

Revue de l'Entrepreneuriat et de l'Innovation

# The entrepreneurial support and the strategic risk management during the process of innovation in the time of crisis

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\_"The key to unlocking post crisis growth is prioritizing innovation"

*Abstract - Innovation practices, the establishment of the creativity's culture or the use of the company's resources and skills in this area has become an almost usual necessity for the company. Except that, these procedures lead to risks that the company wishes to fully control. Our purpose is to analyze the methods of strategic risk management related to the intervention of entrepreneurial support. After having discussed the concept of the innovative entrepreneur, as well as the resulting risks and uncertainty, we presented the major role played by entrepreneurial support in this area and define their main terms.*

**Keywords :** Innovation process, Entrepreneurship, Risk, entrepreneurial support, Strategic risk management.

## INTRODUCTION

Morocco has experienced remarkable development lately in terms of innovation and creativity. As proven by the World Intellectual

Property Organization. This shows that they are of concern to the 74th worldwide in this sense. However, aware of the risk that is related to the innovation, entrepreneurs are not passive in this sense. This is how we represent Strategic risk management as an essential tool for stimulating the company regardless of its size in the current time. Therefore, after having illuminated the theory of innovation initialized by Schumpeter and Knight through risk and uncertainty as a major part of the innovation process serving to face the crisis ; We have highlighted the intervention of the entrepreneurial support in this area through the theory of RBV resources and skills indirectly. Our claim here is that managing risks and uncertainties entails balancing two opposing needs. On the one hand; there is ***a need for clarity in order to achieve operational efficiency in the time of crisis.*** On the other hand, ***there is a need for novelty and flexibility***

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*to achieve innovation in which case it may be useful to temporarily sustain risk and uncertainty.* In this paper we are going to present some models illuminating the balancing act.

First, a literature review is presented to provide a conceptual framework of the key issues such as risk and uncertainty, types of risks and uncertainties along the stages of the innovation process, and strategies to manage them. This is followed by an outline of the theoretical research about the strategic management as a problem solver, while the last section presents the analysis of the perceived risks and their management through the entrepreneurial support, followed by a conclusion of the theoretical framework. The contribution of this paper is twofold. Theoretically speaking, a new combination of innovation and support is suggested. And, recovery while the crisis indicates the presence of an innovative entrepreneur, but to do so he needs entrepreneurial support and entrepreneurial motivation. The main entrepreneurial support systems for every entrepreneurial act are identified.

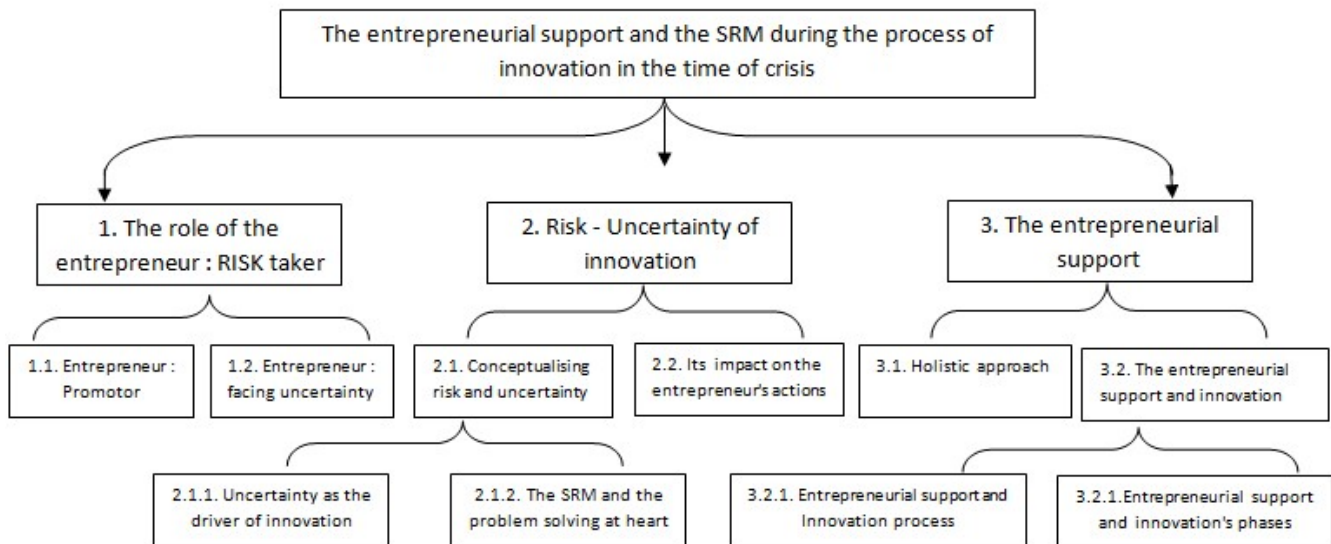
#### *Theoretical review*

The innovation has already been illuminated by Schumpeter (1934). The changes related to greater competition, rapidly changing technology and customer expectations make the innovation more complex with less predictable outcomes (Keizer, Vos and Halman, 2005). The years that we have just lived currently sum up the memory of crises regardless of their magnitude, namely the questioning of trade agreements on a global scale, the volatility of the prices of all raw materials, namely oil and grains have shown a

kind of irrationality in our time as the shift in the center of gravity of the economic world from the West to the East has radically changed the labor market in Western countries. The word that can perfectly sum up The 2010s to the present day is risk. The risk on the markets, the risk on the balances and the risk on the level of growth which will appear gradually and impose itself. The more a society develops, the more its link to risk changes. Contemporary societies seem averse and intolerant of risks that grow in number and complexity. The inherent risk is obvious to all businesses, and it is its essence. The creation of a company falls within the spectrum of risk taking under the effect of uncertainty. Sustainability and survival are not guaranteed and assured within companies of different sizes, even if only SMEs whose structure is very vulnerable to risks.

The crisis is the main time for entrepreneurs to be innovative. Therefore, innovation is widely considered in entrepreneurship literature (Paturel & Masmoudi, 2008; Deschamps, 2001; Shane et al., 2003). It is a phase of the entrepreneurial process such as success and recovery (Cope, 2010). The majority of the studies highlighted the factors influencing entrepreneurial intentions such as initiative, risk-taking and seizing opportunities (Shane et al., 2003). This study is based on 3E and 3F Paturel and Masmoudi models (2008), which underline the fact that the gathering of entrepreneur-related factors – along with enterprise- and environment-related factors – help the enterprise shift into the coherence zone and fosters business creation.

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### I. THE ROLE OF THE ENTREPRENEUR: RISK TAKER

Since the emergence of entrepreneurial action, entrepreneurship has become an important social and economic phenomenon. If we go back through the ages, entrepreneurship remains a concept that deserves such careful study in terms of its definition.

Going back through the ages, it was exactly in the 19th century that Schumpeter found that the work of the entrepreneur is frequently qualified by the English term "Management" which is a generic term to group together all heterogeneous functions of control, representation and discipline. For Schumpeter, his functions are only administrative functions which do not really sum up the real work of an entrepreneur. The representation of the entrepreneur as being the union of the factors of production in no way satisfies Schumpeter, since this function only makes him a simple intermediary between the owners of productive resources and the consumers. Still, bringing the conception of the

entrepreneur closer to an owner of capital does not alter the fact that he tends to be as suppliers of the means of production, workers or landowners. According to this approach, the entrepreneur operates a business is not enough to characterize the specificity of his function. Indeed, according to Schumpeter, the function of the entrepreneur is to take the risks, initiatives and decisions to undertake.

The function of the entrepreneur is called "the function of direction" which requires less the existence of intellectual characteristics (for example alertness, creativity, vision, breadth of the horizon) than the will to take initiatives and risks. It is in this connection that Schumpeter differentiates between two different types of initiative taking, "thought initiative" considered as the conception of a new idea and "practical initiative" consisting of decision making. The latter which focuses mainly on what is the function of the entrepreneur as a risk taker by contributing to the implementation of the decision. By ensuring that leaders are receptive and constructive. The entrepreneur can encounter new possibilities at any time in his managerial

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life that he would have to recognize and apply as an almost permanent source giving birth to new ideas. To initiate that the function of entrepreneur goes beyond the simple execution of routine activities within the company but it is above all to remove the difficulties. It is not enough to copy a concept and apply already existing activities to be appointed an entrepreneur but it is above all to have the own will to be a founder or a promoter to launch an entrepreneurial process and to obtain third parties that they surpass themselves to make it succeed.

#### *1.1. Entrepreneur: Promoter*

Despite the existence of a multitude of types of entrepreneurs, "the promoter" remains the most suitable type for Schumpeter in other words who best personalizes the function of the entrepreneur. The promoter is a factory owner who can technically be an inventor. Our concentration goes against considering the entrepreneur as a "capitalist" who defines himself by belonging to a given social class, in particular "business operators". In addition, this approach merges with our vision of the entrepreneur as a being capable of playing an interface role to bring about "new economic combinations". The promoter invests himself in the entrepreneurial process of emergence of the novelty, the realization of which he does not completely delegate. It mobilizes its energy in the long term in the culmination of this process and is worth it to be modified with the process and its success or failure. Schumpeter's reasoning for the entrepreneur sums up the process to which he is subjected. In other words, any person exercising his functions as an employee, both in the public or private domain can be an entrepreneur.

The usefulness of the entrepreneur's function study as a promoter can be summed up in the fact of specifying in what way it is essential to study

the risk within companies. It is well before studying the behavioral aspect of the risky entrepreneur to see his decision making and propensity to risk. Schumpeter proves that it is not enough to create a company to hold the title of "an entrepreneur" but it is not a question of going further to copy any existing model, more particularly to promote the emergence of new management methods or the development of new possibilities not yet emerged in the managerial environment in particular. Despite being the fundamental element in the entrepreneurial process, according to Schumpeter innovation goes in the same direction as the exercise of the entrepreneur's function. The entrepreneur is then at the center of the entrepreneurial innovation process.

Before turning to the history of risk within companies, it is essential to understand the behavior of entrepreneurs toward the risk in an uncertain environment. The entrepreneur with an entrepreneurial orientation seeks before embarking on the creation of a business project to know if the latter has a sufficiently high probability of success to have the courage to commit his resources to the managerial adventure. It is exactly in this uncertain world that he knows he is not entitled to any serious error except in cases where he does not retain "the right probability" of under or overestimating the risks. It is therefore for the entrepreneur to give for each scenario a probability of realization. The major observation is that the entrepreneur is ready to face a new situation at any time that he has not imagined.

#### *1.2. Entrepreneur facing uncertainty*

It is commonly considered that all entrepreneurs have one thing in common, in particular the fact that they all obtain their means of activity at a fixed rate (certain price) and resell goods and

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services at an uncertain price (Van-Mesle, 1988, P136). His first step towards taking risk materializes in the use of means to make gains and secure property.

Frank Knight (1921) takes Cantillon's definition and adds the difference between two behavioral aspects. People who love risk and those who are averse to risk. Knowing that the creation of any business requires first of all the acceptance of risk taking. The start of any creation requires the acceptance of financial risk taking, professional risks, family risks and psychological risks (in case of failure). Knight distinguishes between risk and uncertainty, he leads us to think of the function of the entrepreneur no longer in a risky universe but in an uncertain environment. It follows then that the action of undertaking is carried out by taking risks in an uncertain environment.

Caution is a prerequisite for taking any risk in an uncertain environment. It turns out to be useless for the entrepreneur to be careful in a perfectly knowable environment. From the angle of this reflection, it is essential for the entrepreneur to collect the data well to know his future and avoid making mistakes by evaluating his costs, the needs of consumers, and their consent.

#### II. RISK - UNCERTAINTY OF INNOVATION

Following the definition given by Cantillon to the entrepreneur as being an agent who takes the risk because he is placed in a situation of uncertainty. Schumpeter also assures that the only entrepreneur who innovates, in other words, brings new combinations. He is led within his company to make risky bets because nothing is acquired beforehand. Going back in time through the ages, the notions of risk and uncertainty belong to the usual vocabulary of managers.

Conceptually, there is a distinction between risk and uncertainty. Uncertainty corresponds to ignorance of future events and risk is the direct consequence of this ignorance, then manifest when the decision is made and the consequences of the latter are unknown.

##### *2.1. Conceptualizing risk and uncertainty*

Risk and uncertainty are treated as if they were synonymous. Knight (1921) is associated with the classic differentiation between risk (known risks) and uncertainty (unknown risks). The risks unlike the uncertainty are essentially insurable (Brouwer, 2000). This discussion is important because generally individuals are more averse to uncertainty than risk. The entrepreneur is considered by Schumpeter as a manager of risk and uncertainty during the innovation process and constitute a pioneer who can act with confidence beyond the range of familiar beacons. Despite being contradictory about whether entrepreneurs are risk takers, Schumpeter views risk and uncertainty as two major obstacles to innovation (Kanbur, 1980). While Knight proved that the uncertainty is the mean factor of innovation since it creates the opportunity for profit which could only be temporary if change was predictable. In other words, uncertainty is a precondition of entrepreneurship. In his seminal work, Knight (1921) distinguished between 'risk', defined as a measurable unknown to which probabilities can be assigned, and 'uncertainty', which are risks to which such probabilities cannot be assigned.



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### 2.1.1. Uncertainty as the driver of innovation

*Innovation is an hypothesis, whose truth cannot be established with certainty” (Paul Hurst, 1982).*

The role of the entrepreneur in relation to uncertainty has long been contested, with Schumpeter (1934) considering it is to manage these conditions, whereas Knight (1921) argued that uncertainty is the driver of innovation diffusion. Alvarez and Barney (2005, 778) consider that, in the entrepreneurship literature, ‘risk and uncertainty are treated as if they were synonymous’. Though, risk is the situation under which the decision outcomes and their probabilities of occurrences are known to the decision-maker, and uncertainty is the situation under which such information is not available to the decision-maker. The uncertainty is the way for every company to brightening the future. Because the innovation in itself is based on the risk as a component to light out the way for new initiatives.

According to (Wärneryd 1988, 407), the entrepreneur functions in the economy only if the environment is uncertain. Therefore, the uncertainty is the fact of economic life, entrepreneurs are needed for compromise, to take risks and to innovate. As the aim of this paper is to search whether the entrepreneur is more willing to manage risks and uncertainty to innovate. A significant portion of the entrepreneurial support literature has been preoccupied with the dichotomy between "Risk management " and " Strategic ability of organizations" where entrepreneurial attitude toward risk were often illuminated as a distinguishing factor among the two groups via the confidence and close relationships. Of course, as all the managers of business operations know quite sure, uncertainty in business is never quiet at zero and some risk is always present. For

Galbraith (1977) uncertainty means “the gap between the amount of information required to perform the task and the amount of information already possessed by the organization”. Nonetheless, despite possible detrimental effects caused by uncertainty within the context of innovation, uncertainty also carries positive, or at least neutral, meanings. Johnson (2001), for example, has linked uncertainty and entrepreneurship. Johnson (2001) portrays the tolerance of uncertainty and ambiguity as a necessary condition for making things happen.

According to Hanft and Korper (1980) uncertainty may actually improve decisions, because it can help to achieve agreement when “honest differences in fact and values might otherwise lead to intransigence”. Rogers (2003), in turn, has emphasized the fact that technological innovation “is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome”. Finally, taking an evolutionary approach, uncertainty is seen as a necessary condition of innovation (e.g. Foster 2010). In a state of uncertainty people have different and often conflicting beliefs which can result in many mistakes and errors. However, they are crucial, because they can be eliminated and replaced by better beliefs in a process of competitive selection. Thus, “errors and mistakes are not a bad thing; they are a necessary part of the process that generates economic growth” (Foster 2010).

While highlighting the concepts of risks and uncertainty, and clarifying the main difference between them. It seems that risk is inherently easier to plan for than the unknown risk (uncertainty) in the innovation process. Rarely are the risk management strategies applied to the innovation process (Barbosa, Kickul, and Smith, 2008), especially in smaller, resource-constrained enterprises. Some questions require our attention

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such as : a) What are the innovating agents uncertain about in the time of crisis ? b) How does their uncertainty affect the way they act ?

### The uncertainties in the time of crisis

Several types of uncertainties encountered as identified by Jalonen's (2012) are : technological, market, regulatory/institutional, social/political, acceptance/legitimacy, managerial, timing, and consequence. But the main types are : Resources (external) - Financial, Technology (external), Market (external) and Timing (external and internal), decision-Making(internal), organizational (internal).

#### *Resources (external) - Financial*

While discussing resources related to innovation, one might come to think of raw material, knowledge and equipment/machinery. Thus, in the context of resource uncertainty the financial capital can also be included (Godart et al, 2009). They claim in their work that the two most important prerequisites for an innovation process to work are the following.

First and foremost, the ability to gather and develop information and knowledge, and turning it into a product that might give the organization a competitive advantage.

Secondly, they describe the spending and distribution of time and money plays an equally important role as the first aspect. Jalonen (2011) describes the risks that come with investing in an innovation process, that includes external actors leaving their comfort zone, and replacing it with discomfort and uncertainty.

These external actors include investors, banks and financiers, all of whom would be affected by the innovation process were to fail. Receiving financial aid can always be a problem. Muller

(2013) describes how banks and entrepreneurial support in general often are wary of funding newly started, or smaller companies because for them it is considered as a risk. Additionally, this uncertainty can therefore come to emerge from an internal or external source.

#### *Technology (external)*

Regarding technological uncertainty, Jalonen (2011) describes how both technical tools and knowledge attributable to the technology could give rise to uncertainty for innovators. Furthermore, he explains how technological innovations could be divided up.

There are four types and they are based on “the degree of technological novelty”. They are low, medium, high and super-high technological uncertainty innovations. To summarize, Jalonen (2011) states two things. The technological uncertainty that may emerge is firstly lack of knowledge about new technology or secondly, a lack of knowledge regarding how to use new technology.

#### *Market (external)*

When it comes to market uncertainty Jalonen (2011) explains how “innovation without a market has no value”. He came along to explain that future market conditions can mean much uncertainty for organizations. The examples he describes in the section are disruptive effects of emerging technologies, empowered customers, new market entrants, shorter product life cycles, geopolitical instability and market globalization.

Jalonen (2011) proceeds to explain that market-based uncertainty can be divided in

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three different categories. He describes how the most important source of uncertainty is customers. For this category the main sources of uncertainty are “demand for innovation, the unknown behavior of customers and unclear customer needs”.

The second market-uncertainty that Jalonen categorize is more focused on competitors, the lack of knowledge about them. Regarding innovation, companies want to differ from their competitors. Without any knowledge about the competitors, this is difficult and Jalonen (2011) explains that organizations can never with certainty know the intentions of their competitors. Competing products and services, and the price development of these is the third category for market-uncertainty, even though it is a minor one, it is still one of the three categories according to Jalonen (2011).

#### *Timing (external and internal)*

Timing uncertainty are uncertainties related to time, how fast things can change or how fast a company must act in certain situations. Jalonen (2011) states that when it comes to management, timing is a crucial aspect. The global market is difficult, and there are rapid changes, because of that decisions must be timely executed, (Jalonen, 2011). He discusses the classical dilemma that is, “to innovate early, but not too early”. There are according to Jalonen three different time-related uncertainties. The first one is about what the statement was in the first sentence. As time passes by, the knowledge regarding the market increases. Which means the uncertainty is higher the earlier you enter a market. This could for example be about investments, earlier in the innovation process there is a lack of knowledge and therefore it is difficult to decide when the optimal timing to know when to make an investment (Jalonen, 2011). This time-related

uncertainty is connected much to being early in the process of innovation. The second one pertains to the later stages of the process and is described by saying that the later in the process a company is, more actors are involved, which increases the uncertainty. This is because with more actors involved you need to have more knowledge about these actors, and that can sometimes be difficult, which implicates uncertainty. From the beginning there are just a few involved, comparatively to the later stages. “Temporal complexity“ is a term discussed by Jalonen (2011) and it is the third considered uncertainty. Instead of just focusing on decisions to be made timely an organization should also think of time as " a multi-dimensional social construct with wide variability". This means that innovators face temporal complexity regarding time uncertainty.

#### *Decreasing the risks through SRM*

##### *Actors*

Schumpeter (1934) claimed that actors take in charge the responsibility of bringing something new to the table within an innovation process. Other researchers have said that it is the actors that bring the solution to the need, and thus offering the market a novelty (Drucker, 1985). Actors could be a single individual, a group of people or an entire organization (Francolini, 2010). The relationship between actors carries a significant importance to it. It can be used to combine resources from several directions, in order to make a process possible (Håkansson & Snehota, 1995).



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### *Activities*

Richardson (1972) discusses how relations with actors in an organization can affect the activities performed by the company. He further explains for example how a company can own shares in other organizations and how this can affect the relationship between them. This can open opportunities which can lead to positive effects such as discounted prices and similar positive effects making activities smoother to perform.

Richardson (1972) states that for production functions (i.e activities) to be performed, there are some necessities required. For example, managerial but also material technology is needed. Activities that need the same amount of capability is said to be similar activities. Other activities that are called complementary activities must be matched in either level or specification. To be most advantageous, firms would focus on both activities that are similar and complementary (Richardson, 1972).

An activity is something that needs to be undertaken. It needs to be undertaken by

certain experience and skill inherent in human organizations. Activities within an organization can be a lot of different things. Richardson (1972) states that for production functions (i.e activities) to be performed, there are some necessities required. For example, managerial but also material technology is needed. He proceeds on to point out that activities are not something that is dependent on the state of the art.

### *Resources*

The final component that together with actors and activities, make up the three main roles of an innovation process are resources. Although resources can easily be visualized as something purely materialistic, it is an equally important component as the other two within the innovation process.

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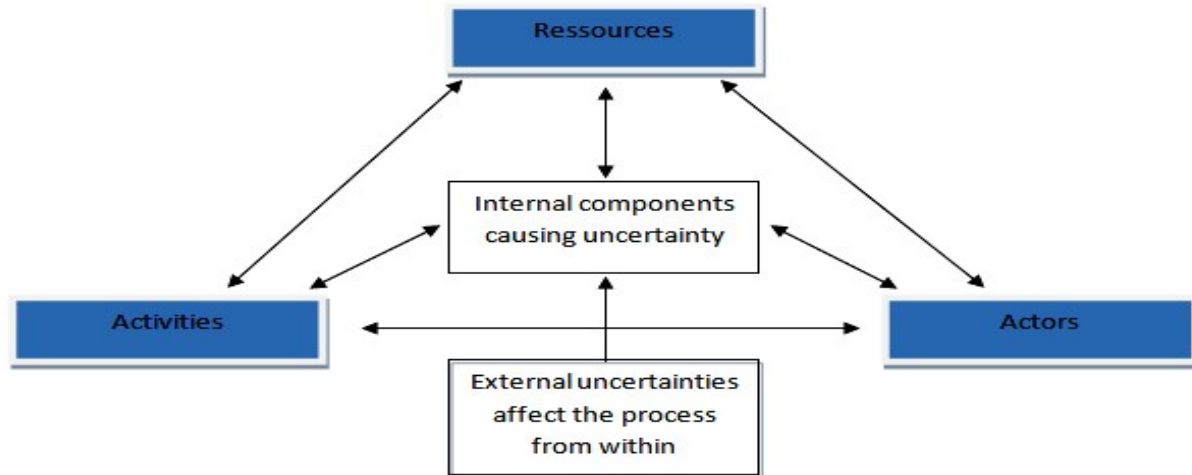


Figure 1 - The uncertainties in the innovation process [1]

Source : Simon Algotsson and Johan Öhlander (2020)

This model named Preben model illustrates how not only the internal uncertainties affect the innovation process but also how the external ones have a huge impact on the innovation process.

### *2.1.2. The strategic risk management (SRM) and the problem solving at the heart*

The literature review on this issue shows that the overwhelming majority of authors deal with the problems of corporate or anti-crisis management. Some authors pay little attention to the adjustments needed when the strategic-management authorities realize that there is an adjustment required (James and Wooten, 2007); others do not take into consideration the behavior of an organization when they begin anti-crisis management, as they concentrate on the problems which must be solved to overcome the crisis, but not on who must find the solutions and in what way (Brace, 2012). The interdisciplinary nature of management

(between corporate and anti-crisis management) comes from the research of (Weiner, 2006; Campbell and Sinclair, 2009).

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After highlighting the main risk and uncertainties that the entrepreneurs face during the time of crisis under the process of innovation, it's time to figure out the various strategies that might be employed so as to avoid, to mitigate and to absorb the risks within organizations. While the risks are mainly managed by the entrepreneurs, it seems obvious to think about ways to be drained. According to (Thomke and Reinertsen 1998), The uncertainties are resolved only as the project of innovation progresses which means once the outcomes become concrete and visible.

Crisis events in business operations happen with an escalation of misunderstandings, which occur as a result of the interaction of microeconomic systems with each other and with the external environment. According to (Cipriani and Guarino, 2008), such misunderstandings are found between:

- The quantity and the quality of production (goods and services) and the state of market demand.
- Actual and required enterprise productive capacity.
- Required volume of resources, which the enterprise needs and the availability of its output (supply), its offer prices and demand for the products.
- Actual and planned enterprise revenue distribution aimed at industrial and social development.

According to Campbell and Sinclair (2009), strategic management in a crisis is a type of management aimed at defining the phenomena of a crisis and creating appropriate preconditions for well-timed prevention, weakening and

overcoming of the problems. That activity aims to support the life of the corporation, business activity and the avoidance of bankruptcy. Crisis strategic management is a special system which is complex in character and which can completely neutralize temporal difficulties for a corporation's work (Bacon, 2006).

Strategic management in a time of crisis is the method which makes it possible to recognize the crisis and to take measures to overcome its negative consequences. The techniques of crisis management include a number of consequent steps from the understanding of the influence of the crisis on the corporation to preventing, alleviating and overcoming the different types of crisis. Anti-crisis managers must have clear system vision and they must be able to analyze a number of the interconnected problems that could lead the corporation to bankruptcy or to a worsening of the position of its staff.

The problems that strategic management solves can be presented in the following way. The first group includes the problems of prediction prior to the emergence of a crisis situation. The second group of problems is connected to key aspects of the organization's activity. The range of problems can be presented by differentiating the management techniques, which is the third problem set. This includes problems of crisis prediction and the variants of behavior of the socioeconomic system in the crisis, the problems of finding necessary information and the development of crisis management solutions. The fourth group includes conflict-resolution and the selection of staff in crisis situations.

In response to the corona virus pandemic, innovators are jumping in to help. Around the

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world, beer makers and distilleries have shifted production to hand sanitizers. For example in Italy, a start-up engineering company began quickly using 3D printers to create the valves used in ventilators. Those just-in-time valves are saving lives. When we look back on the current health crisis, there's no doubt that we'll learn that it resulted in a number of innovations: medical devices, improved healthcare processes, manufacturing and supply chain breakthroughs, novel collaboration techniques.

But there is much more to the generative nature of a crisis that leads to innovation than simply an opportunity to solve problems. Crises present us with unique conditions that allow innovators to think and move more freely to create rapid, impactful change. For learning leaders, these conditions provide us with the opportunity to do our best to help, and for our teams to do their most innovative work in the service of our organizations.

#### The key shifts

What is there about crises that breeds so much innovation? There are four key shifts that occur during a crisis that foster the conditions for new thinking and doing. Understanding these can help learning leaders seize the opportunity to drive useful change.

#### *Foster alignment*

One of the key leadership challenges in day-to-day organizational life is inspiring commitment and generating energy toward the goals of the organization. During a crisis, there can be a massive spike in energy present in the workforce.

Leaders who can appropriately focus the energy of its workforce toward a clear purpose in resolving the crisis will typically find more than just a deep wellspring of energy and discretionary effort – they will often experience a wave of new ideas, as individuals feel compelled to share insights they normally would keep to themselves. Some say that courage is defined as when purpose overcomes fear. In this way, crisis can create the organizational courage to take actions in support of a purpose that would be unthinkable in times of calm.

#### *The substantial system*

A crisis can have much the same effect, putting the spotlight on vulnerabilities, problem areas great and small, that we've been ignoring or are just plain unaware of. When a crisis hits, we are forced to confront the truth about how our systems work (or don't). The places where things could be done better or more efficiently become glaringly obvious. All of a sudden, opportunities for innovation are staring us in the face.

#### *Unfreezing the Organization*

As organizations grow, they harden their structures to create predictability, efficiency, and stability. Crises change all that. For example, the COVID-19 crisis has upended the way that grocery chains manage inventory, a process that has been refined over many years to maximize profitability by carrying smaller inventories and turning that inventory more quickly.

**Revue de l'Entrepreneuriat et de l'Innovation***Make an action*

On that last point, crisis demands movement and change – the pace of ideation, decision making, and implementation all increase dramatically. An organization that normally gets trapped in “the intense study of the obvious” now must force itself to quickly create experiments, see what happens, and experiment some more. This process of experimentation allows the freedom to test different thinking, to fail fast, to learn, and to move forward – in short, to innovate.

*Learning and development*

Times of crisis present incredible opportunities for learning, and the L&D teams are uniquely positioned to make sure that an organization's leaders are aware of and able to take advantage of the resources available to them. Many learning leaders are seeing the unfreezing of systems and thinking in their organizations, and a real demand for fast action to equip people and leaders.

Regarding technological uncertainty Jalonon (2011) describes how both technical tools and knowledge attributable to the technology could give rise to uncertainty for innovators. Furthermore, he explains how technological innovations could be divided up. There are four types and they are based on “the degree of technological novelty”. They are low, medium, high and super-high technological uncertainty innovations. To summarize, Jalonon (2011) states two things. The technological uncertainty that may emerge is firstly lack of knowledge about new technology or secondly, a lack of knowledge regarding how to use new technology.

*2.2. The impact of risk and uncertainties over the actions of entrepreneurs in the time of crisis*

Our main focus is on entrepreneurs and understanding the often blurred and shifting nature of risk and uncertainty via the innovation process in the time of crisis. Therefore, Keizer and al. (2005) have illuminated a simpler on four broad and main risks :

- Technical risks are concerned with the complexity of the technological environment and the impossibility of foreseeing obsolescence or changes, lack of technical capabilities or customers' lack of understanding of the technology;
- Market risks involve customer resistance because of perceived risks, lack of understanding of the innovation value, and difficulties in forecasting sales;
- financial risks concern the financial feasibility of a project
- Organizational risks involve the internal competences of the firm and also its ability to execute strategies and achieve targets with the most available resources.

Based on some commentators including (Kim and Vonortas 2014), it seems like these risks are hard to manage while actually all these risks can be involved in the innovation process. Therefore, the intervention of the entrepreneurial support seems compulsory.



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### III. THE ENTREPRENEURIAL SUPPORT

#### 3.1. Holistic approach

Some researchers have already made attempts to combine innovation with entrepreneurship within a model. They emphasize that the concept of creativity, innovation and change are crucial to the entrepreneurship and have been largely ignored by entrepreneurship researchers.

The first simple model called innovation based entrepreneurial process model. It highlights how environmental change driven by hostility and dynamism leads to innovation. With the influence of creativity, certain change is needed in order to bring the innovation forward. At the final, the innovation leads to an entrepreneurial event, which is defined by the innovation and their later exploitation (Shapero, 1984). The event is driven by an opportunity which is one of the most important duties for an innovation manager and entrepreneur as well.

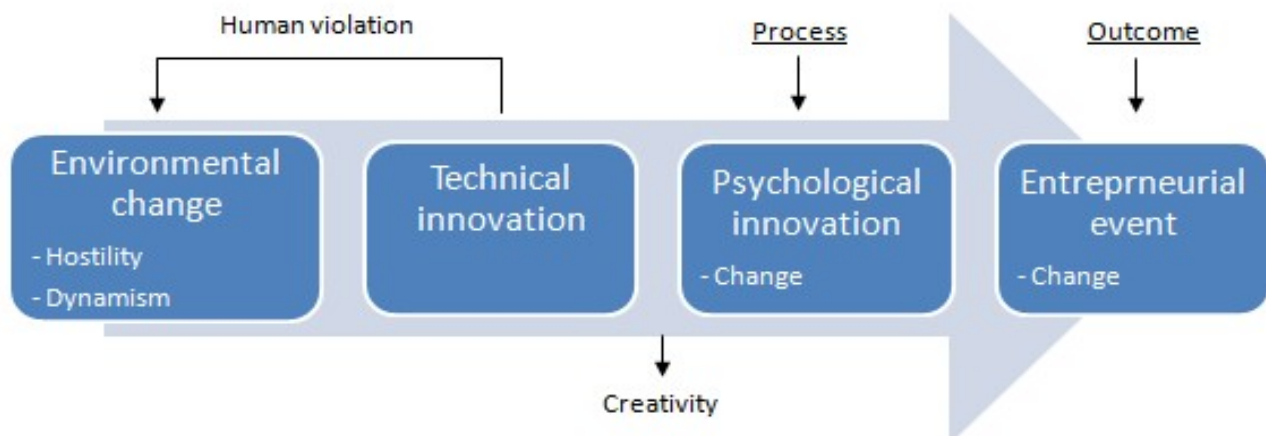


Figure 2 - Innovation based entrepreneurial process model

Source : Brazeal and Herbert (1999)

The indicators seem to reveal the importance of the innovation in the current situation as "the crisis". Therefore, technology is the crucial mean in the market. Based on the technology push/market and pull paradigm with a new need and/or a technology. Just after the idea generation, the process of innovation begins with two distinct stages : Opportunity recognition and research and

evaluation of the recognized opportunities. Taking in consideration the importance of innovation in the time of crisis and the lack of strategic risk management within many organizations nowadays, the organizational support seems to be crucial. First of all, it is important to ask about what organizational support has to do with the innovation in the time

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of crisis dependently on the strategic risk management.

According to Shaw and al. 2005, the micro-model of entrepreneurship and innovation highlights the important factors that emphasis the entrepreneurship and innovation process so as to show how innovation can be successfully managed in an environment full of risks and

uncertainty through the entrepreneurial support and the strategic risk management. This model is divided in five basic categories : Inputs, entrepreneurial catalytic transformation, outputs, contextual factors and relationships between the various elements. As adapted by the mean authors it is crucial to highlight the model as following.

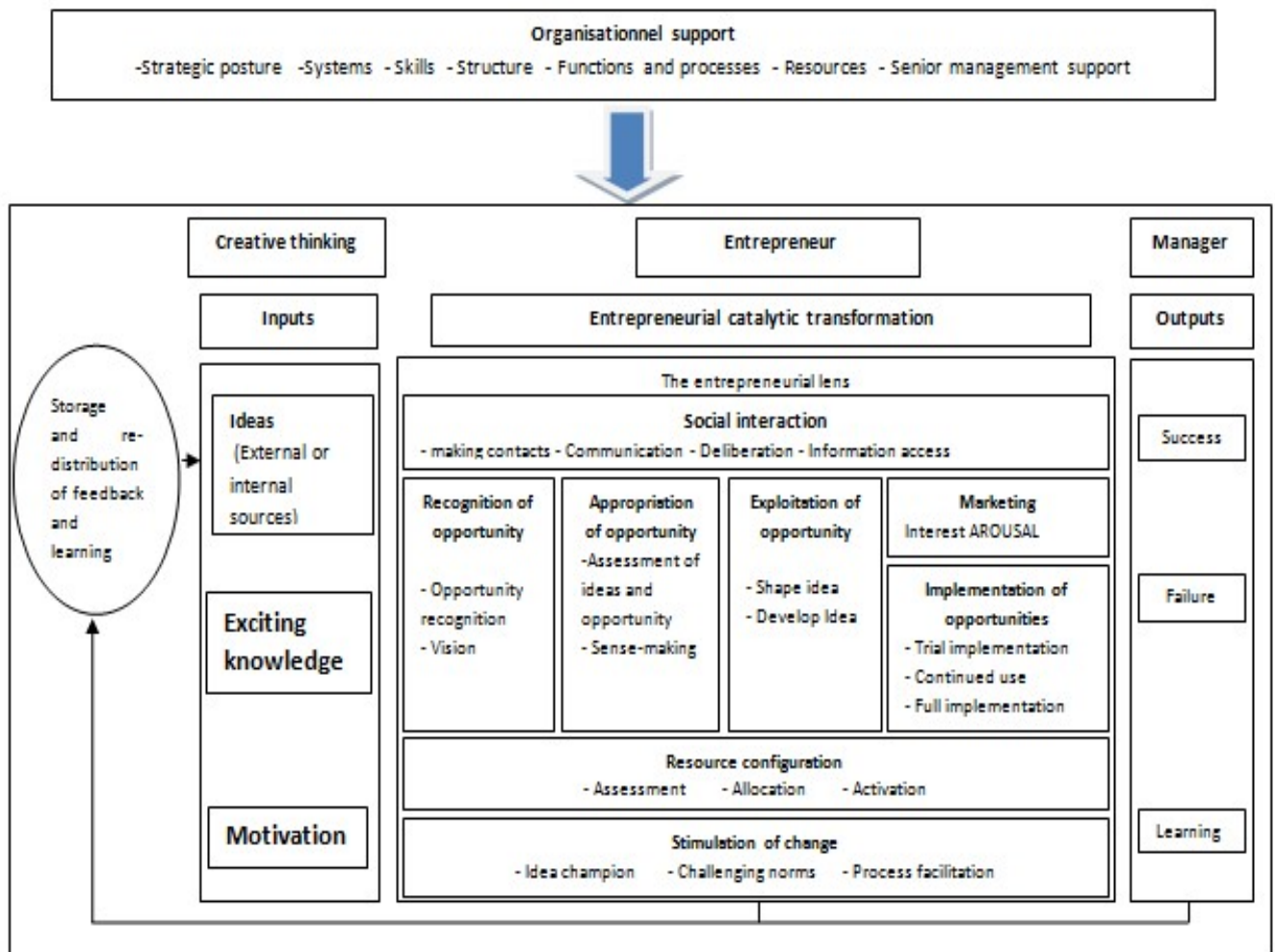


Figure 3 : The entrepreneurial support and innovation micro model

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Source : Adapted by Shaw and al. (2005)

The time of crisis is considered as a threat for the economy since it multiplies the negative issues within it economically, financially and socially. But never for the best manager, it is an opportunity for moving forward and making a good progress through creativity. In the input phase, the main trigger is creativity, as according to (Cumming, 1998), it assists in the emergence of new and novel ideas that will open and support the whole innovation process, especially the birth of an idea. Through the process below, the entrepreneurial catalytic transformation aims to push creative ideas. As mentioned before, the procedure is necessary for the entrepreneur as a promoter who proactively manages the whole process for a successful innovation process. Within the entrepreneurial process, the manager's ability of opportunity recognition, appropriation and exploitation are ultimately required. Actually, the lens acts of focal points allows various ideas to pass through and transforms the strategic opportunities into commercialized outputs through creativity.

### *3.2. The entrepreneurial support and innovation*

From the onset of the crisis, the absolute priority for entrepreneurial supporters around the world was clear: provide practical support to the entrepreneurs and provide it fast. This sense of urgency ensured that companies were equipped with the up-to-the-minute information they needed to make the right decisions

especially in the innovation case for their survival.

The organizational support also called the entrepreneurial support structure belongs to the contextual factors which are supposed to provide the flexible conditions as conducive for innovation in the time of crisis. The entrepreneurial support has different systems and practices (Roxas & Chadee, 2013; Deschamps & Sébastien, 2010; Bollingtoft & Ulhoi, 2005). The source of the support for the entrepreneur come from different forms such as : institutional, organizational, associative and informal (Roxas & Chadee, 2013; Vaszkun, 2013; Wallnofer & Hacklin, 2013; Bollingtoft & Ulhoi, 2005).

The most difficulties faced by entrepreneurs in the time of crisis are the lack of information (the uncertainties), the lack of experience or the lack of competence (Ganescu, 2012; Daurageith, 2009; Bafail, 2006; Berger-Douce, 2005). The most adequate entrepreneurial support in this particular time is training that it might be ordinary or continuous because according to (Valdivia, 2015) every type is used for a specific reason. The continuous training is an intangible entrepreneurial support useful as a mean of human development. While the ordinary entrepreneurial support is an intangible entrepreneurial support used as a mean of human development (Casillas & al., 2014; Bossche & Segers, 2013). Training is crucial for entrepreneurs and managers in order to acquire the necessary competencies, to update their knowledge, and to avoid company memory deterioration (Vaszkun, 2013; Bollingtoft, 2012). The entrepreneurial support is highly adopted by managers in case of the change among the policies and strategies in the organizations

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(Vazkun, 2013). That's why, some researches declare that training and learning are forms of entrepreneurial support that encourage the entrepreneur to make sense of a previous experience and establish a new process, protocols, and routines (Mc Grath, 1999). This situation motivates the entrepreneur to try but also the ability to make sense and to learn from errors and events. When dealing with innovation in such a difficult period, the continuous training is the appropriate support system for the entrepreneurs.

When entrepreneurs experience innovation as an opportunity in the time of crisis, it seems normally to face three mean situations called outputs (as cited before) ; Success, failure or learning. Therefore, when dealing with the innovation process, in the case of failure, certain technical skills are highly recommended. Likewise, the training centers give for the failed entrepreneur the help by offering a continuous training (Audet & Julien, 2006). The main goal of these institutions is to increase the level of insurance among the firms in risk. As a way of formal entrepreneurial support, training gives the entrepreneurs the ability to innovate intellectually without running to interveners. Otherwise, the informal support gives the entrepreneur the ability to discover and/ or to exploit the opportunities in the market, to collect the information but to inserted in a new social network. Therefore, this ability improves the mind-openness of the failing entrepreneur and pushes him to try and to retry after business failure (Abdesselam et al., 2004; Berger-Douce, 2005).

The specific interaction between the creator, the entrepreneur or the manager on the first hand and the entrepreneurial support in the other hand may help us to conduct

some possible relationships between the entrepreneurial acts and the suitable entrepreneurial support system used to perform. The majority of the previous researchers insist on the fact that the major difficulties of the managers while innovating in the time of crisis are the lack of information, the lack of experience and the lack of skills (Cadieux et al., 2007). Therefore, the choice of the appropriate and suitable support system depends on the difficulties faced in each step. Generally, the support is a mean of detecting and discovering opportunities. Hult et al (2002) argue that learning and training are forms of institutional support which make the manager create and collect information and transform it into actions by supporting innovation and creativity.

#### *3.2.1. Entrepreneurial support and innovation's phases*

Based on the phases of innovation such as : Launch phase / Continuity phase / Recovery phase. According to a research made by ( Anis Ben Salem and Lassaad Lakhal, [2] ) about the entrepreneurial support and its importance for the innovation.

#### *In the launch phase*

##### *Market research*

A market research is made especially in order to start a new project. Therefore, it starts with an idea generalization and mobilization as the starting phase for new ideas. So, once the idea is generalized by mentors, it passes to the mobilization stage. Wherein, the idea travels to a different physical or logical location. A new idea

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needs a mentor (someone other) than its originator to move it along. The entrepreneurial support intervenes as a major key of success when the entrepreneur fail in finding new markets and new opportunities. Therefore, the intervention help him to find better ways for discovering new opportunities.

entrepreneur hires some talented professionals in the domain of training. It costs a lot but it is profitable. The innovation process requires the presence of an appropriate background management as well as certain level of managing necessary costs.

#### *Advocacy and screening*

It's the time to weighing an idea pros and cons. Transparency and standardization are the mean keys of a good advocacy and screening. In this phase, the ideas are judged by experts then provide a feedback as to why the idea is good or it's bad.

#### *Experimentation*

In this phase, there is no discovery that could end up with failure. The experimentation tests the sustainability of ideas in a particular organization at a particular time and in a particular environment. It is particularly also important for the company to discover who are the customers and what would they use the innovation for. It is based on customer's favorable answer that the Banking and the insurance companies take the company for the next level. The entrepreneurial support or the provision of support services allow the entrepreneur to launch a successful project.

#### *In the continuity phase ( Management phase)*

Due to the absence of knowledge and proficiency in terms of innovation, the

#### *Commercialization*

The innovation must actually solve the problem of customers. Otherwise, the difference between invention and innovation. The majority of authors make sure that " An invention is only considered an innovation once it has been commercialized ".

#### *Strategies*

Entrepreneurial support is helping the entrepreneurs to make strategies all along the innovation process. Knowing that difficult times are crucial to make innovation a better way to get out of it. But, all along the innovation process, the strategies must be taken. Practically, they are four types of innovation : Routine innovation / Disruptive innovation / Radical innovation / Architectural innovation.

#### *In the recovery phase*

This phase must be improved by other tools especially the intervention of the entrepreneurial support or the expert's opinions. This phase tries to determine the



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experts' opinions concerning the suitable entrepreneurial support system through experiences. The objective of this tool is to determine the procedure of entrepreneurial support during the entrepreneurial process, to insist on the factors that affect the development of entrepreneurial process, and finally to show how this support impacts each entrepreneurial act.

#### CONCLUSION :

Our theoretical research includes the main propend elements about the initiative that most of successful companies take during a crisis which is the innovation. This paper includes theoretical review joined by documentation and some key shifts for succeeding in the innovation process.

The innovation process begins first of all with the idea generation or management and ends with diffusing phase while it entails too much tasks ; namely the management ideas, entrepreneuring and the project leading.

The combination of the Strategic Risk Management (SRM) with the current kinds of risks and uncertainties discussed bellow leads to manage decisions. Starting with them while the time of crisis in terms of resources, technology, market and timing, it seems crucial to intervene the main key shifts to decrease the negative impacts occurred by the crisis through the interaction between actors, activities and resources.

Researchers such as ( Drucker, 1985, Brazeal and Herbert, 1999, Beaver, 2001) acclaimed that the problems of innovation during the crisis might be solved coupling the innovation with the ability to think and to manage strategically. Therefore, the uncertainties are resolved once the innovation process start progressing meaning once the outcome start becoming concrete and visible.

Nevertheless, once the impact of the main uncertainties and risks of innovation is huge. The actions of the entrepreneurs must be guided by the entrepreneurial support. The main goal of it, is to provide practical support to the entrepreneurs and provide it fast from the onset of the crisis. It must be training as continuous form of support or informal support. Because of the lack of immaterial resources as knowledge, experience and informations in the time of crisis, the innovative entrepreneurs seem to be ensured by the entrepreneurial support to take the right decisions in their three different phases for their survival.

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