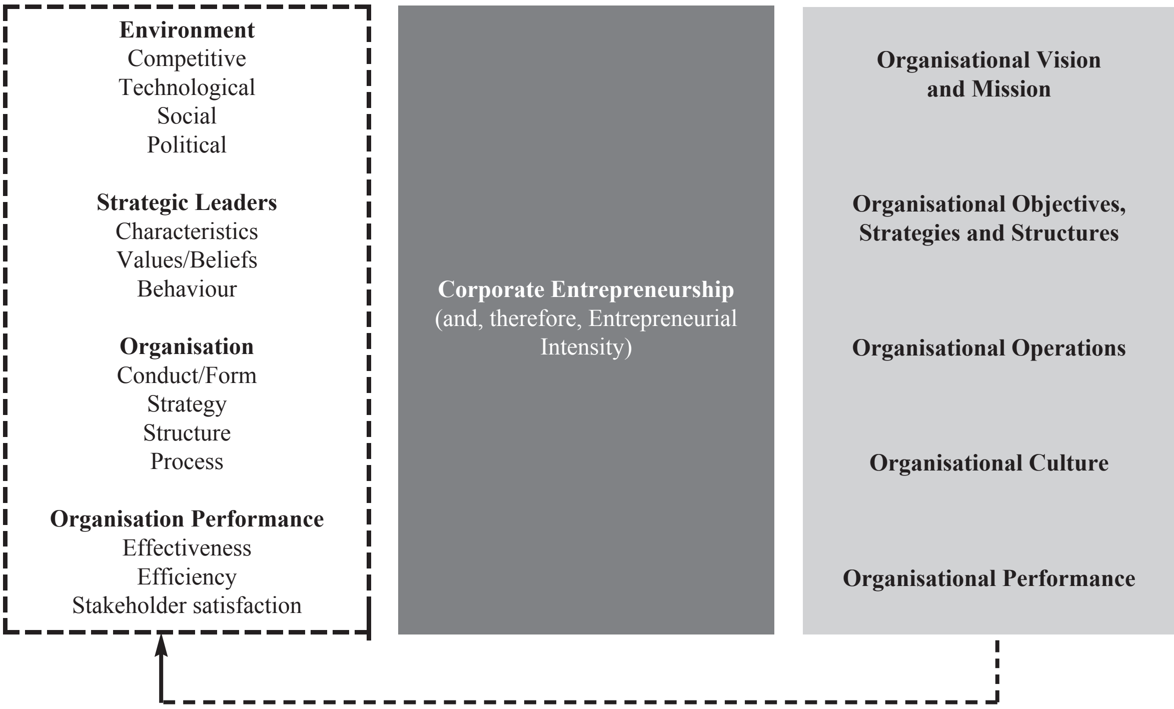


Figure 2. Inputs and Outputs of the Corporate Entrepreneurial Process



Source: Adapted from Morris and Kuratko (2002, p. 34).

2.2. *Obstacles to the implementation of a risk management process*

For a successful implementation of a generic risk management process, it is important to i) improve understanding about the different risk management tools, because benefits depend greatly of the most beneficial combination of tools and techniques, ii) acknowledge the role of project risk management by incorporating risk management into the organisational culture, iii) acknowledge that pro-active and reactive risk management is a change in working practices, and iv) continuity in the development and organisational learning relating with the risk management process (Kahkonen, 1997).

The real problem in the efficacy of risk management is not its complex theory or tools, but the culture and the organisational behaviour (Klakegg, 1997).

To a successfully implementation it is crucial to develop a harmonious risk management outer and inner context. That context is related to several issues that affect the design and implementation of a risk management method within a company (organisational structure, resources, power relations, culture, risk cognitions, and leadership style – see Table 2).

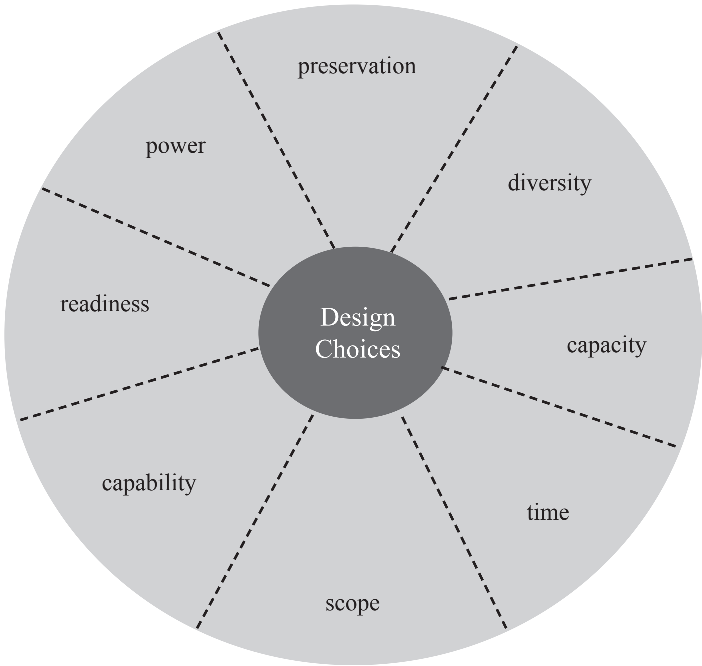
Either the outer context or the inner context induces changes in the companies. Usually, environmental changes (technological, economical, legal, and other) force companies to adopt "new working methods". In fact, changes are continuous, with organisations transforming on an "on-going" basis to adjust to a changing environment (Balogun & Hailey, 2004).

Table 2
Contextual Issues that Affect the Efficacy of a Risk Management Process

Outer Context	**Inner Context**
- Economics and markets	- Organizational structures/systems
- Public, policy, regulation and standards	- Resources
- Social, historical and political climate	- Culture
- Physical conditions and climate	- Power Relations
- Technology …	- Risk cognitions
...	- Strategy
	- Motivations and meanings of success
	- Leadership
	…

Source: Waring and Glendon (2001, p. 8).

Figure 3. Kaleidoscope Model



Source: Balogun and Hailey (2004, p. 8).

The Kaleidoscope Model (Figure 3) developed by Balogun and Hailey (2004) can be a starting-point to think about the implementation of a risk management process. It analyses issues related with the organisational change context such as power, time, scope, preservation, diversity, capability, capacity and readiness.

In this section, based on this more holistic approach, I will briefly highlight some issues related to the organisational context of companies that, notwithstanding being directly related to the risk management process, they are important to understand the efficacy of the risk management process within an organisation:

i) Entrepreneurial working environment

Specially focused on the diversity of organisational structures and cultures, Vries' findings (1977) pointed to a particular working environment in entrepreneurial companies (see Table 3). The author highlighted that frequently an entrepreneurial organisation is dependent and dominated by the entrepreneur(s). In fact, bold and proactive moves can be an initial driver to the entrepreneur' success, but due to the unconscious planning effort, it can carry high risk.

Table 3
Entrepreneurial Work Environment

Leadership Role	- Autocrative - Directive
Decision-Making	- Centralized - Lack of Delegation - Impulsivity - Lack of Conscious Planning - Bold, Proactive Moves - Mixture of Operating and Strategic Decision-Making
Time Horizon	- Short
Power	- Proximity to entrepreneur
Organisational Environment	- High uncertainty - Lack of sharing information
Suprastructure	- Poorly defined - Absence of formal organisation chart - "Spider's web" structure
Infrastructure	- Frequently poorly defined or poorly utilized control and information system - Absence of standard procedures and rules - No formalized systems (use of subjective, personal criteria) - Poor integration of activities - Poorly defined job descriptions and job responsibilities (high incidence of role conflict and role ambiguity) - Large horizontal span control

Source: Vries (1977) in Westhead and Wright (2000, p. 59).

The set of interacting systems and the systematic nature of the organisation increase the difficulties in establishing and monitoring the control systems (Waring & Glendon, 2001). Consequently, this also brings obstacles in the development and management of a risk management process. Currently, the high dynamic economy and business environment carry a high degree of uncertainty and risks. Changes, mainly in the financial sector, the product market and competition, labour market and skill base, industry sector culture and shareholders and investment (Pettigrew et al., 2002), demand competencies from management teams to face the increasing risks.

As Waring and Glendon (2001) emphasised, the interaction between organisations and outer context has a significant impact on risk recognitions and resulting actions within organisations. Notwithstanding, organisations recognise that there are increasing environmental risks in varying degrees; usually some dimensions are only partly appreciated and they are seldom addressed systematically or coherently (Bernstein, 1998). Moreover, the entrepreneurial companies with a higher degree of innovativeness and proactiveness will be facing continuous changes and will have additional difficulties in establishing control systems and a formal organisational structure in which the risk management process will arise.

Moreover, usually entrepreneurial companies employ a flat organisation structure with informal networks (Peters, 1995). Usually, the suprastructure is poorly defined, without a formal organisation structure. Moreover, there is lack of control, poor use of information systems (no information sharing), and absence of standard procedures, rules and lack of formalization.

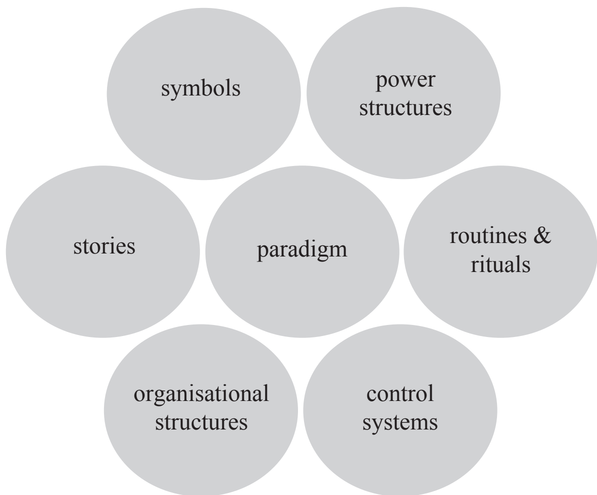
ii) Culture and Risk

Organisations are entities with multiple cultures within a single managerial culture (Turner, 1999). Deal and Kennedy (1986) suggest that organisational culture has three layers of meaning: i) manifest level, ii) strategic level and iii) core level. The cultural web model (Johnson et al., 2000) expresses clearly those dimensions of culture.

Gorman (1989) suggests that culture needs to be regarded as a mediating factor, rather than a causal one. The cultural web model (Figure 4) help us to understand the interactions and changes in organisations that inevitably will have an impact on assessing and managing risks. Moreover, the culture of an organisation may influence the organisational structures, power relations, routines and rituals, and control systems.

In the past, the risk management process was a technical analysis. Currently some authors (Douglas, 1992; Turner, 1999) suggest a broader and less technical basis. They argue that often risk' experts are not exposed personally to the risk scenarios (Waring & Glendon, 2001) and, therefore, ignore organisational specificities.

Figure 4. Cultural Web Model



In fact, culture drives entrepreneurial enterprises (Morris & Kuratko, 2002), and it is generally characterised by a high degree of individualism, a directive and autocratic leadership style, and an absence of formal organisation routines or structure (details in Table 3). These factors will affect the risk management process, increasing the difficulties of establishing a formal and shared methodology in an informal and changing environment.

For example, in an organisation with successful past stories in which the entrepreneurs are symbols and 'heroes' (experts) by the organisation, probably nobody is going to challenge their decisions. Therefore, due to the high status of the entrepreneurs as symbols, the organisational structure and control systems are usually developed according to their experience and judgement. Moreover, the risk assessment and management will be based on the norms and values established by these "heroes". If they understand that it is not important to have a formal risk management process, due to the several stories of success in their past, probably nobody is going to question the possibility of failure of their future risk strategies.

Close to culture are the power relations in organisations. In fact, power has often been subsumed within the topic culture (Douglas, 1992). There are several categories that characterise power: dependence, sanctioning, authority and influence, decision-making and participation. Bacharach and Lawler (1980) defined power-dependence as «the availability of alternative sources of the valued attribute and the degree of value attached to the outcome stake».

When analysing risks, it is particularly important to identify the effect of authority or/and influence in the assessment of risks.

iii) Decision-Making Process in an Entrepreneurial Environment

Usually, the entrepreneurial company is managed in an autocratic and directive way by the entrepreneur(s), following a centralized and informal decision-making process (Vries, 1977).

The decision-making process overlaps other areas (Miller et al., 1996), such as strategic management, planning and organisational structure. Moreover, it is a key issue to understand the relationship between entrepreneurial companies and risk management. Casson (2003) suggests three main stages for the decision-making process in companies (Table 4).

The author highlighted that the first stage usually is taken by decision-makers (top management, entrepreneurs, shareholders or others). With respect to the second and third stages, to increase flexibly in the process the company could reduce the decision time through delegation. Notwithstanding, there are two main obstacles of delegation in entrepreneurial companies: lack of communication and organisational structure (Casson, 2003). In fact, considering the autocratic leadership, centralised and poorly structured organisation, and the lack of communication (details in Table 3) of the entrepreneurial working environment, probably more problems will arise during the generation of data and the execution of the decision.

Obviously, the risk management process implies a decision-making process and therefore it is subdued to that conceptual decision-making path.

Moreover, Haley and Stumpf (1989) suggested that the managerial decision-making is often

Table 4
Stages of the managerial decision-making process

Activities	Qualities
First stage: Formulation of decision problems	
- Specification of the objective	- Self-knowledge
- Specification of the potential strategies	- Imagination
- Specification of the constraints	- Practical knowledge
- Derivation of the decision rule	- Analytical ability
Second stage: Generating data	
- Data collection	- Search skill
- Data estimation	- Foresight
Third stage: Execution of the decision	
- Application of data to the decision rule	- Computational skill
- Initiation of the implementation process	- Communication skill

Source: Casson (2003, p. 25).

not a pure rational model. There are factors that affect the rational decision-making process, such as: i) high costs of the decision-making process (Simons, 1979), ii) limited information, iii) different decision-making procedures, and iv) diverse values of decision-makers (Simons, 1979; Busenitz & Barney, 1997). In this context, Rabin (2003) defines biases and heuristics as the process in which people, based on a limited number of heuristic principles (decision rules, cognitive mechanism and subjective opinions), reduce complex tasks to simpler judgments.

According to Busenitz and Barney (1997), entrepreneurs are more prone to biases and heuristics than managers in large organisations. The authors pointed out that under conditions of uncertainty and complexity, biases and heuristics can be an effective and efficient guide to decision-making. Probably, the level of uncertainty faced by entrepreneurs is high due to lack of information. Often, they have to take decisions where there are no historical trends, no previous level of performance and little (if any) specific market information (Miller & Friesen, 1984).

Usually large companies adopt policies and procedures. This helps them in the definition of a more rational decision-making process (Kahneman & Tversky, 1982; Nelson & Winter, 1982). Additionally, the existence of a formal structure defines areas/ownership of decision-making process (Busenitz & Barney, 1997).

There are mainly two biases and heuristics: overconfidence and representativeness (Bazerman, 1990). Most decision-makers are overconfident in their assessment capabilities and underestimate the real level of uncertainty. Managers rely more than entrepreneurs in decision-making tools and other formal techniques to take decisions (Busenitz et al., 1997), particularly if the later are the business' owners. Therefore, probably there is some resistance from entrepreneurs in adopting a formal risk management process that follows a "straightforward" methodology and is largely supported in the use of "standard" tools and techniques.

Furthermore, Bazerman (1990:7) suggested that «representativeness is to make a judgement about an individual (or object or event), looking for traits an individual may have that correspond to previously formed stereotypes». Additionally, entrepreneurs rely on their personal experience to guide them (Manimala, 1992).

This representativeness biases potentially makes them neglect the importance of a risk management formal process and assume that their past experience allows to identify the critical issues and mitigate them.

Risk Cognition – Beliefs and Values

> «*...any decision relating to risk involves two distinct and yet inseparable elements: the objective facts and a subjective view about desirability of what is to be gained, or lost, by the decision. Both objective measurement and subjective degrees of belief are essential; neither is sufficient in itself.*» (Bernstein, 1998).

Closely related with the decision-making process is risk recognition. There are not many authors developing the topic of risk recognition in a management context. Nevertheless, it is recognised that there are several similarities between individual risk management and corporate risk management (Waring & Glendon, 2001).

This is a very important issue to the success of the implementation and management of a risk management process. It is important that all stakeholders of the process recognise the existence of risk in order to efficiently manage it. Some risk management frameworks are based on a network of tools and techniques (Waring & Glendon, 2001), which follow methodological steps and assume that the organisational and environmental context is "known and controllable". In fact, there are some concerns about the connections and suitability between the risk plan and the company strategy; sometimes ones forgets to analyse «that individuals within the system are essentially not owners of their own destiny, but are elements operating within a bounded system» (Checkland, 2000:122); and that «the most important decisions we make usually occur under complex, confusing, indistinct, or frightening conditions» (Bernstein, 1998:269).

This individual cognition of risk is even more important when we analyse entrepreneurial companies where the decision-making and power is often centralised in a few people (Westhead et al., 2000).

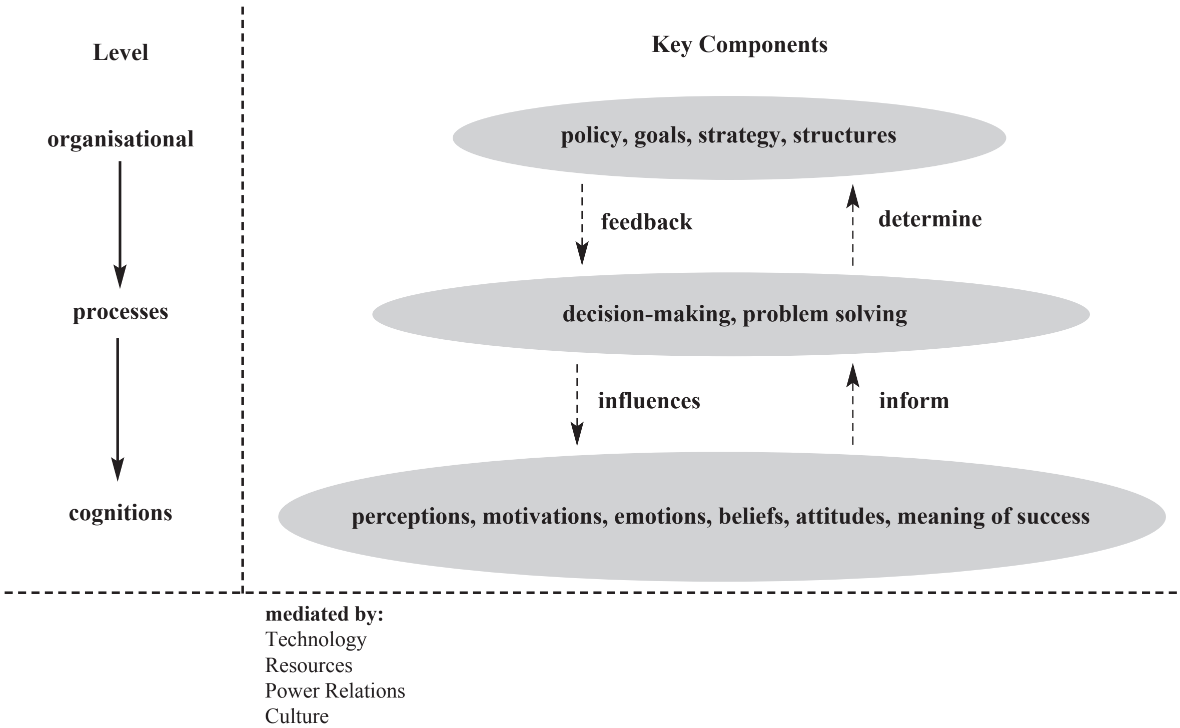
Hence, the potential external risks are perceived, interpreted and dealt through an individual risk cognition process. Moreover, some theory sought to explain that each individual develops a «desired level of personal assessment of the risk» and also gives a degree of threat to each risk (Svebak & Apter, 1997). These personal assessments are integrated within the risk cognition process and are continuously updated (Waring & Glendon, 2001). In all this process there is a continuous re-evaluation of the cost/benefits perceived by the individuals associated with the range of outcomes of the different options. This "system thinking" is an intrinsic and non-systematic process that not always has "immediately" translation in a formal risk management methodology (White, 1995).

Based on the Folkman study, Waring and Glendon (2001) provided two models that give important insights to understand the risk management process in entrepreneurial companies.

In the first model, it is suggested that "risk cognitions and management" will also be affected to some degree by "immediate stimuli impinging upon an individual" and therefore, the managerial behaviour is a response to pressures (external or internal) (Figures 5 and 6). The second model concluded that at a group level, decisions involving risk, follow an established process that includes groupthink, shared responsibility, and polarisation effects (Busenitz & Barney, 1997). However, because in entrepreneurial companies the decision-making process is centralised and individually made, part of those benefits is lost. Furthermore, the effects on risk management at an organisational level are probably related with the cognitions of the individual entrepreneur(s) due to the characteristics of the entrepreneurial working environment.

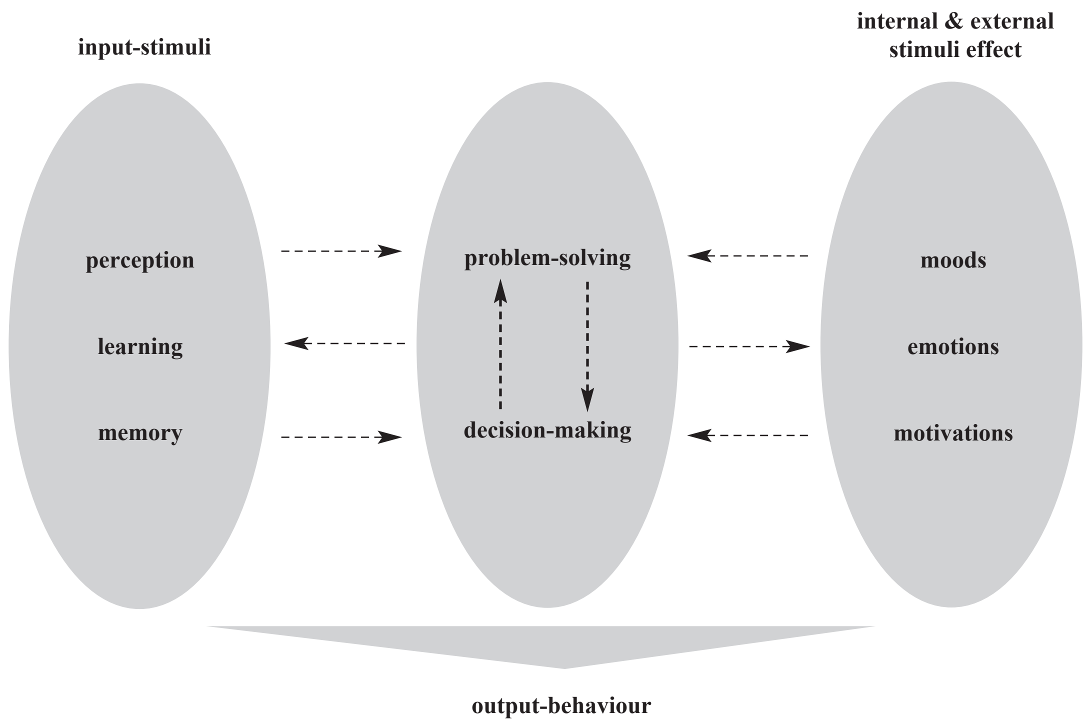
Figure 5 illustrates the three layers of risk cognition. The first is related with those in influential positions or powerful roles. They establish the strategies and have a key position in the decision-making process. Presumably those decision-making process and problem solving situations involving risks are dependent on cognitions. In fact, when one establishes goals and takes decisions, the perceptions of risk, motivations, and beliefs are the basis of the decision system.

Figure 5. Possible links between inner context components



Source: Waring and Glendon (2001, p. 148).

Figure 6. Towards a model of individual risk cognition



Source: Waring and Glendon (2001, p. 151).

Furthermore, Waring and Glendon (2001) explored an individual risk cognition model (Figure 6) that explains to a certain extent companies' behaviour towards risk. In this model the individual expertise is intuitive rather than formal. Hence, individuals interpreted that they survived and prospered on the basis of their past risk judgements and consequent behaviour (Bazerman, 1993). Therefore, risk perception is an external stimulus interpreted on the basis of previous knowledge and experience. This information should be combined to make a rapid (risk) assessment of possible outcomes; evaluating success would be judged qualitatively.

This process should be more visible and frequent in entrepreneurial companies where the control systems are usually low and power is centralised, what gives more freedom to influential and powerful people to take risk decisions based on their risk cognition and without any formal risk management process.

Moreover, as said before, usually entrepreneurs are overconfidence and face representativeness biases. Therefore learning about risk (as a proactive or reactive activity) can result from repeated exposure to different kind of risks, making decisions about them and experiencing a range of outcomes based upon those decisions.

In conclusion, in entrepreneurial companies where power and decision-making process is often centralised in a few powerful and influential people, «preferences on risks and the decisions which they are able to make, are subsumed within a complex broad picture in which motives, interests, experience and learning, provide bounded parameters for decision making on risk» (Waring & Glendon, 2001).

In conclusion, from the analyses of the literature, in order to evaluate the efficacy of a risk management process, it is necessary to broadly understand and shape the environmental context (especially the inner context) of the company. Issues such as power, organisational environment, and decision-making managerial process can affect the potential benefits of the risk management process. The discussion of the efficacy of the risk management process heavily depends on the company profile.

In entrepreneurial companies, the literature revealed unique characteristics not only for the entrepreneur(s) (such as autocratic leadership, tolerance to risk, ambiguity and uncertainty, ability to adapt and overconfidence, representativeness biases) but also for the entrepreneurial working environment. Therefore, there are organisational context issues (power relations, decision-making process, organisational structure) that affect not only the implementation of the risk management process but also the logical meta-level framework of the risk management process necessary to the success of the later (i.e. to the readiness of the organisation to the implementation of such a process).

In sum, the present study aims to address the following research questions:

- How do entrepreneurs evaluate risks and perceive the value of formal risk management frameworks and, consequently, evaluate risks?
- What factors of the entrepreneurial organisation context have an impact on the adoption of a risk management framework?

3. Research Methodology

3.1. *Methodology Guidelines*

This research aims to understand the risk management process in an entrepreneurial organisational context. In order to develop the phenomenological understanding of the topic, qualitative and interpretative research methods are more appropriate, for a number of reasons. Firstly, qualitative research implies a direct concern with experience as it is "lived" or "felt" (Sherman & Webb, 1988); the focus is on exploring a small number of instances or examples which are meaningful and interesting (Blaxter et al., 2003). Secondly, the current research is located in a specific context at a particular time and, therefore, it represents an interpretation of the participants' perception of the phenomenon. Thirdly, the research is located in the "context of discovery" rather than the "context of justification" (Cope, 2001).

Following these choices, the current investigation is supported on a case study approach (Yin, 1993). «Case studies are tailor-made for exploring new processes or behaviours or ones which are little understood» (Hartley, 1994:213).

Case studies have been criticised because i) there is no attempt to make the link between the description and theory, and ii) its tendency to simply record information without any analysis of it (Baker, 2003).

Despite these criticisms, Perry (2001:305) defines case study research as «An investigation of a contemporary, dynamic phenomenon and its emerging (rather than paradigmatic) body of knowledge; within the phenomenon's real-life context where the boundaries between the phenomenon and the context under investigation are unclear».

3.2. *Case Study: Company Profile*

The case company is a familiar business operating in the apparel retail industry. In the beginning it operated mainly like a production sub-contractor (private label) for big apparel retail companies.

In the 90s, the company decided to enter in the retail segment. Its strategy included two actions: i) to acquire an international male clothes franchise; and ii) due to the know-how obtained with the master franchise company, it started to develop its own retail brand.

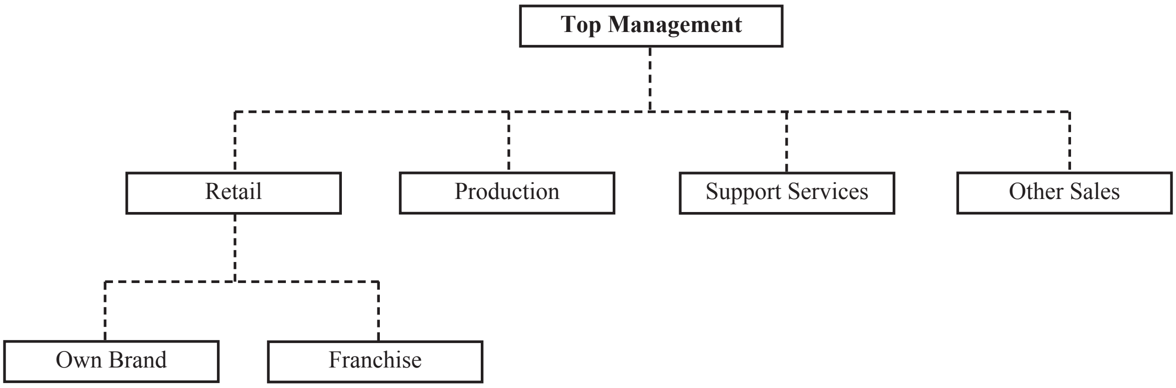
A new dynamic took place in the Group:

- The Group increased their presence in the retail segment. In the year 2000, the Group had 5 franchised and 12 own brand shops. That number increased to 11 franchised shops and 23 own brand shops in 2003,
- The franchised brand extended the product portfolio to Home, Kids and Babies, which demanded new and bigger shops, with different design and layout, and;
- A new own brand concept was launched and a women collection started to be prepared.

Currently, the company is in a process of reorganisation:

- Clear separation of the core businesses. In the past, activities of production and retail sales were developed by the same company. With a new organisational structure they were clearly divided and different companies are responsible for production, franchise sales and own brand business. Moreover, some of the non-core activities of the company were outsourced (for example, logistics) and a new company centralises the support activities (financial, human resources, planning, and other). In fact, the company's growth imposed a new organisational structure (see Figure 7);
- Introduction of the ISO 9002 quality certification not only for the products but also for the processes;
- Implementation of a new stocks management system, and a centralised back-office information system;
- Human resources and quality improvement due to the international franchise requirements.

Figure 7. Case Company's current organisational structure



3.3. *Research Method*

Semi-structure interviews are well-suited to develop a case study methodology (Deever, 2000). Discursive data reflects the conscious or unconscious mind-set of individual interviewees (Thietart, 1999:180) (details of interviewees in the appendix). Moreover, the rationale beyond interviewing fits the objectives of the research (Greenfield, 2002):

i) Large amounts of expansive and contextual data is quickly obtained,
ii) Facilitates cooperation from research subjects,
iii) Facilitates access for immediate follow-up data clarification,
iv) Useful for discovering complex interconnections in social relationships,
v) Facilitates discovery of nuances in culture, and;
vi) Provides background context for more focus on activities, behaviours and events.

4. Findings and Discussion

In this section, I begin by investigating the existence (or not) of a formal risk management framework. Then, I address: i) the perceived value of a formalised risk management tool; and ii) the organisation working environment, and the adoption (or not) of a risk management framework.

In the first section, I analyse factors such as the characteristics of the decision-making process and the organisational risk cognition, mainly beliefs, values and power relations that explain the way the company assesses and manages risks.

In the second section, I describe the organisational structure and the control systems, and explain how they influence the implementation of a risk management framework. To explain the importance of the different organisational levers, I will follow the Kaleidoscope Model (Balogun & Hailey, 2004).

Regarding the existence or not of a formal (reference) risk management process in entrepreneurial companies, the evidence provided by the interviews suggests that there is no formal risk management framework. The FA suggested that:

> «The company is not even familiarised (as the majority of Portuguese companies) with the concept of risk management and how to implement a formal risk management system.»

In fact, as pointed out in several interviews, the risk assessment is an unstructured and informal activity in the company. The CFO pointed out that:

> «In our projects we do not have a formal process to analyse risks. Moreover, there is a lack of formalisation for many activities when we are running a project… it is in a very informal way… we discuss the main problems and start developing actions to sort them out.»

Moreover, it is a centralised process run by the top management of the company. As highlighted by the CEO (when asked how they assess risks):

> «We (top management) seat together and share the key concerns before setting up a project or even during its execution. We do not have a formal set of activities of risk management because the process is centralised in the top management who has past experience in other projects.»

Moreover, there is no registration or post-reviews of the projects. The CEO noted that:

> «We do not have time to spend to register what was wrong in the projects, but we (on or another) usually keep it in mind.»

Furthermore, the top management did not find useful a systematic identification and quantification of the risks. The CFO highlighted that:

> «Such a process reduces flexibility: due to the amount invested there are few advantages in quantify risks because the risk quantification delays the projects (too time consuming) and it increases costs.»

Furthermore, the CEO pointed that:

> «Our experience and the maturity of our team makes such a process unnecessary.»

According to this evidence, there seems to exist obstacles to the implementation of a formal risk management framework in the company.

Perceived value of formalised risk management in the entrepreneurial environment

In order to understand the perceived value of a formalised risk management framework for entrepreneurial companies, we need to address issues such as decision-making process and risk cognition.

As it is common in entrepreneurial companies, the company is managed in an autocratic and directive way by the entrepreneur(s) with a centralized and informal decision-making process. The MB described the management style:

> «All the decisions are taken by the top management; they are responsible not only for the strategy but also for all implementation decisions. From the selection of clothes collection to the location of new shops; everything is decided by them.»

Moreover, it is important to highlight the importance of the autocratic leadership role and its impact in the decision making process. In fact, the MB gave an example of a situation in which the two brothers had a different perspective and the father's decision was followed without questioning:

> «Not only because the father is still the main shareholder but because they respect his experience; sometimes when they cannot find consensus he is the decision-maker.»

In fact, they usually based their risk assessment in their personal experience, as observed by both the CEO and CFO. The CFO pointed out:

> «The top management usually discusses it» (brainstorm) and «evaluate the critical issues of the project».

A similar line was dropped by the CEO:

> «Before taking any investment decision, we can listen people from different departments: marketing, production, and others, but the final decision is always taken by top management.»

In fact, considering the stages of the managerial decision-making process (Casson, 2003), it seems like they jump from the first stage of formulation of the decision problem (based on practical knowledge and past experience) to the execution of the decision. The second stage ("generating of data") is neglected not only because they see it as unnecessary but also because they do not have the competencies to develop risk quantification. The FA underlined that:

> «Their forecasts are a brief and basic financial exercise because they not only underestimate its importance but also because they do not have the skills to develop the analyses.»

Moreover, seldom they consult external experts to help in decisions, as explained by the MB:

> «In big decisions with financial and organisational high impact, such as acquisition of new companies, they search for the expertise of corporate finance departments or auditing companies.»

Despite that, they sub-evaluate the contribution of such experts. The CFO recognised that:

> «In the past, in some particular projects that involved high investment, we searched for specialised advisors in some areas but usually they have a partial view of the problem. That it is why now, when we look for their services, we need to give them support.»

In fact, they assume that entrepreneurs are risk-taking people. The CEO considered that:

> «If a person is not risk-taking, he or she cannot be an entrepreneur because we do not have time or resources to take decisions with all the necessary information.»

Generally, they are confident about their experience and practical knowledge. Although there is little evidence to support this conclusion, it seems that they are overconfident about their capabilities for identifying the risks in their projects and subsequent impact.

In fact, they use external reasons (such as market conditions) to justify the failure of three own-brand shops. The CEO said:

> «The last year due… to the economic situation in Portugal, people bought less. A consumer that usually spent 100 euros in shops, currently spends less and buys less. How can we predict consumer behaviour?»

Therefore, they are overconfident about their risk assessment, because they never assumed that they failed estimating sales or they did not consider all risk scenarios. They also sub-evaluate the importance of a risk management process because they think the past projects *are representative* of the risks that they usually face, and the process of identifying and quantifying new potential risks is time consuming, increases costs and brings few benefits.

Furthermore, the risk cognition (beliefs and values) and power relations, justify the lack of formalisation of the risk management process.

As showed before, the CFO signalled that:

> «The benefits of the implementation of a formal and in-deep risk management process do not compensate the costs of time, training, and flexibility.»

The CEO also supports this idea since he recognises the existence of external pressures:

> «We cannot wait to know all the variables when we are taking decisions, otherwise we will never take them or we will lose the time-to-market.»

In sum, we can apply the individual risk cognition model that highlights that the individual expertise is intuitive rather than formal, and that risk perception is an "external stimuli" interpreted on the basis of previous knowledge and experience (Bazerman, 1993; Waring & Glendon, 2001).

Entrepreneurs (top management) risk cognition is important due to the centralised decision-making process of the company. In fact, the interviews appear to express the view of Svebak and Apter (1997), which suggest that each individual develops a 'desired level of personal assessment of the risk' and also gives a degree of threat to each risk.

Those conclusions support the idea that entrepreneurs are more susceptible to the use of biases and heuristics (Busenitz & Barney, 1997) and especially to overconfidence and representativeness (Bazerman, 1990). The company entrepreneurs suggested that they need to have risk-taking characteristics to develop their activity. For them, the guidelines of risk assessment are experience and practical knowledge. Therefore, they have a low perceived value of formal risk management techniques. Moreover, they never recognise that a failure in a project can be due to deficient risk analysis and management, and that the representativeness of past project is a limited source of risk identification because the external context and the organisational changes bring new challenges.

Moreover, like Waring and Glendon (2001) highlighted, in their assessment of the importance of a formal risk management process, they also evaluate the resources availability and capabilities and consequently personal cost/benefits analysis of developing a formal risk management process.

In entrepreneurial companies, power (formal and informal) is mainly represented by entrepreneurs. It is also important to recognise the role of the father in the *power structure of the organisation*. Although he does not have an executive role in the company, his authority and influence is critical to risk assessment. The reasons for such authority and influence are twofold: he is the main shareholder of the company; he has experience and practical knowledge in the business. The CEO admitted that:

> «In difficult situations my father experience is a facilitator to take decisions. His judgement of the situation and his decision is always the final one.»

Therefore, power is critical to risk assessment because usually they do not search for new tools to help in risk assessment and management; they trust their father's judgement to justify the acceptance (or not) of a risk.

Another issue is sanctioning power. Recently the entrepreneurs increased their sanctioning power with the establishment of an annual performance bonus. This measure is important to determine ownership within the projects. The CFO suggested that:

> «The annual reward is a sign if the employee achieves his/her objectives. It increases his/her responsibility and it is a kind of control system under the employees' performance.»

Moreover, the CFO underlined that:

> «Only recently we started to delegate some projects implementation. Our plan is to start working with project teams, delegating responsibility about the implementation of the projects. This has already happened in the Azores shop.»

This practice will reinforce responsibility of middle management involved in projects. However, top management wants to delegate projects' implementation (execution) only, keeping control of all strategic decisions and risk management.

Therefore, the centralised and autocrat approach in the definition of risk strategies and in monitoring all projects, probably will conflict with delegation of responsibilities and transfer of ownership to projects execution. The separation between those two phases can bring additional risks if there is lack of communication, inefficient control or information systems, or barriers to organisational learning (such as a centralised, informal managerial style).

Organisation working environment

The FA noted that the «reporting system of the company is poor, focuses on market results (revenues per month per shop)», and this is a consequence of top management beliefs.

The *organisational structure and control systems* – other element of the cultural web –, have also an impact in the implementation of a formal risk management process.

In the past, the informal and flexible structure of the company increased the difficulties in establishing and monitoring management systems. The MB suggested that:

> «Only now with the reorganisation of the business units, the Group starts to have formal structure with business units clearly defined. In the past there were multiple-functional companies in the Group.»

The CFO also highlighted that:

> «The ISO 9002 certification imposed new control mechanisms in the company and evaluates risks with quality norms such as supplier's valuation and others.»

The FA pointed out that:

> «In the near past the company did not have the imposition of quality standards in processes or other routines that their dimension asked for…»

In fact, as the MB noted:

> «The past high growth of the company with several projects at the same time in different geographic places and with limited resources, left few people and time to the internal organisation.»

The FA also emphasised:

> «Currently the company is focused in consolidating its business units and creating the necessary internal structures to be able to give one step further; that is why they created a support services company and separated all the different business units.»

The CEO also revealed that:

> «The company is searching for a more professional management, with the improvement of the management systems and training of human resources.»

Although the company is starting to develop and establish a formal management system, the decision-makers still give a relative importance to the implementation of control systems. For example, talking about planning, the CEO claimed that:

> «The business environment is so dynamic that it is not worth to have a medium/long term plan; the only interest of that is to give us a vision.»

The FA also noted that:

> «The reporting of the company shows that the financial department does not invest much time doing the budgeting and forecasts. The level of detail is small; they do not even do a forecast of the monthly cash-flow statement.»

In summary, although there are organisational changes:

i) In the organisational structure through the establishment of separate companies;
ii) With the introduction of information and control systems, and;
iii) In the human resources management with performance related salaries and a more professional/managerial team.

There are some clashes between the new vision of the company – focused in changes of the organisation structure and human resources –, and the risk management process centralised in the experience and practical knowledge of top management.

In fact, the increase of project responsibility of middle management (and the impact in their wages) and a more professionalized team (characterised by CFO «with technical knowledge, different backgrounds and working experience») probably will create some "conflicts" (and additional risks) in a organisation that still has a risk management process dependent on the knowledge of a few people and without any formalised framework.

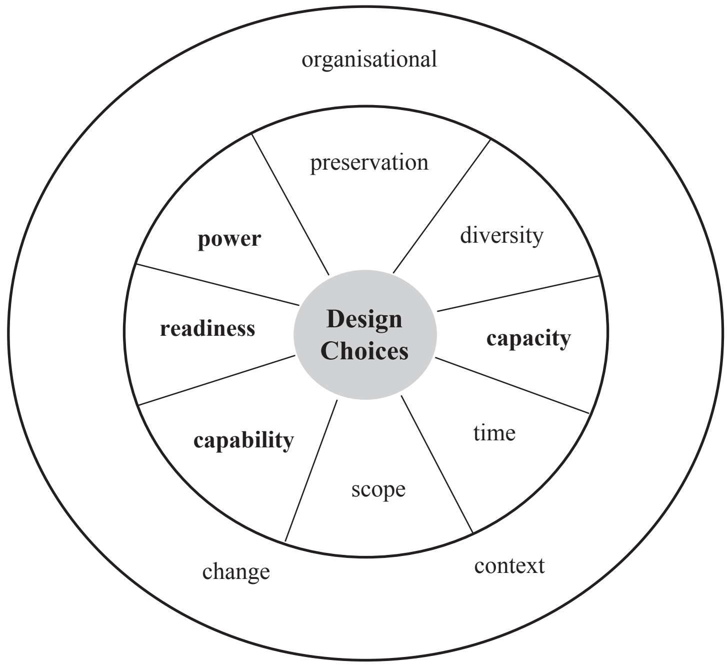
In sum, using the contextual levers of the Kaleidoscope Model (Balogun & Hailey, 2004: time, readiness, capacity, capability, power, scope, preservation, diversity – Figure 8), there are some constraints to the implementation of a risk management process. Mainly, due to the overconfidence and non-systematic decision-making process of the entrepreneurs, there is no top management commitment to the implementation of a new risk management process. Moreover, because they are the ones that posses the power, there is no willing to undertake the change.

Furthermore, there are two other constraints to implementing a formal risk management process: *capacity and capability*. It seems that due to the time constraint for their aggressive strategic plan, the top management team was focused on market expansion and on controlling project execution, rather than in the development of new management systems (such as risk management). Like the AF recognised:

> «They do not have time and human resources to develop a risk management framework. They do not have the knowledge of a risk management process, its tools and techniques.»

Additionally, the capability to implement a formal risk management system is low in the different levels of the organisation. At the organisational level there were poor management systems (information system, planning system and others), absence of rules and procedures, poor formalised systems and no formal job responsibilities. Similarly, at a managerial level there is no perceived

Figure 8. Key Constraints in a Risk Management Process according to the Kaleidoscope Model



need for the introduction of a risk management framework. The directive and centralised entrepreneurial managerial style and the lack of commitment to implement the system also contributed to the low capability.

Therefore, to increase the readiness to a successful implementation of a formal risk management framework, the organisation needs mainly to i) have the commitment of top management, ii) develop the necessary human capabilities, and iii) adjust the organisational structures. Moreover, the company has to carry out some changes in the organisational culture web.

In fact, the introduction of those changes in the organisational culture is importance to the acceptance of a risk management process (see details in Table 5).

The introduction of a professional/managerial team and management systems, will challenge the entrepreneurial culture and consequently affect the biases and heuristics in judgements under uncertainty. Therefore, they will need to adopt rational decision-making tools to manage risks (such as a systematic identification and quantification of risks). In fact, as the venture becomes established and starts growing, managerial experience and skills become increasingly important (Peters, 1995).

Moreover, to successfully apply a more rational risk management process, they need to continue developing a clear functional organisational structure and control (e.g. ISO 9002), information and human resources systems (e.g. competencies). For example, the delegation of responsibilities about projects, demand a better articulation of information between the different layers, a clear

Table 5
Factors of Organisational Culture Impact on the Acceptance of Risk Management

Top Management	- Acknowledgement of benefits of a formal risk management process - Active participation of stakeholders in risk identification, analysis and management process - Delegation (in "internal experts") of activities related with risk management (such as risk quantification, scenario analysis and others) - Improved understanding of top management over applicable risk management practice and tools
Decision-Making	- Understand biases and heuristics in judgements under uncertainty - Shared - Conscious organisation - Importance of trade-off between judgments and use of rational tools and techniques
Time Horizon	- Importance of extending the time spam (usually short) to analyse and manage risks
Power	- Power relations based on competencies and knowledge
Organisational Environment	- Clear organisational structure with all stakeholders involved in project definition and plans - Formal and efficient control systems - Introduction of standard procedures and rules - Clear definition of job descriptions and responsibilities - Improve information system to capture corporate knowledge and data for the future - Improving communication (reducing scope for misunderstandings) - Integrate project management with other management systems

definition of roles and accountability and the implementation of reporting and continuous learning systems.

5. Conclusions and Recommendations

The method and the methodology brought some limitations to my research about the efficacy of risk management in entrepreneurial companies.

Firstly, a research based in a single case study is limited. In fact, several companies should be analysed to find the organisational factors that affect the risk management process and explain efficacy of such a process in entrepreneurial contexts. Because entrepreneurial organisations are affected by the external context, the characteristics of the entrepreneurs and the organisation working environment, each organisation is unique and the analysis of several case studies will not only give different insights into the research but also will allow me to confirm common patterns in entrepreneurial companies.

Secondly, due to the time pressure to do the interviews, the findings were also limited. I think they could be more meaningful if there was i) more time to analyse the literature before the interviews, ii) the opportunity of interview again the same people after analysing the results of the first round of interviews, iii) to interview different and more stakeholders in the risk management process (operational managers, project managers, the main shareholder, suppliers, clients, and others), and iv) use other sources of data (such as questionnaires and secondary that) that will bring the benefits of sources' triangulation. This highlights the importance, especially with time constraint, of the preparation of the interview process. For example, in my research there were some aspects not fully explored during the interviews (such as the meaning of professional management or the concept of confidence *vs* overconfidence for the entrepreneurs) that could bring additional and meaningful information to explain the research questions.

Despite those limitations, this research supports the conclusion that the entrepreneurial environment affects the efficacy of the risk management process. Considering the first research proposition, I realise that the risk management process is an unstructured, informal, and centralised practice developed by top management.

Moreover, my research reinforces the argument that the entrepreneurial organisational factors affect the implementation of a risk management framework. The organisational context revealed unique characteristics not only for the entrepreneur(s) but also for the entrepreneurial working environment.

The fieldwork apparently suggested that the characteristics of the entrepreneurs related with leadership style, decision-making process and risk cognition affect the perceived value of a formal risk management process. The top management autocratic leadership style, the centralised and informal decision-making process, the presence of biases and heuristics in judgements under uncertainty (mainly overconfidence and representativeness) can be barriers to the implementation of a structured, formal, and generic risk management process.

Additionally, the entrepreneurial working environment, characterised by: i) high uncertainty, ii) lack of information, iii) poor organisational structure, iv) deficient planning and control systems, v) absence of job descriptions or responsibilities, vi) poor integration of activities (Vries, 1977), bring additional difficulties to the implementation of a formal risk management process.

Based on those two interrelated sources of obstacles, we concluded that the company's cultural web together with the need for changes in some layers of the organisational – mainly the capabilities, capacity, power relations and top management support (readiness) –, can be a formalised "starting-point" to understand the factors that impact in the acceptance of a risk management framework.

Furthermore, according to the life-cycle, it appears that the company is in a "catching-up" process, trying to adjust the internal organisation to its dimension. Therefore, its vision is to develop more formalised management systems (control, quality, human resources) and to have a professionalized management team. As highlighted by Pascarella and Frohnan (1990), those objectives will probably clash with the entrepreneurial culture:

- autonomy *vs* reporting systems and controls;
- independent and unstructured *vs* interdependent and coordinated;

- directive management style *vs* teamwork, and;
- ideas and individuality *vs* policies and procedures.

This topic should be a target for further research. It would be important to go deeper into understanding the impact of biases and heuristics in the risk management process. For example: the study of the entrepreneurs self-schemas such as overconfidence (*vs* confidence), or the measurement of the probability of failure of an entrepreneurial judgement under uncertainty.

Moreover, it would be also interesting to evaluate the monetary trade-off for an entrepreneurial organisation of developing a formal risk management process; or to analyse selection of the most adequate framework due to the organisational culture and structure.

It could also be interesting to analyse in "real time" how the company develops risk management analysis and management; in addition, when changes happen, it would be worth exploring the question of how does the company manage risks in different projects (multi-site analysis) at the same time, or during the company's life-cycle (long-term).

However, based on the conclusions of the current research, some recommendations can be put forward. Those recommendations are mainly related with i) changes in the organisational culture and structure to overcome the potential clashes between the entrepreneurial environment and the implementation of a formal risk management framework and ii) the establishment of a formal organisational structure and professional management.

In summary, top management of the company needs to understand the benefits of a formal risk management process:

- clear attribution of responsibilities;
- more rational decision-making process;
- establishment of a control and monitoring system when there is task delegation;
- a better understanding of the potential impact of some risks, and;
- a useful scenario analysis of the potential returns of each project.

Moreover, the organisation should recognise that there are applicable risk management practices and tools that do not need a considerable investment in resources, time or money (formal risk identification, scenario analysis, risk perception methods, and others). In fact, these simple techniques of risk identification and analysis are a source of corporate knowledge (which accumulation is especially important when there is power delegation).

Furthermore, by recognising the presence of biases and heuristics in entrepreneurs decisions and in the implementation of a shared, rational decision-making process, will facilitate: i) communication, ii) a clear definition of job responsibilities, and iii) a more complete assessment of financial, operational, human or market risks in future projects. Those changes together with a better organisational structure and management systems will create a clear distribution of competencies/ /expertise what will bring short-term benefits in the risk identification and management and will be the "organisational basis" for the implementation of a formal risk management framework in the long-term.

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Resumo. Este artigo pretende identificar obstáculos, num contexto organizacional de empreendorismo, que poderão condicionar uma eficiente implementação de uma ferramenta formal de análise e gestão de risco.
A compreensão das características intrínsecas dos empreendedores, da sua cultura e contexto organizacionais é fundamental para avaliar uma eficiente implementação de uma ferramenta de gestão de risco.
Este estudo sublinha dois factores: i) a existência de enviesamento e heurística em processos de decisão na presença de incerteza e ii) o particular contexto organizacional presente no empreendorismo, como potenciais constrangimentos à implementação de ferramentas formais de gestão de risco.
Palavras-chave: Características intrínsecas dos empreendedores, processos de decisão, contexto organizacional e gestão de risco.

APPENDIX

Interviewees profile

CEO: Shareholder, CEO and Commercial Director
The CEO is in his thirties and usually assumes formally (and informally) the leadership of the Group. Since he started working, he was always related to this business, first under his father administration and later by his own management. Although he is visionary of the strategy of the company, he shares the Group's management with his brother (shareholder with the same stake); when conflicts arise, their father is the mediator (because he is still the main shareholder of the Group).

CFO: Financial Director
The CFO is a key element of top management. With a financial background, he extended his knowledge about the business: from strategy to more operational issues. Although he is also an entrepreneur, he has more managerial skills than the CEO. Currently, he actively contributes to the strategic and operational choices of the company.

MB: Non-executive Member of the Board
The MB is in his late thirties and he is a managing director in a venture capital company. He started as a corporate consultant in an investment bank. He assumes the role of non-executive member of the board in several companies of different industries. He usually seeks for a high investment return rate and high shareholders value (financial focus). He does not have a 'hands-on' approach, and therefore, he is not an expert on the business operational issues; he relies in lag indicators.

AF: Financial analyst in the venture capital company
Responsible for following up (analysing financial reports, budgeting, market research, strategy) of the Group, the AF is also responsible for the same tasks in other industries (such as IT, consumer goods, beverage, and others). He has a management degree and he always worked as a financial analyst in that venture capital company. He seldom goes to the company and the main source of his financial analyses is the data provided by the Group.