Crisis Leadership: How to cope with uncertainty and Chaos
– An optimistic view

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Abstract

Purpose – Aims of this thesis is to discuss and try to found out the requested competencies for leaders during crisis.

Methodology – According to the topic that we have selected, we determined that the appropriate methodological view to use was the systems view, because there is a system for each crisis, with its own influential elements and its own environment by using mainly secondary data but also primary data.

Findings – Crises are not necessarily harmful for an organization. They can also be sources of opportunities such as learning process, renewal and changes. The requested competencies vary according to the phases of crisis.

Research limitations – We focused our attention on the optimistic aspects of a crisis so we have limited our research by considering crisis as an opportunity. A crisis can also be represented as a decisive moment for a company; the board of management has to take important decisions under pressure to emerge out the crisis and come back to a normal situation, so we have also limited our research to the decision making process under crisis.

Originality – We used many different points of views considering the fact that this can engender paradoxes. Besides, we emphasized the optimistic side of critical events often unknown.

Keywords – Crisis, Leadership, Competencies, Opportunity, Optimistic view, Decision making

Paper type – Master Thesis
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1 Introduction

“Sooner or later comes a crisis in our affairs, and how we meet it determines our future happiness and success. Since the beginning of time, every form of life has been called upon to meet such crisis.”

—Robert Collier (American motivational author, 1885-1950)

The Terrorist attacks of September 11 (9/11) and the tragedy happened in Japan the last 11th march are well know by everybody around the world. The World Trade Center and the town of Sendai touched by the tsunami happened in the north-west of Japan were the theatre of the most mediatised crisis over the last years. In the case of the terrorist attacks of September 11, two civil planes were hijacked by Al-Quaida terrorists to the twin towers in New York. This tragic event resulted with lots of human and financial losses. In front of their televisions people have seen results and aspects of a typical crisis event. Concerning the tsunami in Japan, the region of Sendai bathed in waters, and besides the human losses a nuclear threat appeared in the town of Fukushima. Remember also the landing of a plane on the Hudson River where the self-control and the quickly decision making of a pilot of the US Airway saved the life of 155 people. These crises were unexpected and created disorganization among institutions; besides they formed uncertainty and give birth to chaos.

In general, crisis possesses a bad connotation in people mind. But the concept of crisis is not as categorical as it seems to be. Our thesis and our mind will be not only focused on the bad aspects of a crisis. Of course a terrorist attack or a tsunami are terrible events, but we want also to recognize a crisis as a crucial moment that enables an organization to be more creative or to profit of a unique opportunity to change itself to become a better one. Leaders will learn a lot from the consequences of these catastrophic events and will be better prepared for future similar crises. Moreover, sometimes leaders are the trigger of a chaos in order to put the organization in action. By this way the organization will be in a positive dynamic which should be necessary to renew for example, its mode of operation or its strategic vision.

How should a critical situation to be managed by the ones owning the power of influence and inspire the followers during those crises? Was it possible to master those events in an efficient way thanks to adapted skills, competencies or behaviours? Since the terrorist attacks of 9/11, the recent global financial crisis or the earthquake in Japan, the notion of Crisis Leadership has been in the headlines among students in the Leadership area. Immediately after those terrible events, a need for replies appeared, replies shaped by the leader who had the duty to lead the organization in this environment of uncertainty. During a crisis event, leaders do not live it alone, the entire organization is affected by that and its stakeholders will also suffer from the crisis, so a relevant question would be how leaders must accompanied their teams through a crisis?

1.1 What is a crisis?

What is a crisis? The concept of crisis is difficult to define and an important number of theorists tried to challenge it. This difficulty is demonstrated by the article entitled “Crisis” from the International Encyclopaedia for Social Sciences, the author James A. Robinson begun his article with this sentence “Crisis is a commonly used term, searching a scientific meaning”. J. A. Robinson, 1968, p. 510
Combination of visions from several theorists seems to be the most judicious line of attack to adopt in order to discuss about the highlights of a crisis. In his book “La Gestion des crises”, Lagadec (1991) decided to use several perspectives to delineate the word “crisis”. The different theoretical perspectives discussed by the following authors and theorists from different backgrounds, are composed of lessons that will enlighten our mind about the concept of “crisis”.

André Béjin and Edgar Morin (1976) enable us to be familiar with the origin and the development of the term “crisis”. During Ancient Greece, the word *krisis* possessed different significations according to the studied area. According to the religious area, it meant interpretation and choice. In the juridical domain, it formulated the idea of judgment, of a decision not coming mechanically from evidence. From the Greek Tragedy, crisis represented a milestone in the framework of the story during the theatrical. It was the moment during which the past and the future were involved in a judging process marking the course of the story. In the medical vocabulary, crisis designed a significant change in the patient’s condition and this change was specified in the time (days of treatment) and the space (infected part of the body). The concept of crisis in the medical area did not have necessarily a negative connotation, it allowed the medical profession particularly to make a diagnostic of patients and cure them in the best possible way. The combination of these different significations in all areas enables us to sum up and give a first signification of the term crisis. A crisis is a marking negative or positive event influencing an organization’s future situation where the past is taken into account, the functioning of the organization is questioned that will undergo changes specified in the space and time. Béjin and Morin (1976) also introduced the development of “crisis” concept through the centuries. Since the XVIII century, the medical concept of “crisis” was introduced in the social analysis. This importation from the medical to the social field has been simplified to the negative connotation of observations about diseases of human body. So, the analogy of the medical area was only reduced to its pessimistic point of view and crisis was only designated as pathology of the social order. In the XIX century, the term “crisis” was accompanied by bad feelings, uncertainty, fear and disorder. The political economy used the designation of “crisis” to define a paradigm which demonstrates the cyclical aspect of several economic theories. At the end of the XIX Century, the concept was used to name some psychological and social theories like the « Spiritual crisis ». Nowadays, the term crisis just possesses a bad connotation. One of the best examples is the recent financial crisis, it is impossible to think about something positive when we read or hear this famous expression. Besides, the financial crisis has touched and has been recognized by the entire world and this crisis has more than ever strengthened the feeling of confusion, fear, panic, uncertainty or disorder in the people mind.

According to Klann (2003), a crisis can appear in every organization anytime and has no limits. Due to the globalisation of the economy a simple crisis can affect corporate life more than what would be expected. A crisis does not only affect specially the organization, but also its stakeholders (such as the customers, the suppliers...) and creates a lack of confidence among shareholders. Leaders should agree that every organization is touchable because of the unpredictable characteristic of crisis. Those ones have to behave so as to decrease the occurrence risk of a crisis, decrease its duration, and attenuate its negative effects by using properly the human element of the crisis before, during and after it happens.
“Leadership is the formal or informal power and the ability to influence, persuades, motivate, inspire and use power judiciously to affect others in a positive way.”


1.2 The five meanings of a crisis

After the origin and the development of the concept, it is time to focus on the meanings of the concept of “crisis”, this will be explained through five viewpoints and will be adapted to a business view.

First, as mentioned before, in the juridical domain the crisis describes a discrimination meaning because the court has to examine and to decide in favour or not of the accused. Let’s start with the bad connotations of a crisis. In one hand, sometimes the company produces a kind of discrimination because it fired some employees or relocated the entire company leaving the country and creating unemployment.

Secondly and thirdly, the medical area comports two other interesting meanings, because the meanings for the same term are radically different. One of them described the notion of crisis as a decisive moment for the patient but the other one as pathology. A crisis lived by a company can be represented as a pathology that led the company into bankruptcy. The crisis is also a decisive moment where leaders have to take decisive decision like the moment of truth that will be introduced later. A crisis can also be represented as a decisive moment for a company; the board of management has to take important decisions under pressure to emerge out the crisis and come back to a normal situation.

As mentioned before, this meaning and the next one about the concept of crisis will be linked with the medical area. Bolzinger (1982) treats the decisiveness meaning of a crisis with a very relevant similarity with the medical status of a patient. In the Hippocratic Medicine, crisis designed the critical moment when the patient has the vital choice, either to continue fighting the disease (balance) or to lose the struggle and die (end). It is an instant characterized by a high uncertainty and fear. But the subtlety of the comparison does not stop here. Three terms are used in the Hippocratic vocabulary to define the medical process: crisis, lysis and death. The second one is interesting because it means a gradual healing. It’s accompanied of a “health schedule” realized by the medical help and is composed by decisive appointment where the patient’s organism and the disease have to struggle. Besides, the medical help is on the lookout for the slightest symptom which shows that the patient is fighting against his/her illness. In this situation, the crisis is interpreted as a sign of hope or resistance rather than a “bankruptcy”.

The third meaning for the notion of crisis and the second one from the medical view is the crisis as pathology. Some illnesses are incurable and in that case the crisis is translated as the inauguration of something that is impossible to stop. All the positive aspects of a crisis have disappeared to give place to horrific feelings. To sum up, the medical field presents to us two different significations of the crisis, “Crisis-Healing” and “Crisis-Pathology”.

The fourth meaning, Starn (1976) described the crisis as a moment of truth. All the misunderstood events that have been lived in the past have, during the crisis, a clear signification. Each actor of the organization is put in the action, their real faces and behaviours emerge as a
result of the crisis and this one allows some people to be as they are in and get out of the shadows. It is a moment of truth, when the organization is in trouble, leaders and followers are put in the action; they do not have one hundred possibilities to choose, either they fight or they abandon. As mentioned before in the decisive moment.

The fifth and last one is the crisis as an opportunity. As mentioned before, the crisis can be taken like a kind of gift. According to the Chinese vocabulary, the word used to express crisis consists of two characters: one meaning danger, and the other meaning opportunity. During a crisis, the organization has an unusual chance and opportunity to change and to create a new twist in an original way. The double signification from Chinese vocabulary of the word crisis describes the last but not the least meaning for a company. Occasionally, the organization has to put itself in a dynamic environment (chaos) to generate an opportunity to change in order to become better. Or, a terrible event can give us an opportunity to learn the consequences and outcomes of an inevitable event and approach the next one with a better knowledge and more experience.

1.3 Research question & Aims

During our thesis, we are going to study the theoretical aspects of crisis, clarify its different types, and what makes the difference. All crises are different, have different implications and different consequences, this is why it is important to distinguish the existing types of crisis.

Another side of the theoretical aspect of crisis is the leadership concerning a crisis. How the crisis is detected by the leader, what should this one do when it is perceived? After the crisis, the leader has to extract the different lessons to learn from it, and to implement them within the organisation. So, the leader will also learn how to implement a change, which is an involuntary change in this case.

1.3.1 Research questions

- What are the different types of crisis and their specificities?
- How the crisis is detected by the leader, what should he/she do when it is perceived?
- How are the sequences of a crisis, what are the phases?
- What are the requested competencies for a leader to cope with a crisis?
- What are the appropriate decision making processes to adopt under pressure and their key elements?
- How can leaders perceive a crisis as an opportunity?
- Does a crisis bring opportunities to the organization?
1.3.2 Aims

- Describe different types of crisis according to different ways of categorization
- Describe different phases of a crisis and extract key skills for leaders, for each of them
- Theoretical presentation of different models of decision making
- Analyze the research about the organization's situation after crisis, and observe if any positive aspect occurred.
- Use some empirical illustration to support the introduced theoretical aspects

Therefore, decision making under pressure will be explored in depth. A leader has to be able to master his/her emotions and the emotional factor of his/her team. Leaders are not lonely; they work in an organization and are surrounded by a team which should also be able to cope with a crisis.

In the introduction, we had underlined several meanings of a crisis and some of them were divergent. In one hand, crisis can be perceived as an opportunity and as a decisive moment where organization had to take important decisions and by the way have a possibility to change and become better. In other hand, the crisis was described as a pathology where there is discrimination (firing) and no hope of renewal is possible. So, we decided without pretention to only focus our mind on the first perspective in order to show the optimistic side of a crisis.

The time dimension takes a preponderant place in the concept of crisis. Many articles and books put forward “before”, “during” and “after” the crisis and each of its phases involve different aspects of the leadership sphere. This thesis will mostly focus on the "during" and the "after" but the notion of “after” will be shortly introduced in the first chapter.

Those following research questions are linked with the “during crisis” phase. Historically and nowadays, the activity of leading was and is a crucial and difficult task for leaders, especially in period of crisis, where points of references are massed up. Also, the crisis may have different meanings depending on the perspective, and one of them highlights the importance of the crisis as a decisive moment in the organization where the leader has to make crucial decisions for the company. The organization asks for its leaders to be catalysts and to be effective in the decision-making process.

Therefore, decision making under pressure will be explored in depth. A leader has to be able to master his/her emotions and the emotional factor of his/her team. Leaders are not lonely; they live in an organization and are surrounded by a team which should also be able to cope with a crisis.

The “after crisis” phase is also important for the organization. If a crisis disappears, the organization has the duty to learn about it and transform it into an opportunity to grab, otherwise the next crisis risks to be the last crisis of its life. So, the company has to keep in mind that it has
to learn about the crisis and not to repeat the same mistakes the next time in order to avoid a crisis or to pass faster and easier through it.

The topic of Crisis Leadership is interesting and relevant for future leaders because those ones need to learn what are the different aspects and behaviours to adopt or avoid during a crisis. Each leader will live this kind of situation in his future career. By doing this work, we hope that our thesis will bring them useful knowledge so as to be better conscious and prepared for this situation. Today, a crisis can happen at any time and its origin could come from everywhere, especially due to the globalisation. Thus, a crisis spreads more easily and quickly among organisations, but also the consequences on them became heavier. The global financial crisis of 2008 is a quite perfect illustration of this phenomenon.

As mentioned during this introduction, the research questions of this work are to discuss about the appropriate characteristics and behaviours that might be adopted by the leader in circumstances of crisis. Also, the effects and modifications brought on the decision making process during the crisis. Besides, we will deal with leader’s emotions during the decision making process. Finally, we can learn a lot from a crisis, and transform it to an opportunity, this will be developed too.
2 **Methodology: Crisis Leadership: How to cope with uncertainty and chaos?**

“Methodology is a mode of thinking, but it is also a mode of acting. It contains number of concepts, which try to describe the steps and relations needed in the process of creating and searching for new knowledge.” Ingeman Arbnor & Bjorn Bjerke (2008)

Ingeman Arbnor & Bjorn Bjerke (2008) pay special attention to the concept of “Creator of Knowledge”. To explain the concept, Bjerke uses the unconscious assumptions of the reality of the searchers/investigators. If a searcher investigates using unconsciousness and naivety, he will simply confirm the existing knowledge. But if he appeals to his/her conscious, he will create new knowledge.

2.1 **The problem studied?**

We have chosen this topic because a crisis can happen everywhere and anytime in so many circumstances, not only within companies. Also, in this case the changes made were not expected and their consequences are less predictable, so effectiveness is a real challenge for leaders. We did not want to focus specifically on a specific discipline (finance for example), because working on this domain of study which is applicable on different area is more interesting. In crisis, the leader has the essential role of taking important decisions which will have heavy impacts on the situation. Oppositely to people mind, crisis is not only financial, it could be natural, technological, crisis of malevolence and so on.

The aims of this thesis is to discuss and debate about the most appropriate competencies that leadership have to master in order to cope with a crisis, how to manage and lead during the crisis and what to learn from that. We will try to analyze the subject with different point of view, among other things the emotional aspect, the personal traits, the responsibilities, the followers, etc...

2.2 **Choice of Methodological view**

According to the topic that we have selected, we determined that the appropriate methodological view to use was the systems view, because there is a system for each crisis, with its own influential elements and its own environment. According to Ingeman Arbnor & Bjorn Bjerke (2008), the System View explains the links between different relationships within the organization. Compare to conventional models, which focus on each actor one by one instead of looking the great picture, systems theory allows us to describe its entire functioning. It is crucial to precise that the main part of this thesis is theoretical, and in order to better corroborate this one, some illustrations of study cases are introduced to give a better understanding to the lecturers of the theoretical context. This approach seems to be appropriate for our thesis in order to explain means which are pictures of parts of reality. Some interpretations (metaphors and pictures) have also been done to understand the different phenomenon.
2.3 **Different actors:**

In our case, the given product (the effectiveness of leadership during a crisis) is achieved by different actors such as leaders and followers and of course organizations.

2.4 **Data, Case studies:**

In order to support the system view, several cases of crisis (independent of each other) have been studied. Those ones have preferably been chosen among different kind of area, like political, environmental, economical, technological... Like this we have had different perspectives and views of all the relevant aspects concerning the leadership.

In our topic, we studied different cases, so it is evident that the knowledge creating is qualitative. During a crisis the environment is enough unstable and unpredictable, so we think that it was more appropriate to add case studies in order to better explain this wider context. Since the data’s are abstract, we needed to make lots of interpretations to understand the phenomenon of crisis. However, the answers that we have found out are typical answers depending on the context and to so many other variables. So, the answers are not valid for every case of crisis and cannot be used as a given solution for every case. The cases that we have chosen are well-known crisis, which are in different domain of area, not only financial. To explain the studied topic, after having analysed the case we referred to the theoretical knowledge so as to explain what went well and wrong in the case, and extract conclusions from it. The necessary and linked theories to the topic have been treated and put in the thesis in order to understand all the theoretical side of the leadership during a crisis.

2.5 **Techniques for collecting data:**

According to Ingeman Arbnor & Bjorn Bjerke (2008), there are two major categories about the data collecting, the primary data which consists in collecting new information, and the secondary data where the principle is the using of previously collected data. Due to the difficulties to collect primary data in this topic, we used mainly secondary data, then we observed crisis and extracted the relevant points via other information sources (media, books, articles, thesis,...). We have also used primary data by doing an interview with Giuseppe Pagano about the past and actual political crisis in Belgium. Of course, due to the difficulties of collecting primary data, we already knew that we were going to use mainly secondary data.

The selection of our systems were commonly based on crisis environment where the problem studied covers the successes or the failures of leadership styles during crises and what could be learnt from the consequences of the different decisions.

2.5.1 **Primary data**

According to Ranjit Kumar (2005), the primary data are simply sources that provide first hand information. Pervez N & Ghauri, Kjell Gronhaug, agree and said (2005) Primary data’s are original data’s collected by us for research problem at hand. Additionally, Nicholas Walliman (2001) introduces the primary data like that “Primary sources are those from which the researcher can gain data by direct, detached observation or measurement of phenomena in the real world, undisturbed by any intermediary interpreter” (p205).
As show the following figure from Ranjit Kumar (2005), there are several types of primary sources. The primary sources are composed by “observation”, “interviewing” and “questionnaire”. In our thesis we used only the interview as primary data, so we focussed on it.

2.5.2 Interview

According to Ranjit Kumar (2005), the interview is a method of amassing data’s from individuals. Interviews can be classified according to different flexibilities and according to the interviewer’s style. For the interviewer’s style, in one hand, there is the interviewer having the freedom to formulate the questions like he desires and in another hand there is the investigator posing strict questions decided beforehand.

Our interview with Giuseppe Pagano was mainly a general discussion about the actual political. However, at the beginning of this interview we precised that our aim there was to emphasize Jean-Luc Dehaene’s leadership during the past crisis. So, after having explained how these crises occurred, our interviewee directly started to talk about Dehaene’s role and leadership. We had already prepared some specific questions before the interview started, but Mister Pagano answered those questions by himself during the discussion without the need to ask those questions.

2.5.3 Unstructured interview: Oral history

The level of flexibility of our interview that we have realized with Mr Pagano lies halfway between an unstructured and a structured interview. We decided to begin the interview with a dialogue accompanied with spontaneous questions but we wanted in another hand to have responses about some specific questions which were prepared. According to us the oral history is the type which corresponds more to our interview with Mr Pagano. The topic of the interview
was the current crisis in Belgium and also the crisis which has been lived by the Belgian government in 1989. The interview was a mixture of gaining information about historical events narrated by the interviewee and questions about specific characteristics of the leader incarnated by Jean Luc Dehaene former minister that has solved the crisis in 1989. But in general, interviews possess its advantages and disadvantages.

![Diagram: Types of Interview](image)


### 2.5.4 Advantages

It is the best way to appropriate complex situations. If the area studied is sensitive or complex during an interview, the interviewee has the time to prepare his/her answer in an easy way, to make to answer visible and understandable for the interviewer. In our case, it was helpful because the topic of the crisis in Belgium is very complicated.

It is possible to collect in-depth information. For our topic we wanted specific information about the leadership style of Jean Luc Dehaene former Prime Minister that has solved the crisis in 1989.

Questions during the interview can be explained. If the interviewer has posed a question misunderstood by the interviewee, he has always the possibility to repeat the question in a different way in order to receive the expected answer. During our interview, we have met this situation only once.
2.5.5 **Disadvantages**

Several disadvantages characterized interviews; the first is that interviews are time-consuming and expensive. In our case, the interviewee Mr Pagano is living in Belgium, so we had to travel to Belgium in order to meet him and realize the interview.

Secondly, the quality of data depends upon the quality of the interaction. Greater the interaction between the interviewee and the interviewer is good, greater the quality of the information collected will be good. The interviewee was our teacher during two years, so we knew each other well before to do the interview. So we can think that the quality of the information is pretty good.

Thirdly, the quality of the information depends on the quality of the interviewer. For us, it was the first time that we did an interview, in this case the quality of the information mentioned before can be questioned because of our inexperience.

And finally there is the interviewer bias. In fact, the meaning of a response can be rightly or wrongly interpreted by the interviewer. In this case, we are in the impossibility to affirm if our interpretation of the responses is right or not.

We used and interpreted the responses collected during the interview to reinforce our theoretical reasoning but the reader has to keep in mind these disadvantages.

2.6 **Secondary data**

As said before, during our thesis, we used a lot of secondary data, so it is important to enumerate advantages and disadvantages of this type of data. According to Stevens, Loudon & Wrenn (2006), there are four advantages and four disadvantages for the secondary data.

2.6.1 **Advantages**

Firstly, *low cost*, the “cost” of secondary data is cheaper than the primary data. The only cost required to find secondary is time.

Secondly, *speed*, this type of data is easy to find and to obtain and do not necessitate a great loss of time.

Thirdly, *availability*, some types of information are only available if they are founded under the form of secondary data. (Census information)

And finally, *flexibility*, secondary data includes an impressive number of varieties.

2.6.2 **Disadvantages**

Firstly, a poor “*fit*”, as said the authors (2006), “the secondary data collected for some other research objective or purpose may not be relevant to the research question at hand” (p.73)

Secondly, *accuracy*, some secondary data have the probability and the risk of coming from a secondary of a primary source. And so, the value of the secondary data can be very poor.
Thirdly, age, sometimes the age of the secondary data can be important. The quality of the data is not questioned but it is more a question of up-to-date. In a dynamic world as we know, information is quickly obsolete.

And finally, quality, there are a multitude of criteria that define the quality of secondary data (collection method, how it was collected, field procedures and so on). And verifying them, it is almost impossible and would take too much time to check. So, the quality of secondary data is often to put between quotation marks.

2.7 Reliability and validity

Two important things should be done carefully during an empirical research in order to be sure that this one is realized properly to be trustworthy, which are the reliability and the validity.

Bryman and Bell (2007) tell us that the notion of reliability is deeply involved concerning the accuracy of measures. They continue by explaining that no less than three different elements are implicated concerning the reliability of a measure, which are stability, internal reliability and inter-observer consistency.

Firstly, Stability refers to the fact if a measure vary or not over time, so if it is stable or not. Like this, it would be possible to describe the results obtained from a measure as stable if they do not fluctuate significantly. Secondly, concerning the internal reliability the important point is if the different indicators that constitute the scale are consistent or not, so if the results are linked or not to other indicators. And thirdly, the inter-observer consistency has to be paid attention in situations where researchers have to make subjective judgements, which could imply a loss of consistency in the decisions they take (this could be about the categorization of the data for instance).

Concerning validity, Christensen (2007) explains us that it concerns the accuracy, the truthfulness, or exactness of an inference made from collected empirical data. Therefore, validity is not about the form of research or its method, but is more about the precision and exactness of the deductions that researchers make from evidences, in this case the research studies. However, we have to pay attention to another subtlety during a research study, due to the fact that the inference’s validity is dependant of all the data we collect, we have to be certain that our empirical findings are exact and true at the very most.

Reliability and validity could seem really similar for some people, but they are not so of course. However, an important link between them both exists, reliability is strictly necessary in order to obtain validity. But we can also have invalid results and reliability at the same time.

2.8 Measurement techniques and techniques for controlling reliability:

Due to the fact that we used cases studies of crisis, the measurement technique used in the systems view is more qualitative rather than quantitative. So, we had to interpret the collected data. Besides, the creation of knowledge would be increased, in view of the fact that our cases are from different areas as mentioned before.
The main goals were to understand the leadership during the crisis and its consequences (changes) after the crisis.
In this chapter, the crisis will be introduced and defined thanks to different kinds of categorization. The competencies that leaders need during the different phases of a crisis will be also presented and deeply explained. One paradox will be mentioned to keep in mind that leaders have to juggle between chaos and control. And finally, one of the categorization mentioned in the beginning of the chapter will be especially explicated.

3 Crisis and its facets

3.1 Introduction

People usually think about huge events and disasters that menace human being when the topic is about crisis. According to James & Wooten (2010), in times of crisis what are really needed are key actions and an impressive leadership. A crisis brings a hard atmosphere to cope with for everyone who is touched by it, and leaders do not often succeed in such situations. This is probably the most difficult times that they have to live in their work life.

3.2 Defining Crisis

According to H. James and Wooten (2009), crises reflect a critical situation where the organization knows a crucial phase of its existence and has a heavy impact on its working. A crisis is not a simple problem; it is distinguished from a non-crisis strategic issue because crisis is not predictable and is followed by unpleasant feelings like pressure and ambiguity. This situation asks for a process of resolution and requires a fast decision making process from leaders. Each crisis possesses its specific characteristics such as the frequency of the occurrence, the effects on stakeholders or the impacts of publicity.

A crisis is a disruption of the actual situation due to any kind of event influencing heavily the organisation’s functioning. The disturbing event could be from different origin out of control, coming independently and suddenly. The crisis can occur in different field and area, which makes it more attractive for the researcher. After being finished, a crisis marks the organisation deeply by changing its balance and the way of operating within this one. This changing brought by the crisis is established permanently and touches everyone inside the organisation.

During a crisis, the rules of the game change, the leader cannot act anymore as he usually did. The leader does not know what will happen, the consequences for each decision remains unknown. Besides this situation, the followers are waiting for an effective leadership from the leader. They hope to pass this crisis successfully with this leadership adapted to this emergency situation. In the case of crisis, a huge confidence between leader and followers is needed in order to better apply the taken decisions, and then the leader should establish this confidence by taking decisions which make sense among the followers.
Dutton explains that crises are a threat toward organizations and will always be so. However, she adds that we have to differentiate a situation of crisis from a problem, because crisis brings time pressure and ambiguity. An issue can be described as a crisis by the organization if this one is qualified of very important, immediate and uncertain. Pearson and Clair present to us a parallel definition of crisis, which is “a low-probability, high impact event that threatens the security and well-being of the public, and is characterized by ambiguity of cause, effect, and means of resolution, and consequently requires decisions to be made swiftly.” So, when we observe diverse definitions of crisis it may be possible to extract three relevant points separating it from a problem, which are ambiguity, high stakes, and urgency. Besides, the author explains that crises are distinctive, due to the infrequency in their occurrence, their effect on stakeholders and impact of publicity.

3.3 Problem versus Crisis

After having defined what a crisis event is, we will now try to explain the subtle difference between a problem and a crisis. These both notions might sound quite similar to people, which is a mistake. This understanding needs to be corrected, otherwise the diagnostic would be wrong, and the treatment of the disease inappropriate.

There are four important features concerning a crisis, which also make its difference with a problem. The first point is the rarity; opposite to a problem, which could appear usually, a crisis is a threatening event happening rarely. The second feature is the significance; this means that a crisis or the mismanagement of this one can heavily damage the organization’s life on the long-run, or at least consume lots of means. The third characteristic is the stakeholders of the organization; those ones will probably be affected by the crisis touching the concerned organization, even if there are boundaries (geographic for example) between them. By using the term stakeholder, we mean all the actors (apart the shareholders) having an influence on the organization’s decision making via their view and desires. The stakeholder model supposes that besides the shareholders’ interests, executives and managers have also to pay attention to stakeholders’ needs and interests. This model brings heuristics to leaders, which help them to put stakeholders forward during the crisis in order to use those ones to solve the different issues in the crisis. The fourth and last point differentiating a crisis from a problem is the publicity; a problem happening within an organization would become a crisis as soon as it attracts media’s attention or an important stakeholder’s one.

3.4 Categorizing Crisis Types

Crises can be categorized in many ways according to the selected dimension by the researcher. We will now present to you some categorizations of crisis in order to make clear how those events can be differentiate.

According to James and Wooten (2010) the domain of crisis is so huge that it is possible for researchers to classify it in a large number of types. The Institute for Crisis Management (ICM) – a consulting firm in this area – has defined two primary types of crisis, which are the sudden crises and the smoldering crises.

A sudden crisis can be described as a major and unpredicted event which will interrupt the daily life for a while within the organization. As typical example of sudden crisis we can cite
natural disasters, it is unpredictable and poses a limited threat. A *smoldering crisis* is a crisis that begins as a little problem and then grows up until becoming a crisis because stakeholders know it. In this case, the fact that the problem becomes public is the result of mismanagement.

Another typology is explained by Coombs and Holladay (1996), their crisis typology is based on two dimensions that are the *external control* and the *intentionality*. In turn, the first dimension (*external control*) is formed by an internal and external control, the internal one is a crisis due to someone or something within the organization (as we could deduce by its appellation), and oppositely to this one, the external control represents a crisis having a source out of the organization. The second dimension of this typology, *intentionality*, is also divided in two branches: intentional and unintentional; the intentional designates a voluntarily action inducing a crisis. Opposite to that, in the unintentional case the crisis inducing action is not done intentionally. With this typology, the authors have determined four different types of crisis, which are:

1) *Accidents* (unintentional and internal)
2) *Transgressions* (intentional and internal)
3) *Faux pas* (unintentional and external)
4) *Terrorism* (intentional and external)

Mitroff and his colleagues (1993) propose us a crisis typology too, based also on two primary dimensions. The first dimension is about if the crisis is inside or outside of the organization, and the second one refers to the crisis’ origin, if it is caused mainly by technical factors or by human (organizational) factors.

A last typology that we would like to present from James and Wooten (2010) seems interesting by the fact that it establishes characteristics for the organization in order to take easily proactive measures, this with the intention of keeping away from a potential crisis. The first dimension of this typology is focused on the predictability, so if the crisis is *predictable* or not. By definition, a crisis would be predictable “if place, time, or in particular the manner of its occurrence are knowable to at least a third competent party and the probability of occurrence is not to be neglected.” This means that a crisis event can be described as predictable if that event has a probability to appear, and if this probability goes beyond a certain level. The second dimension of this crisis typology is about crisis’ *influence possibility*. This dimension is helpful in the prevention from crisis and in the management of this one. So, it may be possible to influence a crisis by attacking its reasons if the (plausible) replies are known and are practicable.

From these both dimensions, Gundel (2005) introduced four crisis types according to the predictability (easily or hardly predictable) and the influence (easy or hard to influence):

1) *Conventional crises* have a high level of predictability and are easy to influence because the possibilities to do so are known.
2) *Unexpected crises* cannot be predicted but are easy to be influenced. It is then impossible to prevent this kind of crisis because of its unpredictability.
3) *Intractable crises* are predictable but have a restricted influence possibility, which makes them more threatening for the organization and its stakeholders.
4) *Fundamental crises* are most dangerous one among these four types as a result of the unpredictability and the impossibility to influence them. Therefore in front of this kind
of crisis, leaders should already be aware of this and understand their inability in that case.

To conclude this part, we can say that day after day organizations are more complex, researchers who worked about the domain of crisis leadership have developed many crisis typologies. Those typologies have been developed from some features described as relevant by researchers, which are for example: the cause (origin) of crisis, organization's stakeholders, the different strategies to solve crises, and the different means to keep away from crises. (p 29)

3.5 **Another perspective: Crisis categorized according to danger and organization’s reputation**

3.5.1 **Introduction:**

Each crisis has its characteristics and aspects, it is why there are a lot of types of crisis, each different compare to the others. A crisis can be differed by its nature, length but it can also be categorized by its level of brutality. Gene Klann (2003) uses the level of severity and its impacts of the crises on the stakeholders of an organization to classify and distinguish crises between them. Klann (2003) introduced 3 levels of severity. First at all the severity of the threat is classified according to the dangerousness (danger of death or injuries) of the situation and the degradation of the reputation.

**Level 1:** This level concerns the image and the reputation of an organization. The organization will be touch by a crisis because one subject on is hierarchy like a key leader have made a mistake such as ethical or professional. For example a key leader is accused of racist remarks towards employees of the organization. The level concerns also the wrong decision given by the organization and its bad aftermath on its reputation. For example, the organization does not accept changes about its old infrastructures in order to be more eco-friendly. At this level the physical integrity of the stakeholders is not questioned.

**Level 2:** At this level, the situation includes physical danger for the stakeholders. There is the possibility that some people are injured and seriously loss of reputation for the organization or a combination of the both. For example, a railway company makes a mistake about traffic lights and some people are injured. The physical integrity of the stakeholders is touched and also the reputation of the company. For this level, the combination of loss of reputation and physical danger can be illustrated by the horrible situation of France Telecom. Actually, the reputation of this organization is very awful. In France Telecom, the number of employees who committed a suicide is impressive. During 2008 and 2009, the number of suicides was 32. The last is dated 6th April 2011 [http://www.lemonde.fr/societe/article/2011/04/26/france-telecom-un-salarie-s-est-suicide-en-s-immolant-par-le-feu_1512911_3224.html]. This wave of suicide has obviously affected the reputation of the organization and it include more than injured people. We put this crisis in the second level because the last one, the loss of life is indirectly provoked by the organization and even with these horrific events, the existence of the organization is not in danger.

For the physical integrity, it seems appropriate to add animals/environmental areas in stakeholders touched by the crisis. It seems ridiculous for few people but when animals or
specific places are dramatically touched by an event, the organization in question is awash in criticism and reputation is heavily damaged.

For example, the sinking of the oil tanker “Erika” that dumped thousands of gallons of oil along French beaches in 1999 <http://www.lexpress.fr/actualite/environnement/total-juge-responsable-de-la-pollution-de-l-erika_727311.html>. Total, the responsible of this oil tanker has seen its reputation significantly diminished.

**Level 3:** This level defines a critical situation where there is loss of life, significant damages and the existence of the organisation is in real danger and one more time the combination of the previously items is possible.

### 3.5.2 Comments

Obviously, an organization can recognize the 3 levels but not necessarily in different time of its existence and the consequences will be different. During the 9/11, according to the part of the town, New York and its Major have been confronted to the level 2 and 3. More the organization is confronted to a high level more the crisis tends to the chaos that is defined by a lack of information, a huge destabilisation of the emotions and heavy impact on the future of the organization. The emotional aspect plays an important role in all the levels. It can be the vehicle of negative and positive behaviour. Negative feelings are represented by the fear, anger, anxiety, and desire of revenge and so on. And the positive catalyst from a crisis can be translated by self-sacrifice, courage and may prompt employees to excel. During a crisis the emotional aspect is crucial and the leader must be conscious about it and act accordingly.

### 3.6 Phases of a Crisis (Pearson & Mitroff)

According to Pearson and Mitroff (1993) in people mind crises happen suddenly, however reality is quite different, because research has shown that crises appear gradually. By observing crises, researchers have determined (at least) 5 chronological phases during this event. A good understanding of these phases would be useful for leaders and managers in order to better manage the crisis.

### 3.6.1 Phase 1: Signal Detection

A leader can understand that something wrong or unusual is going on by noticing some early warning signs in many types of crisis. However, this is definitely not a valid rule for all crises, a generalisation cannot be made since the early warning signs are unnoticeable, or do not exist at all in several cases of sudden crisis (for example a natural disaster). Unfortunately, leaders usually miss those warning sign because of denying the reality of crisis, they clearly think that crises happen always in other organizations than theirs. Another case where leaders miss the signal is when the crisis is partly caused (so contributed) by their decisions.
3.6.2 **Phase 2: Preparation/Prevention**

“You need to crush the snake’s head when it’s still little”

– Turkish proverb

In this phase, leaders are involved in actions to prepare the organization for the crisis, and even to try to avoid it. Those actions consist in generating plans and procedures in that way. One thing should be clear during this phase according to Pearson and Mitroff (1993), leaders’ target should not be to avoid all crises, because this is simply impossible. Instead of this, they have to be more reasonable rather than focussing on preventable crises in order to better manage those ones.

3.6.3 **Phase 3: Containment/Damage control**

This phase is an important phase before passing to the next one, because it consists in (activities) restricting the different threats to the organization due to the crisis. Those threats could be reputational, financial, and from other kind of it. However, these activities take lot of time and concentration of the management when the crisis is happening. Also, we have to precise that these activities are often described as Crisis Management.

3.6.4 **Phase 4: Recovery**

This phase is a bit like the consequence of the activities inside the previous phase, and its aim is to get back to the usual situation, so to finish the crisis situation. At this level, an observation made by researchers is that leaders of the organizations which lived a crisis try to restore confidence among their stakeholders, telling them that the situation has recovered or is in the process of recovering. Here, leaders managing the crisis should have some initiatives (on the short and long-run) in order to come back to a normal situation.

3.6.5 **Phase 5: Learning**

This last phase consists in extracting, obtaining, deducing new information useful for the organization. Nevertheless, when leaders try to manage a crisis they might adopt a reactive and defensive position, which would unfortunately stop from learning. Of course, all the previous phases remain valid for every organization living a crisis, even those adopting learning position, but compared to others those ones will understand the essential reasons having provoked the crisis. This understanding in this phase will be useful for the future so as to make easy the essential changes in organizational systems and methods.

3.7 **Phases of a Crisis (Sezgin)**

Here is a perspective about the phases of a crisis a bit different. According to Sezgin (2003), the chronology of a crisis is divided in six phases, which are:

3.7.1 **Phase 1: Avoiding the crisis**

The author explains that the first phase of crisis management is naturally its avoidance, and continues by telling us that this phase is usually the less expensive one, but in spite of this fact
that phase is often completely skipped. Maybe because most of leaders believe that crises are unavoidable in organizational life.

3.7.2 Phase 2: Preparing to manage the crisis

Many leaders do not pay attention to make plans for future crises, and prefer not to spend time in that. The second phase of crisis management is about getting ready to the conditions that would appear in the case where the means of prevention became useless. It consists in preparing plans to avoid bad consequences.

3.7.3 Phase 3: Accepting the state of crisis

This phase is really important for crisis handling, here leaders accept the presence of a crisis. It is psychologically crucial, because you need first to make a diagnosis to treat the illness.

3.7.4 Phase 4: Freezing the crisis

At this level priorities are defined, and the “bleeding” has to be stopped. The difficulty lies in taking important decisions in a short time, so leader’s determination is quite decisive. The main issue in this phase is information, because either there is not much information or there are too much of it to create confusion about what is important and what is not.

3.7.5 Phase 5: Solving the crisis

Speed is the key element in this phase; in other words the leader has to act quickly and cleverly in order to solve the crisis.

3.7.6 Phase 6: Taking advantage of the crisis

This final phase of crisis management concerns the reparation of damages caused by the crisis, but also to learn about organization’s weaknesses, and how to improve the leadership for future crises.

3.7.7 Comments

It is really needed and recommended for leaders to understand the different phases of a crisis, how to distinguish crises according to the typology, and to differentiate a crisis from an organizational problem in order to improve their leadership skill to effectively do what is expected from them during a crisis.

3.8 Paradox Chaos-Control

After having seen the crisis in itself, let’s have a look now on a paradox between two relevant notions in relation with the leadership area: Chaos and Control. This paradox should be kept in mind by the leader before learning the competencies that we will present in the following.

De Wit and Meyer (2010) explain us that leaders control and decide about the future life of their organization, and they enjoy it. Because of that, they have a fondness for power, and use this power to influence people within the organization in order to lead this one in the way they desire. In other words, a leader likes to have power and the duty of leading the organization.
However, the authors precise that leaders also know they cannot control people in the organization as machines, these people have to act by act by themselves for the usual tasks, not because they should but because they are human beings and need a certain freedom. Leaders have to empower them in order to make them able to take initiative and handle different situations alone. In other words, leaders should abandon the idea of total control so as to make the organization more efficient. Besides, leaders need to understand that it is quite impossible to lead an organization entirely from the top and then the renunciation of some control seems as a need for the organizational life.

From what was explained above, we can see a paradox appearing in front of us, on the one hand the leader has to impose his vision concerning the organization via a ‘control’, and on the other hand this one has to give up some of the needed control, which could lead to an organizational ‘chaos’.

De Wit and Meyer (2010) tell us that leaders cannot let the organization alone and lead itself without any control. The organization has to fulfil its aim and objectives, due to this a leader has the duty to lead the organization accordingly, by being sure that the needed changes are brought and the adaptation to the environment is realized. Of course, this is only possible with a certain level of control inside the organization, certain authority in order to bring the needs in change provoked by the environment. At this level, we need to emphasize that this needed control is not the same as the control for the daily tasks, but concerns especially the strategy and other vital characteristics about the organization, so leaders need ‘strategic control’, opposed to ‘operational control’. The difference is that strategic control means the authority of the leader on changes concerning the organizational system, and not on current activities inside the organization.

Later in our thesis, we try to explain that a period of turbulence is needed to obtain a strategic change and renewal. De Wit and Meyer (2010) by explaining that without any control of the leader an organization would go to a chaos. Of course nobody desires a chaos, but a certain level of disorder and turbulence is necessary in order to reach an organizational renewal and change. This disorder will encourage people to generate innovation and creativity, thank to the leader who will allow them by renouncing partly to control entirely the organization.

The conclusion is that, leaders who want their organization to progress with innovation and creativity in order to use fully the potential should not try to control everything from the top, but rather empower people, even tolerate some chaos to appear, and try to find the good balance.

3.9 Critical competencies at each crisis phase

According to Bass (1985), crisis leadership involves leaders learning some behaviours if they want their organization to face up to a crisis, through its different phases. An organization will be more resistant to crises if its leadership owns those competencies and behaviours. So, crisis leadership consists in having information, abilities, and traits for leaders in order to succeed this event.

James and Wooten (2010) tell us that an ability at influencing goodly the different organization’s stakeholders is a proof of an effective leadership during a crisis. Thanks to those
competencies, leaders will be able to take decisions implicating important actions. However, the key point is that the leader should encourage the followers to acquire those same competencies.

3.9.1 **Signal detection**

As we said before, the first phase of a crisis is the Signal Detection, where leaders have to notice the early warning signals. But unfortunately this may not be always possible. According to James and Wooten (2010), at this phase one of the needed elements is Sense Making, this one means trying to make sense of something happening, by wanting to interpret things in a rational way for everybody, and is influenced by the context in which the signal appears. In other words, the interpretation of this signal will be affected by our interpretation of the context too. When something unusual or abnormal is happening in the organization, which cannot be easily understood, we usually collect some data in order to transform it into something understandable for us, useful to be able to see that a crisis is going to happen. Nevertheless, concerning new stimuli, usually we do not have the needed frames in order to make sense from it, and then it may highly be possible to miss it.

3.9.1.1 **Sense making**

According to Karl Weick and his colleagues (2005), three important questions have to be asked by leaders concerning the process of sense making: How does a signal become an event? What does this event mean? What should be done concerning this event? This ability is about finding the right answers to those questions in order to take right actions during this first phase of crisis. Thanks to Sense Making it may be possible to anticipate a crisis, and maybe even to avoid partially it. Being without sense making will keep us from being aware of warning signals.

In normal time sense making is already hard to realize, then of course it is even more difficult during the crisis. But as it is the case with so many things, there are subtleties with sense making too. Two different scenarios are possible. Either, the signal can be taken into account and the leader hopes nothing bad happens. The good thing in this strategy is that it doesn’t cost so much in time and money. However, if the situation turns bad contrarily to the leader’s expectation, then this one will have to cope with a crisis and to manage it. Or, the leader could make sense when he/she notices a warning signal. This strategy needs time and money, but can help to keep a crisis from appearing. Of course, the appearance of a crisis at this phase is only a probability, because as we know a crisis can never be fully anticipated. Because of that, some people think that an investment in time and money in sense making is useless.

3.9.1.2 **Perspective taking**

According to Galinsky and Moskowitz (2000) another ability that leaders should have in the first phase of crisis is the Perspective Taking, which means that a leader takes into account others’ opinion too and strikes a balance between all opinions. By this way, a better understanding will be created among leader and followers. Leaders have to take care of every part of the organization, included its stakeholders, but especially during a crisis. A crucial duty of the leader is to guarantee the well-being of those affected parts. Leaders will be able to well understand their feeling during those hard times, and act accordingly in order to satisfy the collective interest.
James and Wooten (2010) explain that this ability is really pertinent in the signal detection phase, because if the leader does not take into account the repercussions of unusual events or warning signals, this could be viewed as being thoughtless towards others inside or outside the organization. The perception of these events’ importance can be different for leaders and for others, because of their positions within the organization, and leaders should be aware of this.

3.9.2 Preparation/Prevention

As we have seen previously, the second phase in crisis leadership is Preparation/Prevention phase, which consists in preparing the organization for the crisis or (in better cases) trying to avoid it when this one is detected during the first phase. Some relevant competencies exist for this phase too, which are useful for an effective leadership at this level.

3.9.2.1 Influence

According to Staw, Sandelands & Dutton (1981), leaders become dependent on their followers and even their stakeholders, because they need them to obtain information to make easy the decision making process and then to take effective decisions. However, during a crisis people feel pressure and furnish less information than usually.

As conclusion of this fact, Yukl, Gary & Falbe (1990) explain to us that a crucial ability for leaders is to influence or convince people, but also that this ability is a heavy factor of success. They explain that there are two significant ways (or tactics) to influence people in the domain of crisis leadership. The first one and the most used by leaders is Rationality, this simply means that the leader tells his/her followers the logic of what is expected from them and gives more information about it. Leaders have to stay calm, show that they are skilled and able to take control over the emerging situation. During this period, leaders will definitely not succeed alone, it is obvious that they need others’ assist, so in order to obtain this assist leaders’ behaviour and decisions have to seem rational and to make sense in others’ eye. A way of increasing people awareness of the crisis is to give them information about what is happening, like this they will better understand the actual situation lived by the organization and will encourage them to work for solving this crisis. Otherwise, if they do not get information about the unusual events happening in the organization, people would probably not understand the threat’s seriousness, and will not participate enough in this process. The second significant way is about using inspirational appeals. People touched by a crisis live a period with lots of heavy emotions. If leaders want to be effectively assisted by their followers, they have to channel followers’ emotion. An example of inspirational appeal is the use of personal or organizational values. The competency to influence people is really relevant for crisis leadership because it leads to look for new ways of accomplishing things and succeed.

3.9.2.2 Organizational agility

According to Crocitto & Youssef (2003), another competency in this phase is the organizational agility, which means that the ones having this agility is able to take place at every function within the organization and they have a deeper knowledge of each side of the company. However, this ability has some requirements, such as a combination of the structural, technological and human sides of the organization. In other words, leaders have to be enough well-informed and flexible to make links between those three areas.
The competency/ability to detect and see probable threats and reduce their probable effects is one of the most crucial behaviours. Due to the fact that when a facet of the organization is touched the whole organization might be contaminated, to be organizationally nimble is decisive in planning for a crisis. Consequently, during this preparation/prevention phase of crisis leaders must have a high regard for the entire organization.

3.9.2.3 Creativity

A last ability that we will try to explain here in this phase of crisis is Creativity, this concept has been developed for a long time in the domain of psychology according to James and Wooten (2010).

According to Furnham (2008), “Creativity can be regarded as the quality of products or responses judged to be creative by appropriate observers, and it can also be regarded as the process by which something so judged is produced.” (p. 237)

By reason of crises cannot be effectively managed with usual thoughts and procedures, creativity is a needed competency in the crisis leadership domain. Thanks to creativity during this second phase of crisis, it may be possible to avoid a crisis or to border its effects.

3.9.3 Containment/Damage control

3.9.3.1 Communicating effectively

As explained previously, the third phase of crises is containment and damage control, and its aim is to border the different things threatening the organization’s life. James and Wooten (2010) explain us that in this phase leaders having the duty work with determination to finish a crisis in order to limit the bad publicities on organization’s image. This work will also lead to the next (fourth) phase of crisis, which is the business recovery phase. It is important to precise that communication is an essential fact in this damage control process, this is so important that its efficacy can be the key element of the perception of success or failure of the crisis handling. So, Communicating Effectively is a relevant competency in the area of crisis leadership.

According to Coombs (1999), leaders’ duty is not limited at increasing the efficiency of an organization, but also to handle its efficiency’s perception in the eyes of others (followers, stakeholders, public...). Communicating well is a competency always associated to crisis handling. The aim of crisis communication is to form in an optimistic way of others’ perception, especially the stakeholders, about the crisis event and the organization.

3.9.3.2 Risk taking

Another competency identified by the research is the Risk Taking, which is considered as a relevant feature of leadership and creativity according to Morgan.

According to Staw, Sandelands and Dutton (1981), risk taking is especially pertinent during situation of crisis due to the fact that crises are naturally risky events. Crises are huge tests for leaders where they are often not ready and do not have previous experience of it in order to extract some useful knowledge about how to get out of the crisis. Leaders have to decide and act quickly under uncertainty during a crisis, because of that solving a crisis demands leaders capable
of finding new ways in problem solving. So, in the case of a quickly changing environment and conditions for an organization, leaders who will be more successful are the ones ready to looking for new ways of doing and adapt themselves to it. However, it is strictly not recommended to take avoidable risk, but risk taking is often combined to creative thinking and innovation, a risk averse behaviour might impede a organization’s capabilities to find out new ways of limiting a crisis.

3.9.4 **Business recovery**

James and Wooten (2010) tell that during the fourth phase of a crisis, the business recovery, two organizational facets are threatened: the revenue stream and the reputation. If these both are unrecoverable, then it could be almost not possible for the organization to continue its activity. When an organization is touched by a crisis, this one has to continue its business affairs and try to repair the bad consequences provoked by the crisis.

3.9.4.1 **Promoting resilience**

Sutcliffe and Vogus (2003) explain that an important competency associated with the business recovery phase for leaders is Promoting Resilience. A person will be emotionally less affected by a crisis if this one was promoted toward resilience before that the crisis occurs. Due to this fact, in crisis situations people who have been previously promoted toward resilience are competent to cope with negative emotions engendered by crises and adopt an effective behaviour with less difficulty. Promoting resilience does not automatically mean better performance, but it will make easier for avoiding the appearance of harmful emotions and recovering will be done with less efforts. Also, what tells the difference between a good crisis leader and a less good one is the ability to take effect on the followers in order to make them more resilient.

3.9.5 **Learning**

Concerning the last phase, James and Wooten (2010) explain that there is no really clear identifiable competency. Nevertheless, leaders can implement a learning orientation and use the different lessons that they found out from past crises. Good leaders will distance themselves from others by looking with determination for learning opportunities. In our personal opinion, this is linked to leader’s personal traits and characteristics.

In consequence, competencies and abilities needed in crises events may probably be different than the ones needed in normal situation. We tried to explain in detail each competency or behaviour appropriate in each phase of crisis, and make leaders aware that their followers’ effectiveness will be different during a crisis, in a good or bad way, depending on each person. So, an effective leadership under tough conditions can emerge in someone who would maybe not be expected in usual situations.

3.10 **Crisis team**

After the individual vision of crisis management, we will now try to understand the benefits of doing this in a collective way, in other words by forming a team. In nowadays organizations people work in teams, because working in that way has many advantages for example a better providing in information, a higher creativity, and so on. We will try now to observe team capability under pressure.
According to Katzenbach & Smith (1993), an effective team is composed of a small number of people having complementary skills and working for the same aim. Also, according to Adair, besides the number of people in a team the combination of different skills is another important fact in order to achieve the aims by obtaining a synergy via this combination of skills. Katzenbach & Smith (1993) explain that except for the skills, another factor of team effectiveness is the leadership, which transforms those individual sources of skill into a collective result.

According to Braden et al (2005), the high efficiency of teams is due to efficient usage of resources, mutual learning, and cooperation. However, during a crisis event the usual conditions disappear, teams have to work as a matter of urgency and they have to be ready to cope with bad results within the organization. All of this can bring a chaotic atmosphere for the crisis management team, which means unexpected tasks, unforeseeable events, and perturbations in organization’s stable situation concerning its operations.

King (2002) explains us that when a crisis management team is necessary, leader’s first task is to form that team, to that purpose the leader has to respect the criteria explained previously in order to obtain an effective team, but moreover to pay attention to their past experience and knowledge and to respect team’s heterogeneity (because this helps to get a better flux of idea).

Mohammed & Brad (2001) show us that heterogeneity helps to generate solutions, because it gathers different points of view, knowledge, values together, and this produces an ideal work atmosphere in order to sort a crisis situation out.

According to James and Wooten (2010), the duty of a crisis management team is to keep from, prepare, and to be ready to manage crises. This means that the team has to find ways to prevent cases of emergency, organize for crises that cannot be avoided, manage it in the case it occurs, and try to reduce the probable effects of the crisis. The authors explain also the benefits of a preestablished crisis management team, that this kind of team acts already for potential crises before any signal detection. They build up some procedures within they train to detect and reply for potential crises. In this way, the team learn to avoid problems and find out creative resolution. Also, by doing so the team members get used to work together and this will decrease their stress during a crisis thanks to the team’s prior experiences.

3.11 Intentionally provoked crisis

The context of the article “Strategy as Order Emerging from Chaos” from Stacey (1993) corroborated with the typology based on the two dimensions presented previously by Coombs and Holladay (2002).So, the following theoretical explanations will be specifically connected to “Transgressions” (intentional and internal) type of crisis. Stacey studied those patterns from companies that forced a chaos to allow the company to match market requirements. The article “Strategy as Order Emerging from Chaos” from Stacey (1993) describes the important points that characterizes a chaos and enumerates the different phases to emerge from it. We also used this article to have a general view of a dynamic system (chaos) and to give to the leader the patterns to take into consideration because a chaos unprompted or not, staying a chaos with its consequences and characteristics. According to Stacey (1993), companies are living in a dynamic system (chaos) where the creativity is a crucial pattern in order to survive. He also introduces the concept of self-
organization like a solution to emerge from a dynamic system and create a “new order” but it will be explained later.

3.12 The dynamic system (chaos)

Stacey (2003) counts four important points that sum up the recent discoveries about the complex behaviour of dynamic system (chaos).

3.12.1 Chaos is a Fundamental Property of Nonlinear Feedback Systems

Before all, Stacey (2003) defined a feedback, it means that one action gives rise to another one and determines the next according to some relationship. There are several types of feedback relationship and each of them is distinct. A feedback relationship can be linear or non-linear; the competition between two organizations and the reaction of one according the decision of the other one is relevant to illustrate the purpose. With the linear system, for example if an organization (A) decides to change its advertising channel, the other one (B) will do exactly the same. With the nonlinear system, the reaction of the other organization (B) will be more subtle and unpredictable, instead of react in the same area the organization will decide to change the price of the product in reaction of the change of the advertising channel. In this case, the first organization (A) will react to the non-linear reaction by changing also the price of its products.

The nonlinear system produces a circle of reactions and amplifies positive feedbacks. The linear system produces a system of action-reaction where the next reaction is known, so it amplifies negative feedbacks. The positive feedbacks create an environment of instability because each reaction is volatile and for leaders is not possible to predict the reaction of a decision taken. Oppositely, the negative feedbacks from the linear system allow the leaders to control and regulate the organization because he knows the results of its reactions. For example the annual budget of an organization is a perfect example of negative feedback, for each specific field, the reaction expected is known by leaders.

“Scheduling, budgetary and planning systems utilize negative feedback to keep an organization close to a predictable, stable equilibrium path in which it is adapted to its environment.” Stacey (2003 p.11-12)

Where negative feedback produces stability, the positive feedback creates an unstable equilibrium where changes are amplified. This instability establishes an insupportable pressure on the system until its run out of control. But there is a third kind of feedback system, in which the nonlinear feedbacks creates a stable equilibrium towards instability. It’s only possible, if the organization passes through a phase of bounded instability. The bounded instability can be reached thanks to the existing thin boundary between the stability and the instability where the feedbacks autonomously tend to a negative or positive behaviour. This combination of autonomously behaviour feedback system creates a paradoxical environment where the stability and instability coexist.

An environment where a non-equilibrium state between stability and instability and a nonlinear feedback system are in force is a chaos. Stacey (2003) also adds “that this kind of unstable equilibrium allows the organization to be successful because it allows it to be more creative”. (p. 13)
3.12.2 Chaos is a Form of Instability where the Specific Long-term Future is Unknowable

As mentioned before, Stacey (2003) said that “…chaos is an irregular pattern of behaviour generated by well-defined nonlinear feedback rules…” (p. 13). The organizations affected by this environment are marked to be under the grip of vicious or virtuous circle because they are very sensitive to changes. The propriety of this system is that the links between the cause and effect and the specific path of its long-term development is unpredictable. With the short-term is possible to predict behaviour because the consequences of small changes take time to appear.

3.12.3 In Chaos there are Boundaries around the Instability

A future situation of chaos is practically impossible to predict but it will always do according to some specific similarities and patterns. The general idea is that it's possible to classify a combination of unpredictable specific behaviour within an overall pattern.

“This is what we mean when we say that history repeats itself, but never in the same way.” Stacey (2003, p.14)

We are able to specify the consequences and the functioning of a financial crisis but we are not able to say when it will be appear and how it will be (size, starting point, etc). Stacey (2003) takes the example of a snowflake. Nothing likes more a snowflake than another snowflake but it’s impossible to predict shape of each snowflake even if we can predict a snowfall.

Stacey (2003) gives to us the way to categorize a chaos, “Chaos is unpredictable variety within recognizable categories defined by irregular features; that is, an inseparable intertwining of order and disorder.” (P.14)

3.12.4 Unpredictable New Order Can Emerge from Chaos Through a Process of Spontaneous Self Organization

The chaos is usually reduced to a horrific situation for an organization but during a chaos organizations have the possibility to create a complex new order. The creation of new opportunities by shattering old patterns of behaviour is possible by passing through a chaotic period. During this period, the organization will be confronted with critical situation and it will have to make crucial choices between several options. Those chosen options will lead the organization to different developments.

Some leaders manage changes and developments better than others. The key of effectiveness lays in the manner in which leaders handle what Stacey (2003) calls their “Strategic Issue Agenda” (SIA). The SIA, as its name suggested, is a dynamic agenda comprising a series of challenges with which the leader will be have to attend to. The following steps have to be considered by leaders to respect the SIA.

3.12.5 Detecting and selecting small disturbances

In open-ended strategic situations, changes are the result of many small events that are indistinct and undefined with unknowable consequences. The most difficult at the beginning is to
recognize what the real issues or opportunities and the challenge is to find an appropriate and creative objective to solve the situation.

3.12.6 Amplifying the issues and building political support

After the detecting, leaders have to push the organization to take into account the changing situation.

3.12.7 Breaking symmetries

As they build and progress Strategic issue agendas, leaders have the power to rework old mental view and to infuse new ways of doing and thinking. They are destroying a house of cards to build a new one.

3.12.8 Critical points and unpredictable outcomes

Any issues on the agenda don’t have the same term period. Some of them may be dealt with quickly but others take more time or have to be dealt continuously. An issue is dealt when a consensus and commitment to proceed to action are fixed. The dealing time depends on the context of power, personality or group dynamic that makes it unpredictable. The outcomes are also unpredictable because the founded action can be experimental or simply not appropriate to the situation.

3.12.9 Changing the frame of reference

The concept is the sharing of work memories that worked or not in the past. More the frame of reference will be consequent more the organization will be able to manage the chaos, for example the “speed detection signal” can be improved. The frame of references must be continuously challenged and modified because it can be quickly inappropriate depending on the situation faced.

Stacey (2003) gives us a multitude of frame of reference that must be redefined in order to cope with a dynamic system (chaos).

3.13 Eight steps to emerge out Chaos

After the enumeration of aspects of the chaos, let’s focus on the steps that leaders have to cross to emerge out chaos. So, a dynamic system can be provoked by leaders in order to challenge the organization and to create an energetic environment where innovation and the emergence of new strategic aspirations are potentially boosted. According to Stacey (2003), leaders also have the responsibility to establish requirements to move his organization towards a spontaneous self organization.

3.13.1 1\textsuperscript{st} Step: Develop New Perspectives on the Meaning of Control

According to Stacey (2003) a self organization is, as suggested its name, an organization that is able to manage itself automatically. Leaders have the tendency to take choices and make actions in a particular way which follows a continual direction to enjoy the sufficient support. But here, the key element is to let the organization produces its own controlled behaviour. Stacey (2003) said: “...sometimes the best thing a manager can do is to let go and allow things to happen.” (P.16)
3.13.2 2nd Step: Design the Use of Power

Fixing the distribution of power and the way in which it is used, encloses the organization into an invisible jail where new strategic directions cannot escape. So, the notion of group dynamic is important in the second step. Under fear and pressure, the only result that will come out of the group dynamic, will be the rebellion. The best way for a dynamic group to produce complex learning in order to develop new perspectives and new mental models is to remove the win/lose polarization and encourage open-minded questioning.

In this environment, the group uses arguments and conflicts to move towards periodic consensus and commitment to a particular issue. But the dynamic is created when there is a dynamic alternation of conflicts and consensus. And it’s possible if they are also able to efficiently alternate the form in which they employ the power. Stacey (2003) gives some examples of alternation of the use of power, sometimes withdrawing and allowing conflict; sometimes intervening with suggestions; sometimes exerting authority.

3.13.3 3rd step: Encourage Self-organizing Groups

The self organization spirit allows to a group to fix its own challenges and objectives. In this situation, the key role of the leader is to create an ideal atmosphere in which the group can spontaneously form itself. If a leader predetermines the deal issue to the group, it will be influence and its angle view of thinking will be more acute. Instead of install boundaries around the group, leaders must introduce ambiguous challenge and give the opportunity to the group to do create its own dynamic.

At this step the relationship power must be good manage. Most of the time the leader has to break the normal hierarchy in order to let breath the group and allow it to feel free and develop its goals in the best condition. But it’s only possible if members of the group attach importance of its mission.

3.13.4 4th Step: Provoke Multiple Cultures

The aim here is to put the managers and followers in cultural diversity by using rotation of people come from different function and business units. This provocation of this cultural diversity will generate a new dynamic and developing view.

3.13.5 5th Step: Present Ambiguous Challenges Instead of Clear Long-term Objectives or Visions

Instead of specify an apparent long-term objective; leaders have to set ambiguous challenges in order to provoke new emotions in the organization. By this way, leaders will be able to active a process of searching a new way to do and to keep the dynamic spirit flowing.

3.13.6 6th Step: Expose the Business to Challenging Situations

Leaders must put the organization in a “fighting spirit” situation. The best way to become better is to struggle against the bests. So, leader must intentionally expose the organization and himself in a challenging situation that will enable them to excel.
Michael Porter (1991) in his article “The Competitive Advantage of Nations” underlines the role of competitors and proposes to “seek out the most competitors as motivators. To motivate organizational change, capable competitors and respected rivals can be a common enemy.” (p. 90)

3.13.7 7th Step: Devote Explicit Attention to Improving Group Learning Skills

Groups of managers/leaders are able to generate new strategic directions if they learn together in the sense of questioning and altering existing mental models rather than simply take into account the existing knowledge and sets of techniques.

3.13.8 8th Step: Create Resource Slack

But all those steps cannot occur if the organization is not ready to make investment in spare management resource. In order to install an emergent strategy, the crucial prerequisite for it, is to invest. By this way, it will be possible to pass through previous steps to create an environment that will be friendly with individual initiative and intuition, political interaction, and learning group process.

3.14 Comments

The lack of connection between specific actions and specific outcome is the crucial trouble during a chaos. According to Stacey (2003), one of the solutions is to emerge from chaos by shaping the organization in order to turn into a spontaneous self-organization. It implies short-term planning approach, efficient learning process and the development of a new strategic direction.

“Probably my best quality as a coach is that I ask a lot of challenging questions and let the person comes up with the answer.”

Phil Dixon – Director, Hoops Skool

3.15 Illustration: FORD

According to the research made by Jayme A. Sokolow (2005), the self-organizational and self-reinforced program put into action by Ford during the 80’s in reaction at a crisis occurred during 70’s, can be used as a suitable illustration of a spontaneous self-organization. Ford has survived to different crisis during its live and talking about crisis using Ford as an illustration strengthens the power of the previous theory introduced by Ralph Stacey. Firstly we will present the case. Secondly, we will try to corroborate information enumerated in the illustration to the eight steps to emerge out a chaos/crisis. And finally, the concept of extraordinary management/leadership which is associated to the self-organization will be explained.

3.15.1 Presentation

During the 70’s, Ford knew serious financial problems because the products (cars) on the market no longer meet the needs and characteristics of the global situation of the moment. In fact in 70’s, the world knew an energy crisis and Ford was only able to propose bulky vehicles which were large consumer of energy. In just two years from 1978 to 1980, Ford lost six percent
of its market share. But during the 80’s, Ford became a successful company by focusing on the quality due to a self-organizational conversion.

Ford undertook a variety of initiatives to emerge from this crisis. Until the 80’s, the company was unclosed in a bureaucratic system where the employees were suppressed and reduced to follow rules like sheep. As a senior executive from Ford deplored, “We’d solve problems by issuing a new rule – which only solved the problem on paper. There wasn’t any dialogue. It was bureaucratic gridlock. The edicts used to come from on high. You had to be nuts to argue anything.” (p34).

In order to change this monotony, Ford decided for the elaboration of the new car of the brand to build a multi-discipline team. This decision had as objective to break the boundaries among Ford’s divisions and to create a kind of dynamic synergy which can be correlated to a provoked crisis/chaos (knowing the fact that this “provoked crisis” is a response to financial troubles). It can be related to the idea of the famous proverb “Fight fire with fire”. As the author said, this cooperation was promoted by Ford, “blue collar and executive training and development programs, and more cooperative relations with the United Auto Workers union – to redesign the company without disrupting it” (p34).

This change took a certain time but the result was great. Progressively, Ford employees learned to work together and realized the new model in only four years that was a good performance in 1986 and the car was also acclaimed by the public as one of the highest quality car.

Jayme A. Sokolow (2005) added another initiative that Ford applied. Ford wanted to get better its relations with United Auto Workers. In 1982, Ford negotiated a profit-sharing program and thanks to it, Ford became the in American Corporate history at that time with a bonus of 3700 dollars for every employee. Besides this generous act, the productivity of the company improved significantly. After the closing of height plants in USA and the firing of 130 000 employees, the production increased by about 7% (500 000 more cars). This significant augmentation is the result of the both initiatives.

3.15.2 Eight steps to emerge out Chaos

1st Step: Develop New Perspectives on the Meaning of Control

The first step is of course present in the illustration. The perspective of Ford was to build a new car thanks to a new organizational behaviour which consists to the creation of multi-discipline team.

2nd Step: Design the Use of Power

A new distribution of the power was made. As ford promoted, the blue collar and executive training and development programs had to be more cooperative with each other and try to work on an equal footing.

It was also sure that this new configuration will give reach to conflicts but it was the objective, creating conflict in order to create a dynamic system in which new ideas can take form.
3rd step: Encourage Self-organizing Groups

Ford put the employees in the best possible conditions to improve the “self-organizational feeling”. The author described an action conducted by Ford which is a good example, “Traditionally, Ford’s divisions were semi-independent fiefdoms. At Ford headquarters in Dearborn, Michigan, the Design and Engineering Departments occupied adjacent buildings but officially communicated only by memos. Ford responded by creating cross-functional teams.” (p34)

4th Step: Provoke Multiple Cultures

As mentioned in the first step, Ford provided a multi-cultural environment by creating multiple-discipline teams.

5th Step: Present Ambiguous Challenges Instead of Clear Long-term Objectives or Visions

The present ambiguous challenge was to create a new car by using a new organizational behaviour. It is relevant to precise that in the automobile sector the conception of the product (car) put in the market takes more time than the others fields. So indirectly, it was a combination of short and long time objectives.

6th Step: Expose the Business to Challenging Situations

The organization put the company in a “fighting spirit”. The purpose of this “fight” was to build a new car with a high quality and able to compete the other cars on the market which were less energy consumer.

7th Step: Devote Explicit Attention to Improving Group Learning Skills

The new collaboration among the Ford’s divisions and also thanks to the financial effort consented by Ford gave significant results in particular regarding the increasing of the production with less employees. It is a proof that some kinds of skills were learned thanks to these changes.

8th Step: Create Resource Slack

Some investments were made by the organization, not as the first signification of the term. But the profit-sharing program and the bonus of 3700 dollars for every employee can be translated as investments.

3.15.3 Comments

Ford became a successfully company thanks to a new organizational behaviour. The change of the composition of executive leadership or whatever was not necessarily. It is the evidence that a leader can change his way to do and emerge out from a crisis by creating a dynamic system where the creativity and positive conflicts are legion. “Fight the fire with the fire”, this proverb mentioned before, well sums up the idea of this organizational behaviour. Besides, in order to implement the self-organizational behaviour, leaders have also to make some changes about its behaviour. The next topic will introduced this way to do called extraordinary management.
3.16 The extraordinary management

3.16.1 Introduction

In his book, Stacey (1996) emphasizes the role of managers/leaders in organizations because like in the real life the ambiguity, uncertainty and surprises are inevitable and organizations need someone to cope with them. To deal with an organization like in the real live, Stacey (1996) introduces the concept of extraordinary management which is a key ingredient for the implementation of a self-organizational behaviour.

Stacey (1996) explains that instead of always searching the stability in an organization, leaders should exploit the uncertainty, instability, constructive conflicts and cultural clashes to acquire new ideas and new ways to do and to promote continual learning and creativity.

The concept of extraordinary management is the total contradiction of classic management where the current day is the same than yesterday. In the following figure (next page) from the article of Jayme A. Sokolow (2005), there is an enumeration of characteristics that clearly differentiates the two management concepts.

The first finding when you analyze the figure is that for the extraordinary management a crisis environment is conductive of new ideas and constitutes an opportunity to experiment new perspectives. Secondly, the emotional rapport among the employees is very different according to two concepts. In one hand, the unique emotional reference is the organizational code and the rules and in another hand, relations are established on trust, friendship and other respectable values.
### Differences between Ordinary and Extraordinary Management (p36)

<table>
<thead>
<tr>
<th>Classic Management</th>
<th>Extraordinary Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on blueprints and master plans formulated at the top</td>
<td>Ideas appear from many sources and are pursued in different ways</td>
</tr>
<tr>
<td>Instructions for implementation are passed down the hierarchy for implementation according to bureaucratic rules</td>
<td>New ideas, policies, and procedures appear at many different points and are tested on an experimental basis before they become codified as company policy</td>
</tr>
<tr>
<td>Outcomes derive from the realization of the intentions of those highest in the hierarchy</td>
<td>Outcomes emerge without prior or widely shared intentions and are later codified as the new organizational policy</td>
</tr>
<tr>
<td>Those in charge are in control, or at least everyone thinks they are in control</td>
<td>Those in charge create an environment where new ideas, policies, and procedures can emerge</td>
</tr>
<tr>
<td>Relationships are contractual</td>
<td>Relationships are based on trust, friendship, honor, the fear of failing, or letting the group down, etc.</td>
</tr>
<tr>
<td>In principle the principle between policy and implementation is not problematic. The blueprint establishes a roadmap for everyone to follow</td>
<td>Uncertainty, ambiguity, disagreement, complexity, and the sheer messiness of organizational life make it impossible to start with an intentional, organization-wide policy. The local behavior of an organization’s members will create ideas, policies, and procedures that later will become legitimized</td>
</tr>
<tr>
<td>Failure to reach predicted outcomes is considered disastrous</td>
<td>Some of the organization’s ideas, policies, and procedures will succeed while others will fail. Positive feedback systems are built into the organization’s learning process</td>
</tr>
<tr>
<td>Sustains stability and the status quo</td>
<td>Operates in tension with the reigning system and provokes changes in that system</td>
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#### 3.16.2 Illustration: Belgian Political Crisis & Jean-Luc Dehaene’s Leadership (Interview Mr Pagano)

Some similar point with the extraordinary management and the competencies presented previously are connected with this case. We realized an interview with Giuseppe Pagano (2011) about the political crisis of 1989 in Belgium in order to extract the main key elements of Jean-Luc Dehaene’s leadership during that crisis, Jean-Luc Dehaene who is a Former Prime Minister of Belgium. Also, we talked about the actual political crisis, which has many similarities with the one of 1989.
In 1989, the crisis appeared because of economical issues in the country, but mainly because of the need of an Institutional Reform. This reform was about three different issues: the transfer of competency to federate governments, the Brussels’ status, and the Law of Financing. Of course, realizing such a reform was only possible via negotiations between the north part and the south part of the country, which were not concluded with the first actors because of cultural clashes. Due to that, the King gave this duty to Jean-Luc Dehaene, who was Minister at that time. As our interviewee said, “Dehaene was not somebody well-known by people, but had King’s confidence”. Today’s political crisis is a bit different than the older one, because the actors are different, negotiations have to be done with an extremist party of the north, there is a lack of trust, and finally the will observed to obtain a compromise between both parts of the country seems really weak this time. Concerning those negotiations, Pagano could not help saying “I can’t understand how in the Flemish side they don’t think about Jean-Luc Dehaene…”

Concerning the political crisis in 1989, it may be possible for us to say that several competencies and abilities needed for a leader were seen in Dehaene’s leadership style. The first competency that we can observe in his leadership during that crisis is the perspective taking, which consists in consulting others’ opinion about the topic (or issue) in order to create a better understanding. We can affirm this, since Dehaene has always consulted everyone involved in the negotiations, from the north as well as from the south of Belgium. A second observable ability in his leadership is that he was able to influence and convince people by telling his opinion and supporting it with many arguments and proofs that made sense in their mind. The next competency that Dehaene had is the agility, because he had a deep knowledge about every issue having provoked that crisis, and was able to discuss about it without any help from his personal advisers. Another distinct ability notable within Dehaene’s leadership is creativity; we can definitely affirm this because the compromise that he proposed to both parts in a real product of creativity and is even qualified as the masterpiece of his political life. As would say Pagano, “There was Dehaene’s pure intelligence that played”. Also, Dehaene had an effective communication with everybody concerned about the topic to avoid ambiguity, and they knew each other quite well, which was also a fact having contributed to the trust they had in him. Pagano told us that “Jean-Luc Dehaene knows perfectly his Walloon interlocutors, and used to often discuss with them”. The last ability we may enumerate is the resilience, because we know how much he was determined to solve this crisis when he received this duty from the King and after during the negotiations. When he received his duty, he asked the King “Sire, give me one hundred days”, which is a clear sign of his determination. Due to this resilience, he never made any statement that could irritate people, contrary to the one implied in the actual negotiations...

Besides these competencies that Dehaene has, another important factor was his personal team, formed by experts in diverse domains. Our interviewee described briefly this team like this, “Jean-Luc Dehaene had a formidable team around him, of course, really competent and valued advisers”. Having such a team is always useful and creator of synergy for a leader, especially if this one is enough competent like Dehaene.

Jean-Luc Dehaene is a perfect example of leader having solved a crisis thanks to all of his abilities and competencies, but also with his good personality and honesty which have contributed to the trust that the King and the people have in him.
This chapter will focus on the decisive aspect of crises. Indeed, we have considered since the beginning of our thesis that crisis is not a pathology but rather a decisive moment. Crisis is a sensitive moment where the company and its leaders have definitely to take decisions to keep the company from the harm of a crisis. In the next step, we will emphasize the important of decision making process for leaders because leaders have certainly to influence, inspire and motivate “followers”, but also to take decisions. Beside of this, we will enumerate several decision making process models, which are appropriate during tough conditions characterised by ambiguity, lack of time, and pressure. Each model will be explained separately, but the reader should be aware that they represent a good sample of all competencies that a leader has to get so as to be an effective decision maker in crisis time. Some illustrations will be presented to give depth and support our theoretical reasoning.
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4 Decision making under pressure

4.1 Decision making importance

In this new chapter, the decision making will be the centre of our attention. After having defined briefly, in the first chapter, what leadership is, it is now necessary to try to explain shortly its different functions and to emphasize the function of decision making. De Wit and Meyer (2010) explain that to better understand this, it is necessary to be aware of the difference between a leader and a manager. They explain this by the fact that all leaders have to execute some managerial tasks, even if all managers cannot play a role of leader. Leaders know that it is essential to attract the attention of followers on elements that could increase organization’s effectiveness. This attention focus is essential among leadership functions for the productivity, which is really important in business. In addition to this, another relevant function of leadership is the interpersonal function, leaders have to give direction to followers and influence their attention focus. Some factors can be considered as important for a leader, and then this one has to direct their attention at it, a good way to help this would be sociability and sincerity within the organization, but also by showing it clearly via his or her activities or behaviour. The last important function of leadership that we will mention here is the decision making. This function will be explained with more details by after, because this one is especially much more relevant in period of crisis due to the lack of information, the presence of uncertainty, and the short time that leaders have at their disposal to take decisions. Decision making means the process that leaders have to make when they must take decisions concerning the organization, and of course it goes without saying that an organization’s objectives achievement depends on the effectiveness of those decisions made by the leader. Also, leader’s decision making can have an influence on followers’ attention focus, and influence on their behaviour by this way.
4.2  **Rational approaches to decision making**

Hammond, Keeney and Raiffa (1998) define the decision making according to a simple point of view, decision making is the process by which leaders identify troubles and attempt to resolve them. In this part of the thesis, rational reasoning and approaches will be presented in order to illustrate the particularities of decision making in the context of crisis leadership. After, decision making biases that can influence the judgement and finally, the ethical decision making will be also laid out in the following text.

4.2.1  **Rational decision making**

According to James and Wooten (2008), there are a lot of types of decision making approaches but the rational decision making is the most instinctive and effortlessly identifiable. This process will be illustrated steps by steps. In addition, the limitations of the rational model will be shortly explained in order to emphasize the constraints fashioned by crisis conditions.

4.2.2  **Rational decision making step by step**

1\textsuperscript{st} step: **Definition of the problem**

The rational decision making process begin naturally by defining the problem. The utilisation of the term “defining” is a little bit too strict because a situation is never totally black or white. The “definition” permits to leaders to focus on the priorities that will be taken into consideration and to choose the resources that will be used.

2\textsuperscript{nd} step: **Determination and weighing of evaluation criteria**

This step is one of the most ignored of the process but it is as important as the others. When leaders are confronted to a problem, the first reflex is to immediately think of solutions rather than determinate the criteria that will allow to evaluate the following envisaged solutions. Thanks to the second step, leaders change their thinking process, instead of firstly search a solution, they must indentify a set of criteria’s that will represent a guide for the next steps of the decision making process.

3\textsuperscript{rd} step: **Generation of alternatives**

After the determination of criteria’s, leaders have to identify multiple solutions and alternatives to resolve the problem(s) recounted. They have to make this task in a reasonable time because spend too much time on this step can make the situation worse than at the beginning. The solution taken too late can become inappropriate because the problem can quickly evolutes over time. According to Bazerman (1998), if the additional benefit from new information is equivalent or less than the costs induced by looking for supplementary alternatives, the search for alternatives can be considered optimal.

4\textsuperscript{th} step: **Evaluation of the alternatives**

The natural continuity of the process brings leaders to the fourth step where leaders assess the alternatives that they have chosen during the third step according to the criteria’s determined at the second step. Leaders must also judge the aftermaths of the alternatives. Additionally, the
difficulty here, is to make an attractive and quickly evolution trying to take into account the external (environment) and the internal (organization) pressures.

5th step: Reach a decision

The final step consists to choose the ideal options according to the gathering of all information collected during the previous steps. Besides, leaders have to calculate the weight of each criteria for those alternatives and to anticipate at least the future outcomes of the decision.

4.2.3 Constraints to rational decision making

This figure (figure 4.1, p.77) from “Leading under pressure” written by Erika Hayes James and Lynn Perry Wooten sums up and indicts the constraints to rational decision making.

<table>
<thead>
<tr>
<th>Constraints to rational decision making</th>
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<tbody>
<tr>
<td>Incomplete information</td>
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<tr>
<td>Cognitive limits</td>
</tr>
<tr>
<td>Limited time and resource</td>
</tr>
<tr>
<td>No unilateral authority</td>
</tr>
<tr>
<td>Emotional investment</td>
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</table>

All these constraints limit and make imprecise the decision making process. Under crisis conditions, all those constraints/limitations are of course present and are sometimes accentuated. Besides, leaders' judgments can influence the course of the decision making process.

4.3 Decision making biases by human traits

According to Amar (2008), the complexity of elements to take into account during the decision making process and during a crisis brings leaders to use empiric processes or mental shortcuts that are called heuristics. Heuristic come from the Greek word “eurisko” that means “discover/find”. In an uncertain environment, heuristics allow leaders to work more efficiently and to spend less time on a problem. But heuristics are not always the best way to do. They can lead to a very bad decision because they introduce biases in the decisions making process. Amar (2008) enumerates three principal kinds of heuristics: availability heuristic, representativeness heuristic and anchoring and adjustment heuristic.
4.3.1 The availability heuristic

The availability heuristic is a mental strategy that consists for decision makers to judge a situation according to the easiness with which they recognize the current situation as a similar situation recounted in the past. For example, if you ask to people if the number of suicide is increasing or decreasing and if the answerer knows a lot of people around him that killed themselves, he will answer that the number of suicide is increasing but it is not necessary the true. So, the bias is that the representation of our reality is not necessary the same than the real situation and the judgment of a situation can be counterfeit.

4.3.2 The representativeness heuristic

This heuristic consists to categorize the current situation to a typical one. For example, judgments realized according to stereotype are a kind of representativeness heuristic. In this heuristic, the bias is to base our interpretation of a situation according to our preconceived ideas and to miss or underestimate crucial information about the current situation.

4.3.3 The anchoring and adjustment heuristic

This heuristic is divided in two parts. The first step is the anchoring; people make implicitly a first estimation of a situation, an “anchor”. After doing this estimation, step by step, they incrementally adjust the first estimation based on additional information to reach to a final estimation of the situation.

The bias of this heuristic is more or less the same of the first heuristic. The way to estimate the “anchor”, which is based on implicit image, can bring the decision maker to an ironed evaluation of the current situation.

4.3.4 The bias of overconfidence

Sometimes leaders have too much confidence about their judgments. Overconfidence about their abilities can produce wrong decisions. Sometimes leaders are more confidence about their beliefs than an objective result of a survey. This bias is also dangerous for the decision making process, leaders have to put themselves in perpetual questioning to make the best decisions and not only to refer on their own knowledge and values.

Because of its uniqueness or rarity, crises are events difficult to recognize by using simple heuristics or basing on confidence. But leaders are not robots and sometimes heuristics can be helpfully. They have to be used with parsimony because they permit to win precious time during a crisis but they can get leaders to take a wrong decision. So leaders have to weigh the pros and cons of the utilization of heuristics. In one hand, win time knowing that the decision will be maybe wrong. In another hand, lose precious time and prefer to bed on a right decision.

4.4 Two models of decision making models influenced by uncertainty

Gilpin and Murphy (2008) introduce two models for decisions making that are especially connected to crisis situations, rational choice (anarchy model) and naturalistic approaches. The first model is focused on the logical thinking and delineated alternatives. The second is purposeful on the context and action.
4.4.1 Rational-choice Decision making with degrees of uncertainty (Anarchy Model)

Traditional decision making are based on the postulation of the rationality. According to Choo (2001), the rational-choice decision making is a model where leaders enumerate available alternatives course of actions, plan potential outcomes and estimate them according to their effectiveness in attaining the maximum payoff in relation to a know goal and the rational-choice is characterized by a long time planning. However, crisis situations make practically impossible the possibility to know all the possible range of options, determinate the possible outcomes and the notion of time is short. Several numbers of conditions have to be respected to apply the rational-choice decision making. F. A Hayek (1945) has elaborated a sceptical view of the rational model by relating the limitations for crisis situations, “If we possess all the relevant information, if we can start out from a given system of preferences and if we command complete knowledge of available means, the problem which remains is purely one of logic. That is, the answer to the question of what is the best use of the available means is implicit in our assumptions” (p. 519). If all those conditions are respected we can used the relational model but the crisis forces us to taken into account a certain degree of uncertainty.

Choo (2001) indentified four decision-making models where leaders have to work with different degrees of uncertainty. He delimited the concept of uncertainty into two dimensions: uncertainty about the looked-for final outcome (Goal) and regarding the preferred methods for achieving this outcome (Procedural). The first model which is characterized by a low level of uncertainty in both dimensions is called “boundedly rational mode” and it was introduced by Simon in 1976. This decision making process mostly uses standardized procedures for executing organizational habits in scanning and evaluating information. The second model, “process mode”, defines a precise goal but the way to achieve this one is based on alternatives and choices are made according to the estimation of available options. The third “political mode” is the opposite of the previous model, the organization has conflicts about the goal but the used approaches and outcomes are certain. According to the authors, the last mode, anarchy, is the appropriate type of decision making to employ during a crisis. The anarchy mode represents the everyday situations where the organization is living in a turbulent context. Choo (2001) defines the “anarchy mode” by this following words “goal and procedural uncertainty are both high, decision situations consist of relatively independent streams of problems, solutions, participants, and choice opportunities. A decision happens through chance and timing, when problems, solutions, participants, and choices coincide; and when solutions are attached to problems and problems to choices by participants who have the time and energy to do so”. (Choo, 2001, p. 199)

Please, refer to the next page
4.4.1.1 Implications for Decision Making:

The anarchy model reposes on improvisation and experimentation and the decision depend on chance and timing. Leaders face to a “usual” crisis with little consequences can use this model but during an important crisis where the entire organization is in danger, the improvisation and experimentation comported a high level of risks. This dangerousness can slow leaders to use such methods but sometimes improvisation is the unique way to do. The anarchy model can be considered as a solution according to the type of crisis and it has to be discussed in the organization. According to Gilpin and Murphy (2008), the next model, the naturalistic decision making is more appropriate to organization under crisis conditions. But before introducing this model, the concept of improvisation and its outs will be deeply analyzed.

4.4.1.2 Improvisation

As described by Choo (2001), the anarchy model gives great emphasis on improvisation and also on the experimentation. But let us focus especially on the improvisation. According to Boin et al. (2005), in highly volatile conditions where there is non-negotiable time pressure, the utilisation of improvisation is an optional tool to solve the situation. The improvisation is not only used in crisis time, certain organizations conduct to it or limit it. A crisis has the bad aptitude to make structures and plans of an organization irrelevant. The decision making is not necessary a process of operational actions or standard procedures. During time crisis, leaders can profit of an organizational culture that assumes to put into brackets standards operating procedures, routines and rules in order to give free rein to the improvisation. For example, in a high bureaucratic organization, the given place to the improvisation is very small. But, this statement produces a paradox.
4.4.1.3 Paradox of the improvisation (bureaucratic organizational structure)

A high bureaucratic organizational structure is principally established in order to decrease the uncertainty among the organization that is appropriate under crisis conditions. Oppositely, the appropriate environment to generate leader’s improvisational skills has to be untied from organizational procedures chains. But in this case, the uncertainty of a situation can increase and make the situation more critical than before. So, the organization has to find the balance between the proportion of respect of organizational procedures and the proportion to let leaders used their improvisational skills.

4.4.2 Illustrations

The following example is used by Boin at al. (2005). In 1970, NASA saved the mission of Apollo 13 which almost ended in a tragedy. During the mission an explosion erupted on board of the spaceship. This explosion touched the life-support systems of the spaceship and the electrical power necessary to navigate. So, explosion produced the apparition of carbon dioxide on board putting astronauts in grave danger and the possibility to come back was severely diminished. The astronauts and the flight control people in Houston worked together in order to find a solution knowing the boundaries created by the lack of oxygen and energy supply. In order to increase the improvisation, NASA decided to put behind several procedures and routines, the unique aim was to save the astronauts by a creative way (improvisation). This environment enables the engineers of NASA to have more options and to be more open-minded. The ingenious solution was to check all the components that could be useless to come back at home and to switch off them. No procedures or routines provide to switch off components of a spaceship. But in this case, the improvisation and the organizational culture installed by NASA (put behind procedures and routines) allow to be more creative and to take a creative decision but a right one.

4.5 Naturalistic decision making and the “recognitional pattern matching”

The naturalistic decision making (NDM) is a means of studying the decision making process of people that work in situation marked by time pressure, uncertainty, team and organizational constraints and by a environment in perpetual changes. Churchman (1967) described the NDM with simple definition and clear key elements. First, according to him the NDM is, “a class of social system problems which are ill formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing” (p. B141). Secondly he enumerated several key elements that distinguish an NDM, (1) ill-structured problems; (2) uncertain and dynamic environments; (3) shifting, ill-defined, or conflicting goals; (4) multiple event-feedback loops; (5) time constraints; (6) high stakes; (7) lack of decision-maker expertise; and (8) multiple players. Of course, those key elements are not always present in same time but most of the times, there are linked to a crisis situation.

Besides, Canon-Bowers et al. (1996) also point six traits of the NDM.

1) Unique and dynamic situational context

The uncertainty is omnipresent during the decision making process.
2) Multiplied impacts as decision feed-back loops

When a decision is taken, there will undeniably have implication(s) on the next decision. As said Mitleton-Kelly, “Once the decision is made, there is a historical dimension and subsequent evolution may depend on that critical choice”

3) Meaningful consequences

The meaningfulness of a decision and its consequences is differentiated by two perspectives, one internal and one external. Each of this perspective can determinate the impact of a decision. The internal is represented by the decision maker values and own goals and the external by the environment.

4) Multiple goals

The researches about NDM have demonstrated that it is involved the most part of the time in situations where stakes and time pressure were very high. The important number of interests that are touched by a crisis produces therefore a large panel of conflicting situations accompanied by the creation of multiple goals.

5) Decision complexity

This point and the next are both linked with the previous one. A classic model doesn’t take into account the complications associated to a dynamic environment. Crisis creates disorder and, as mentioned in the fourth point, produces multiple goals in order to react to many touched interests. This situation makes decision making very complex and requires considerable experience and knowledge on the part of concerned leaders.

6) Knowledge richness

Taking decision in this type of context is very complicated. To be a brilliant crisis decision maker is also a hard work, this necessitates acquiring essential cue and components for decision making. During researches about NDM, Canon-Bowers & Bell, in 1997 and Klein in 1998 have established a form of mental construction which is only usable by decisions makers possessing a high level of expertise and who are able to make the connection between specific knowledge and the specific context of a situation. This mental process is known under the name of recognitional pattern matching (RPD). RPD is one approach in which researchers have categorized a decision maker’s aptitude to formulate a quick and correct decision under high-pressure. Klein (1998) explains the abilities of experts that use the RPD model. They are able to identify which types of goals make sense for the organization. They specify the cues that are important, so the information is properly distilled. They know the consequences of their acts and know what the next step to follow is. They are familiar with distinctive situation and know the usual way of reacting to it. And Klein finishes the enumeration by this sentence: “The recognition of goals, cues, expectancies, and actions is part of what it means to recognize a situation” Klein (1998, p. 24). To be able to master the RPD, leaders must possess the knowledge and experience required and the aptitude to intuit patterns.
4.6 Comparison between the two models

<table>
<thead>
<tr>
<th>Analytical Decision-Making Model</th>
<th>Naturalistic Decision-Making Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation is static and clearly delineated, with unambiguous goals</td>
<td>Situation is dynamically evolving; it is not always certain that a decision is necessary, or what the desired outcome should be</td>
</tr>
<tr>
<td>Decision maker gathers as much information as possible about the situation in the time available</td>
<td>Decision maker consciously or subconsciously assesses the situation and notices familiar aspects</td>
</tr>
<tr>
<td>Brainstorming generates large possible number of options</td>
<td>Assessment prompts limited range of appropriate options</td>
</tr>
<tr>
<td>Formal evaluation of the pros and cons of various alternatives</td>
<td>Mental simulation applying suitable options, one at a time; simulation also spots any weaknesses and allows changes to be made “online”</td>
</tr>
<tr>
<td>Comparison of all assessments to select the best available option</td>
<td>Select the first workable option without comparing to others</td>
</tr>
</tbody>
</table>

Comparison Chart of Analytical and Naturalistic Decision-Making Processes (Gilpin and Murphy 2008 p.96)

This table sums up the differences between the two models. The models have their own proprieties and it is interesting to point some of those. With the rational model, decision makers need a lot of information before to take the decision and the context is stable. Oppositely, the lack of information and the instable context are on familiar terms with the naturalistic model.

But one aspect is absent of these characteristics, the emotional side of the decision making process. This question will be studied in the following thanks to the role of emotion in the intuitive decision making under pressure.

4.7 Emotions and the intuitive decision making during a crisis

Besides the traditional view of the decision making theory that underscores the rationality and does not take care about the human part of the stakeholders whose leaders, Sayegha et al. (2004) emphasize the primordial role of the emotion in the intuitive decision making process during a crisis situation. They suggest a conceptual model of managerial decision making that turns the attention on the emotional influence on leaders in an intuitive decision process. Lisa Sayegha et al. (2004) argue that emotions represent the catalysts of the intuitive decision making process. This part of the thesis will focus on a theoretical model that integrates the roles of emotion of leaders in intuitive decision making during a crisis.

In their article, the authors made a personal definition of an organizational crisis under a decision maker point of view, “A crisis is a major, unfamiliar, and unusual situation for the manager that requires a rapid decision. It is an unexpected event in that the manager has not had sufficient time to prepare for it.
Finally, it is a situation that has the potential to result in major consequences for the organization and/or its members” Lisa Sayegha et al. (2004, p.183). They present also the crisis as a “decision opportunity” and add that crisis can enable the organization to improve in several sectors but this topic is reserved for the next chapter.

They introduce some interesting abilities (from others authors) that leaders have to master before to point the attention on emotions. Managers and leaders who are able to take critical decisions under pressure of crisis conditions have the aptitude to collect all the available information and to use it on short time (Hymowitz, 2001). In addition, they must to take decisions within a context of multiple players, to play with environmental constraints and to make choices without knowing specific consequences of them (Huy, 1999). However, the literature about decision making has given to us multiple cognitive mechanisms to steer leaders toward successful decisions. But during events where pressure and uncertainty are omnipresent, emotions felt by leaders influence instantaneously and inevitably the decision making process and be able to master them is a crucial task for a “crisis leader”.

4.7.1 The conceptualisation of the decision making under pressure

The following conceptual model of decision making under crisis underlines the weight of emotions and tacit knowledge. The emotions are the key element of this conceptual model that gives great importance to the intuitiveness. This model is based on existing knowledge but the authors add two propositions. Firstly, the decision-making process is not only centred on the rationality but also on mechanisms of action in an intuitive way. And secondly, psychological, managerial and neurobiological concepts will be premised in order to give emphasis to the role of emotions.

Fig. 1. Managerial decision-making under crisis.
4.7.2 Experience

Experience plays a decisive role in the conception of tacit knowledge and is the base of the intuitive decision-making. As figure depicts, the authors denote that the experience is composed of education, training and contacts to events comparable to the current situation. The experience is correlated to the manager’s explicit knowledge, cognitive schema, sense of efficacy and emotional memory, each of those elements will be explained later.

4.7.3 Explicit knowledge

Before all, to pass successfully through a crisis, leaders have to possess the rational decision-making skills. They permit them to collect and analyse efficiently information and by this way, build a detailed perception and interpretation of the event. Besides, they permit to use their reasoning ability that is very important during a crisis. Reasoning ability facilitates leaders to gather information but also to produce observations and generate alternative resolutions (Ford & Gioia, 2000). The connection between the experience and the knowledge is uneducable. More a leader has experience more it will be able to be aware to the situation and to visualize the possible causes. So, the rational decision kills accentuated by the experience of leaders help them to direct look for an appropriate solution and only focus their consideration on the pertinent information cues. Because if leaders have a wrong perception of the current situation, the attention will be focus on a wrong direction and reactions resulting will be inappropriate to resolve problems. Moreover, the capacity to produce a clear image of the situation is essential for producing fast decision response in crisis.

4.7.4 Cognitive schema

According to the psychologists, cognitive schemas represent the set of values and beliefs that determinates how leaders perceive and comprehend events around them (Nystrom & Starbuck, 1984). Besides, the cognitive schema is influenced by the past experience reaped by leaders who have been confronted to an important number of decision situation (similar events). So, the past experience with similar events enables leaders to generate assumptions about the cause of the current crisis thanks to their existing cognitive schemas and generate more efficient decisions based on these assumptions, Hastie (2001). But emotions interfere whit this course of action. According to Huy (1999), leaders can feel a sense of disaffection when the current situation is negatively comparable with their expectations. This negative feeling can influence the decision making process because they deform the real impact of the situation, as Huy (1999, p. 331) explains “The desire to minimize uncomfortable [negative] feelings and maximize positive ones affects information processing [and subsequent decision-making]...”). Moreover Weick (1990) explains that in one hand, cognitive schemas facilitate the process by completing omitted information quickly due to tacit knowledge but in another hand, schemas also increase the risk for wrongly perceiving the crisis. Moreover, emotions amplify this risk. According to Lazar (1999) a surplus of emotions can deform environmental indications and conducting leaders to a biased view of the current situation. The uniqueness of an event is difficult to divine. If leaders are persuaded that the current event is similar to a previous one, the rareness of the current situation can be misunderstood. So, leaders will misjudge the real challenges caused by the new situation (Bazerman, 1990).
As Barr (1998) sums up, the quality of leaders’ cognitive schema defines the quality with which they will be able to respond to a crisis. It means that if leaders had lived an important number of critical events, the chances of being confronted to a similar crisis are greater. But they have to be careful because if they rush in their cognitive schemas without first investigate the current situation, they can do mistakes. In addition, they have to be careful about their emotions that can be the source of biases.

4.7.5 Efficacy

The experience and the efficacy are interconnected and influence the decision making process. It is relevant to precise that here, the efficacy is translated by the self-efficacy of leaders. In this part of the model, the emotional aspect plays a crucial role. Agor (1990) defined the self-efficacy of a leader through an interesting point of view. The self-confidence is the feeling of being convinced that our potential permits us to deal with the rareness of a crisis. It is the conviction that “I am able to discern the fact that I’m taking the right decision for the current situation” and this confidence allows leaders to trust on their intuitions and to proceed according to them. So under critical condition, the trust is primordial. The experience with similar events facilitates leaders to increase their self-efficacy and their self-confidence. Skills are primordial to act on an appropriate way but without confidence leader are not able to judge if they can or not use these skills during a specific situation. More leaders will possess self-confidence, more they will have control and mastery on their environment.

The combination between the theories of Grandey (2000) and Totterdell & Holman (2003) makes available the following argumentation, a high level of self-efficacy in other words self-confidence will influence leaders’ aptitude to control their emotions. It is the same sensation felt by students before an exam. If he is confident due to the fact that he has studied enough to succeed, he will be calmer than another student who has less studied and thus having less confidence.

So, confidence and positive emotional reaction make the process of decision making more effective. But leaders also must be aware because overconfidence can be source of biases.

4.7.6 Emotional memory

The neuroscience has demonstrated that emotions and especially emotional memory affect the quality of decision making process (Bechara et al. 1998). Damasio (1994) has realized an experience on a patient who was brain-damaged. The patient possessed intact cognitive functions but the patient was unable to feel any kind of emotions. The purpose of this experience was to emphasize the role of emotional memory in the decision making. Damasio (1994) concluded that the patient put in an emotional context (i.e. crisis situation), had the intellectual abilities to take decision but it was not able to learn about his mistakes. Damasio made another experience on a patient with the same damage and the same results have been observed and the patient also lost the ability to choose the best decision due to the incapacity to learn about mistakes. Besides, Bechara et al. (1997) made empirical researches with individuals with same brain damages of Damasio’s patients. The results corroborated, even the rationality was intact, the patients made always poor decisions. Watling (1998) explains that feelings have a strong memory. He supposed that if leaders are confronted to a similar crisis live ten year ago, maybe they will be unable to
recollect the specific details of the past event (financial lost, etc.) but they will be able to remember emotions related to the past crisis.

The authors of the article conclude that the emotional memory enables leaders to take the optimal decision in situation that require quickly responses because emotional memory facilitates the link between tacit knowledge and the intuitive decision process.

4.7.7 Tacit knowledge in crisis decision-making

The tacit knowledge is the knowledge learned during the professional life in an organization and it is related to the intuition. Khatri and Ng (2000) call attention to the importance of tacit knowledge in intuitive decision making, “It compresses years of experience and learning in to split seconds...[and] allows calling a number of related problems or issues at the same time” (p. 61). This aptitude to employ tacit knowledge enables leaders to address the lack of knowledge and facilitate the perception of a crisis. So, the combination of explicit and tacit knowledge, mentioned before, agree to draw the closest and most realistic image of the current crisis situation.

4.7.8 Perception and interpretation of the crisis event

Leaders have a great responsibility at the beginning of the decision making process because their ways in which they recognize and perceive a crisis will modify the entire process. If leaders perceive the crisis as a challenge or as a threat, the related decisions will be studied according to different angles. The danger is to recognize the first perception and interpretation of the current situation as the good and unique one. Besides, leaders are used to adopt decisions that are based exclusively on experience and previously successfully outcomes (Cyert & March, 1963; Reger & Palmer, 1996). So, a good perception and interpretation of an event thanks to the explicit and tacit knowledge will create the responses more appropriate.

4.7.9 The role of emotions in the intuitive decision making process

The emotions are introduced in this model in order to make the decision making process more suitable during a crisis situation. Appropriate emotional responses permit to make easier and more efficient the relationship between tacit knowledge and the intuitive decision making process. According to L. Sayegh et al. (2004), during crises, best emotional responses used by leaders must be characterized by “a heightened state of awareness, arousal of physical systems, and acuity in thinking”(p192). These emotional responses represent the arsenal that enables leaders to battle a crisis in the best conditions.

Sayegh et al. (2004) resume the role of emotion for leaders in the intuitive decision making process by this way: “The manager’s capability to demonstrate an appropriate (i.e., constructive and adaptive) emotional response coupled with a sound foundation of tacit knowledge, built upon accumulated training and experience, is optimal for effective decision-making.” (p. 192)

Moreover, the relationship between the tacit knowledge and the intuition are moderate by leaders’ emotions. And under crisis conditions, the time seems faster than under normal conditions. The authors (2004) believe that leaders have not enough time to respect the rules of the rational making decision process. So, analysis of outcomes, options or preferences can
paralyze the process and crisis situation requires that the decision be taken quickly. As Huy (1999) said: “during such periods [of radical change or crisis], too much analysis may breed increasing doubt and paralysis” (p. 330).

The high level of uncertainty, fear and anxiety during a crisis created an avalanche of emotions during the decision making process. Leaders have to abandon the traditional model to alternative models. According to Ubel and Loewenstein (1997), emotions have the particularity to be adaptive in times of ambiguity. Leaders and followers have the propensity to diminish the past fear and to amplify the future fear. This phenomenon enables leaders and followers to centre their attention on the current situation because they are afraid about the future and not paralyzed by past fear.

Emotional responses have also the particularity to structure the past experience and the situation. It is pertinent during the critical period when leaders have to recognize a crisis with multidimensional aspects and to decide about a future decision. According to Damasio (1994), emotions help leaders. Emotions operate as sensors that work in unison with the memory and recognition to help the access to tacit knowledge. Remember that the tacit knowledge is closely linked to the intuition.

Khatri and Ng (2000) introduce a simple definition of the intuition, “smooth automatic performance of learned behaviour sequences and often can short-circuit a step-wise decision-making, thus allowing an individual to know almost instantly what the best course of action is” (pp. 60–61). The intuition is a mixture of experience and judgement skills. It is a key ingredient for leaders during the decision making process under crisis conditions. The intuition is an instantly reaction, it allows leaders to win precious time and to prefer a decision instead of another one. The intuition is an emotional response that can be visualized as a “sensorial signal”. If the “sensorial signal” indicates as a result of a bad sensation that the decision is inappropriate according to circumstances, the decision is maybe not the best one. If the signal is associated to a good feeling according to circumstances, the decision is maybe the appropriate one.

In their article Gaudine & Thorne (2001) established and concluded that the emotions and ethical decision making are closely connected. They said that “the main contribution of this paper is to show that emotion is integral to a rational ethical decision process.” (p. 183). In the next point, our desire is to independently present the ethical decision making which seems also important for our field of study.

4.8 Ethical decision making

After the presentation of the emotional decision making model, another model is relevant for the decision making process under crisis. The ethical decision making is also used in disaster situation like Karin Jordan (2010) (Ph.D. and Professor and Chair in the Department of Counseling at the University of Akron, Akron, Ohio) introduced with his article “An Ethical Decision Making Model for Crisis Counselors”. Firstly, the ethical decision making will be presented thanks to Jones’ work and secondly the Jordan’s article will be examined in relation with the leadership sphere. But Jordan’s article will be used to emphasize and determine possible ethical traps.
4.8.1 Economic and specifications

The French philosopher Ricoeur (1990) defines the ethic as a perpetual research of “well done”, founded on the adoption of a constant individual behaviour in order to respect the well being of others. The German philosopher Habermas (1991) also adds that ethic is an argumentative practice anchored in decision contexts and determined actions. So, ethic is a reflection that aims to determinate the principles of “right” and “wrong” taking into account constraints related to action contexts.

According to James and Wooten (2008), the ethical dilemmas are omnipresent in organization life where environments are characterized by uncertainty and where time notion is short. In these conditions and during unprepared situation, cognitive skills of leaders are diminished and they have to mostly cope with their own judgment. Rick Houser et al. (2006) describe the ethical decision making as a hermeneutic model where the interpretation is the key component. According to them a hermeneutic approach “is accomplished by suggesting interpretational hypotheses and determining whether the interpretations are accurate.” (p101). James (2008) also explains that leaders have eventually to deal with unethical decisions due to quick and short-term focused resolutions that can have bad impacts on the organization.

4.8.2 The moral intensity: key element

From psychological theories, Jones (1991) introduced the concept of “moral intensity” which is a key element of the ethical decision making process. The moral intensity includes six characteristics of a moral issue that can affect the decision making process.

4.8.2.1 Magnitude of consequences

The magnitude of consequences represents the sum of the troubles/benefits done to victims. For example, if the number of death in a hospital unit is too high, the hospital can take the decision to suspend the unit in order to study the reasons.

4.8.2.2 Social consensus

The social consensus is the degree of social agreement that a proposed decision or action is either evil or good. It can also be decoded as the tendency of people to avoid the association to an unethical decision. More the decision will be unethically according to the ethical propensity of the leaders, more they will want to be dissociated to this decision.

4.8.2.3 Probability of effect

The probability of effect is constituted of two probabilities. In one hand the probability that the issue question will happen and in another hand, the probability that the issue will cause harms excepted. A company can take the decision to sell a product knowing that the danger of it is too small to create real harms.

4.8.2.4 Temporal immediacy

The temporal immediacy is the duration of time between the current situation and the onset consequences of the issue question. Obviously, more the duration of time is short more consequences occur immediately and oppositely, consequences appear slower when the duration of time is longer.
4.8.2.5 Proximity

Proximity is the feeling of mental or physical closeness that decision makers have with the victims or beneficiaries of their actions. If the victims/beneficiaries, touched by decisions, are psychologically or physically close to the decision maker, the decision making will be more difficult to realize. This reasoning is valid in the opposite situation. The decision making will be easier to realize if the victims/beneficiaries of the decisions are psychologically or physically far from the decision maker.

4.8.2.6 Concentration of effect

Concentration of effect is the number of people affected by an action by a giving magnitude. It is an inverse function, it means that more the number of touched people is small/great, more the magnitude of the decision will be great/small.

4.8.3 The framework of ethical decision making

After introducing the moral intensity, Jones (1991) incorporates it in the framework of ethical decision making that is divided in four key steps. Toward each of those steps, leaders have to cope with ethical dilemmas and also with the moral intensity which influences the decision making process.

The first step is the recognition of the ethical issue. Leaders have to remark that their future decisions will have impacts on the others and that they have a kind of total freedom in the choice of their decisions. Obviously, here, the ability to recover is the recognition of the consequences. If the crisis possesses a high intensity i.e. a high magnitude of consequences, decision makers will have more facility to recognize the ethical issue of a situation. The proximity plays an important role in this step, more the proximity will be high (feeling of mental or physical closeness) more the decision will be perceived with a high intensity.

Making a moral judgement about the issue is the second step of the ethical decision making. According to Souryal (1993), the morality is a human behaviour dictated by rules, values and laws that conducts people to decide or to act in a right or wrong way. According to James (2008), researchers have defined that the moral cannot be considered as a stable characteristic but people function with a range of moral developments stages. This range is influenced by context, for example, in a real-life situation, the moral reasoning/judgement is lower (less morality) than in a hypothetical situation. So, when leaders are confronted with ethical issue and they perceive it with a low importance, they will diminish their efforts on moral judgements during the decision making process.

The third step is the establishment of moral intent. In this step, leaders have to decide what will be the turn of event according to the moral judgement realized in the previous step. Also, this step is accompanied by moral dilemmas that give rise to the emergence of conflicts between moral consideration and others elements (self-interest of leaders, organization life). For example, if leaders know that the organization is not respecting the applicable fiscal rules; the denunciation of the organization may be the ethically correct decision. But this decision will probably have bad repercussions on the organization life and their employees (leaders). The moral intent is related to the social consensus, people want avoid being associated to a bad or unethical decisions. So, this emotion pushes leaders to behave in a morally correct way.
Finally, leaders have to take the decision according their moral intentions.

4.9 Ethical decision making during a disaster

With his article “An Ethical Decision Making Model for Crisis Counselors”, Karin Jordan (Ph.D. and Professor and Chair in the Department of Counseling at the University of Akron, Akron, Ohio) incorporates the ethical decision making process under disaster conditions, through ten steps. But we want especially put the light on the possible ethical traps which seem relevant for the leadership area.

According to Jordan (2010), the rareness of the challenge creates by a disaster demands a different and specific kind of counselling. During a crisis/disaster, the nature crisis counselling has to possess a clear sense of the ethic (using the code of ethics of the American Counselling Association [ACA code of ethic]) and has to be familiar with the ethical decision making. In order to be effective, the decision making process must progress in an eco systemic perspective (Bronfenbrenner, 1979). An eco systemic perspective involves hierarchically four systems. Firstly, the microsystem constitutes the interrelatedness of a person, family or community. Secondly, the mesosystem represents the environment where the disaster happened. Thirdly, the exosystem symbolizes the environment where the recovery from disaster took place. En finally, the macrosystem corresponds to developmental tasks that must occur.

4.9.1 First step: identify the ethical concern within the context of the disaster

During this step, decision makers identify the ethical dilemma and recognize the uniqueness of the current situation (location, magnitude...). They have also to deal with diverse cultures if they work in a foreign country.

4.9.2 Second Step: Consider personal self, beliefs and values, skills and knowledge

Decisions makers need to gauge several personal elements. The self, their abilities to cope with their emotions in order to be able to focus and open minded. Beliefs and values, they have to know if their values or beliefs will interfere with the ethical decision making process. Skills and knowledge, they have to possess manager/leader skills to stand up the needs of the disaster victims.

4.9.3 Third step: identify the code(s) of ethic involved

They have to indentify the appropriate codes according the ethical dilemma recounted. In the best case, decision makers know and are familiar with the entire code (here ACA code of ethic).

4.9.4 Fourth step: Determine possible ethical traps

This step is one of the most relevant steps of the process because decision makers have to struggle with several kinds of traps. The ability to recognize and avoid them is a primordial skill to master in order to become an effective ethical decision maker.

The next table enumerated the name and the signification of the different ethical traps mentioned in the article written by Karin Jordan. But we tried to read between the lines and extract the possible implications of each of these traps according to our opinions.
<table>
<thead>
<tr>
<th>Trap</th>
<th>Signification</th>
<th>Implication(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The common objective trap</strong></td>
<td>Decision makers can be too concerned by the trauma that affected the community (organization).</td>
<td>Loss of their capacities/abilities to think about clear and appropriate solutions.</td>
</tr>
<tr>
<td><strong>The circumstantialities trap</strong></td>
<td>Leaders have the belief that circumstances of all crises are the same.</td>
<td>Inability to change/adapt their mind. (or concept of decision making)</td>
</tr>
<tr>
<td><strong>The traditionally trap</strong></td>
<td>They believe that because they did not act by this way before, the actual way to proceed appears inappropriate.</td>
<td>Loss of innovation and improvisation</td>
</tr>
<tr>
<td><strong>The role trap</strong></td>
<td>Decision makers take the role of another member in the crisis group beyond their lack of skills.</td>
<td>Loss of energy in other activities rather than concentrate their efforts on the decision making process.</td>
</tr>
<tr>
<td><strong>The “that’s what we do in my country” trap</strong></td>
<td>They are used to employ their own frame of reference but they have to be attentive to cultural and historical settings of the environment.</td>
<td>Increasing the possibility to take wrong/inappropriate decisions.</td>
</tr>
<tr>
<td><strong>The “who will benefit trap”</strong></td>
<td>Leaders can boundary their circle of action by thinking that some people merits to be deserved rather than others.</td>
<td>Focusing only on one part of the solution and consequences.</td>
</tr>
<tr>
<td><strong>The vicarious traumas trap</strong></td>
<td>Leaders have the sensation that what they are making, are useless or unhelpful.</td>
<td>Paralysation/Immobilisation of the decision making process.</td>
</tr>
</tbody>
</table>

4.9.5 **Fifth step: Frame a preliminary response**

After the first four steps and the identification of appropriate codes of ethic to use according to the ethical traps, decision makers have to draw a first response for how to deal with the current events.
4.9.6 **Sixth step: Consider the consequences**

During this step decision makers have to judge the consequences of the preliminary response by using the ecosystem systemic view, explained before.

4.9.7 **Seventh Step - Prepare an ethical resolution**

After the evolution of all possible consequences and after that decision makers have determinate that the consequences from their ethical decision making will produce the smallest impacts on people touched by the crisis, decision makers prepare their decision.

4.9.8 **Eighth Step: Get feedback/consultation**

Initially decision makers share their ethical decision with the entire organization (decision making team). After, they communicate with the members of the organization in order to get feedbacks from their decision. If it is possible, they also can consult other members of the organization that have been confronted to a similar situation (leaders from others units).

4.9.9 **Ninth Step: Take action**

If the first wave of feedbacks does not contradict the ethical decision, decision makers take action.

4.9.10 **Tenth and last step: Review the outcome**

After that the decision has been taken, they have to check the outcomes of the decision in order to learn and to improve their expertise in the ethical decision making. They also have to harvest the feedbacks of the application of their decisions with people touched by the crisis (different to feedbacks from the eighth step) in order to evaluate the outcomes on a different point of view.

This specific ethical decision making process is also interesting but we used it to emphasize the possible ethical traps. In the following, an illustration will be introduced in order to demonstrate that ethical decisions play an important role for organization especially in this case. The next example refers with the theoretical point introduced in the first chapter of thesis which categorizes crisis according to danger and organization’s reputation. In this case, it is a crisis of level 2 where there is the possibility that some people are injured and seriously loss of reputation for the organization or a combination of the both.

4.10 **Illustration ethical decision making**

We chose a specific illustration that put the decision maker in a position in which he cannot avoid the ethical aspect of a crisis. The case of Nike presented by Ferrell O. C., Fraedrich & Ferrell L., (2009), seems to be an appropriate example to demonstrate that during a crisis, leaders can make the organization more respectful and increase the reputation of it by taking an ethical decision. As mentioned in the beginning of the thesis, the degradation of the reputation can put the organization in troubles. The economic factor is not the unique source of crisis within a company. As we will demonstrate in the following example, the ethics of an organization must be seriously respected otherwise leaders and companies will face serious economic
difficulties that will arise in a crisis. This illustration will be shortly reused in the next chapter but for a different reason.

4.10.1 Nike

Nike was founded in 1964 by Phil Knight under the name “Blue Ribbon Sports”. The real Nike brand was created in 1972 and the commercial and public success began during the 80’s.

Nike knew a wave of troubles during the 90’s caused by the allegations about subcontractor labour and human right violations in the third-world countries. This ethical question was underlined by the Medias and the American audit company Ernst and Young. First, Nike was suspected by the Medias of denying the welfare of its employees, there were deficiencies in health and safety conditions, extremely wages. Secondly, E&Y commissioned by Nike, agreed with the previous allegations and reported that factory conditions in Vietnam Company were extremely awful. The standards of chemical were not respected and some employees had health problems causes as a result of these conditions.

The reputation of Nike felt down. Public protested against Nike by boycotting the brand and American Universities cancelled their deals with Nike. In 1998, revenues and stock prices decreased by about 50% and sixteen hundred employees were fired.

The first reaction of Nike was to reject these accusations but it was a very bad choice. But after court sentences and sums paid particular to Fair Labour Association, Nike decided to take radical decisions and to realize heavy changes in the organization.

4.10.2 Decision made: the building of a corporate responsibility

The mainly purpose of the decision making was the creation of new standard code of conduct and to provide the corporate responsibility. According to us and O. C. Ferrell (2009), it looked for Nike like a new definition of its ethical behaviour.

Firstly, Nike abandoned its old monitoring system and replaced it by three new ones. Firstly, “SHAPE” that consists to the inspection of basic conformity concerning environment, safety and especially health. Secondly, Management Audit (M-audit), initially Nike hired and formed twenty-two members for labour-auditing practices and after they were designed to do an in-depth inspection of the uncover problems that may not be readily obvious. And finally, Nike supported independent monitoring by the Fair Labour Association.

One of the most significant decisions was to make transparent their supply chains, so to disclose an important element of the organization for all people outside of the Company. This transparency was wanted in order to reach two specific goals. First, they want to inspire the others company to do the same and secondly, it was a motivator for contract factories. In addition, Nike won again the confidence of its customers and of the public opinion.

Another change was made to resolve the specific problem of toxic chemicals. An innovative way to recycle was put into operation, toxic products was replaced by recycled polyester and organic cotton.
A relevant point of this case is that Phil Knight decided in same time to hire a CEO but to stay chairman of the board. This new CEO, Bill Perez was an expert in corporate responsibility field. Additionally to the ethical decision making, we can also signify this decision inspired by the naturalistic decision making model that promotes a high level of expertise for the decision maker.

4.10.3 Comments

The result of these decisions was very fruitful. Less than 10 years after the crisis, Nike was rewarded for their efforts and right decisions about the ethic and also for the preservation of the environment. These two sensible aspects for the public opinion increased significantly the reputation of Nike and past allegations were forgotten. The thirteenth place in the Business ethics Magazine’s list (2006), the first place in the ranking in the magazine’s environmental category (2008) and the best score on the Human rights Campaign Foundation Corporate Equality Index two years in a row are a lot of evidence that Nike is now one of the company with great respect about ethical issues and therefore enjoys a high reputation worldwide.

If Nike had just taken the ethical decision from the beginning, the results would be maybe the same and they would have been even better than today. It might also be avoiding financial losses and moreover avoid a crisis. This example can be considered as a proof of how ethical decisions can prevent an organization from a crisis.

The case previously presented was especially focused on the ethical question. But the next illustration called “Miracle on the Hudson” referring to the event of the 15th January 2009 is relevant four our thesis because it brings together the decision models presented before. In addition, the paradox of the efficacy will also be introduced.
4.11 Miracle on the Hudson: Decision making under pressure

4.11.1 Introduction

The following illustration will put on the light the specific key elements which characterized some decision making processes discussed before. To refresh our memories, the anarchy model emphasizes the improvisation with the help of experimentation, the naturalistic decision making call attention to the level of expertise of the decision maker and finally the emotional decision making underlines the crucial role of experience, intuitiveness and of course emotions. All of them will be discuss together in the illustration because we think that there are interconnected, by the experience, the instinct and the emotions and treat them individually seemed us unexciting. Every key element of these decision making processes will be illustrate toward the event called “Miracle on the Hudson” where the experience (experimentation/expertise), the instinct (improvisation/intuitiveness) and emotions played a crucial role for the decision maker.

4.11.2 Methodology

The “Miracle on the Hudson” has been selected by us as an appropriate illustration in order to corroborate, reinforce and interpret the theoretical elements discusses before in the thesis about decision making under crisis. The illustration will be presented thanks to newspapers articles and interviews related to the event.

4.11.3 Presentation of the illustration

The 15th January 2009, Chesley Burnett Sullenberger alias 'Sully', pilot for the US Airways took the control of the Flight 1549, rallying New York to Charlotte (Pennsylvania)< http://www.msnbc.msn.com>. Approaching the retirement, this flight was common for Sully but this day became unforgettable for him and for all passengers. Unfortunately, the plane struck a flock of birds during takeoff minutes earlier at LaGuardia Airport (New York). With the both engines out, Sullenberger decided with all the information in his possession to land the plane on the Hudson River located close to the Bronx. Thanks to this unbelievable manoeuvre, he saved the life of 155 people and avoided a terrible crash in an urban zone. “Sully” took a critical decision in a very short time, according to the Canadian video documentary (2010) the flight lasted 6 minutes (‘Les grands reportages’, RDI, diffused Wednesday 19 May 2010 presented by Simon Durivage).

4.11.4 Presentation of the decision maker and its competencies of decision maker during a crisis

4.11.4.1 Experience and Expertise

Sully Sullenberger is 57 years old in 2009 and according to the article on internet < http://online.wsj.com>, Sullenberger is an expert and has a long experience behind him, “Sullenberger is an airline safety expert who has consulted with NASA and others, according to his resume posted on the Internet. He has 40 years of experience, 29 with US Airways, and hold masters’ degrees in public administration and industrial psychology.” As mentioned before, the decision maker’s experience and expertise plays a crucial role in the three decision making processes under crisis conditions. It is evident that in this case, the both conditions are respected. Sully has e great experience in the airline area with forty years of career and he is an airline safety expert.
4.11.4.2 Tacit knowledge related to intuition

In the same article on internet, Kitty Higgins, a former safety board member said that "...his decision used the best information he had... and was based on his experience and instincts."

The tacit knowledge is the knowledge learned during the professional life in an organization and it is related to the intuition. In this case, if we refer to the long experience accumulated by “Sully” we can say that his tacit knowledge was important. As said before in the thesis, Khatri and Ng (2000) call attention to the importance of tacit knowledge in intuitive decision making, “It compresses years of experience and learning in to split seconds...[and] allows calling a number of related problems or issues at the same time” (p. 61).

4.11.4.3 The lack of time

As Huy (1999) said: “during such periods [of radical change or crisis], too much analysis may breed increasing doubt and paralysis” (p. 330). Besides, under crisis conditions the time seems faster than under normal conditions. So, analysis of outcomes, options or preferences can paralyze the process and crisis situation requires that the decision be taken quickly. In this case we can put the light on the role of the sort-time during a crisis event. The lack of time was a decisive element for “Sully” in his decision making process and was remarkably able to deal with it. According to the Canadian video documentary (2010), the time between the takeoff and the leading is more or less of six minutes. Three possibilities were envisaged and the choice was made in these laps of time. Firstly, come back to the airport where he took off, but not enough time. Secondly, the eventuality to land in another airport closer than first one was envisaged but for the same reason of the first proposition, this choice was rejected. Finally the landing on the river was chose as the best decision for two reasons. The first reason was to try to save the life of the passengers and secondly whiteout the risk to kill more people by trying to come back in the two airports proposed (close to habitations).

4.11.4.4 Ethical decision making

He employed the ethical decision making when he took the decision to land on the river. In fact, his ethic of pilot leads us to avoid putting the life of other people (habitations) in danger.

4.11.4.5 Instinct (improvisation)

According to Boin at al. (2005), in highly volatile conditions where there is non-negotiable time pressure, the utilisation of improvisation is an optional tool to solve the situation.

This statement produces a paradox. To sum up, organizations have to find a balance between the proportion of respect of organizational procedures and the proportion to let leaders used their improvisational skills.

According to the situation, the landing on a river was a mixture between improvisation and experimentation which are the key element of the anarchy model but in same time he was able to respect certain procedures. So, he had to deal with the improvisation of emergency landing on a river and had to respect some rules to land in the water. So, he was able to cope with the “paradox of improvisation” in a crisis situation.
4.11.4.6 Emotions and intuition

Appropriate emotional responses permit to make easier and more efficient the relationship between tacit knowledge and the intuitive decision making. During the Canadian video documentary and the American TV show ("Sully" was interviewed by Katie Couric for the TV show 60 minutes on CBS) he said two interesting sentences.

"I had to control my adrenaline" and "You have to be concentrate"

Sully Sullenberger

According to L. Sayegh et al. (2004), during crises, best emotional responses used by leaders must be characterized by "a heightened state of awareness, arousal of physical systems, and acuity in thinking". According to these sentences, "Sully" was able to control his emotions and produce appropriate emotional responses, translated by self-control and concentration.

The intuition is an instantly reaction, it allows leaders to win precious time and to prefer a decision instead of another one. The intuition is an emotional response that can be visualized as a "sensorial signal". If the "sensorial signal" indicates as a result of a bad sensation that the decision is inappropriate according to circumstances, the decision is maybe not the best one. If the signal is associated to a good feeling according to circumstances, the decision is maybe the appropriate one.

During the interview with Katie Couric for the TV show 60 minutes on CBS, He said these words, "After the impact with the birds...I felt the engine’s vibrations...Obvious to me...this was a critical situation."

In this sentence we can maybe interpret this feeling as an intuition. He felt directly that the situation was critical and that he was able to percept the crisis in a very quick time and produce alternatives. This intuition permits him to win time in the different steps of the decision making process. And so, the final decision was taken quickly and permits him to apply it in the best conditions and not in the precipitation.

4.11.4.7 Efficacy

"I was sure that I could do it!"

Chesley Sullenberger

Skills are primordial to act on an appropriate way but without confidence leader are not able to judge if they can or not use these skills during a specific situation. More leaders will possess self-confidence, more they will have control and mastery on their environment. The sentence assumed by Sully, shows us that he was confident and believed in their abilities. It was repeated many times during our thesis that the self-confidence is key factor for leaders during the decision making process but leaders have to be careful because too much confidence can be dangerous.
4.12 **Paradox of the efficacy**

For the decision making the efficacy is a double-edged sword. It is judicious to specify that in this context the efficacy is translated by the self-confidence felt by leaders. It is the convection that you are able to do something or to reach an objective.

The self-confidence can be for leaders a source of motivation and a catalyst that permits them to take appropriate decision and to focus their attention and knowledge only on the current crisis. As “Sully” mentioned, his self-confidence helps him to reach his objective and to land the plane on the river.

But as introduced at the beginning of this chapter, the bias of overconfidence is part of the decision making game. The overconfidence is a feeling that can alter the perception of the current crisis situation. And a wrong perception about a problem meet by the organization may totally bring decision makers on a wrong way and make the future decision completely inappropriate.

So leaders have to keep in mind that the confidence must be considered as a catalyst and they have to be careful to do not fall in trap of to be convinced that they are rocket scientists.

4.13 **Comments**

This case previously presented was a good example to illustrate the combination of different models and their key elements studied before. In this case, these key elements were mastered in a perfect way and “Sully” resolved the crisis thanks to his experience, expertise, control of emotions, ethical behaviour, intuition and improvisation. All these necessary elements were presents in this illustration. According to this case and according to our interpretation of the events, we can legitimately think that a leader possessing this panoply of key elements is maybe able to cope with a crisis, take the right decision under time and stress pressure and resolve it.

Finally, during the Canadian video documentary (2010), one Sully’s sentence strikes us. Sully said “Without my co-pilot, I could not have done what I did”. This quote underlines the fact that during the decision making, a leader is not lonely and he can be surrounded by a team.

4.14 **Decision making: the crisis team/ followers perspective**

In the decision making the scale of the reply is adapted in proportion to the scale of the impact. According to Arjen Boin, Paul T. Hart, Eric J. Stern and Bengt Sundelius (2005), crisis responses are not only fashioned by decision but in addition by the implantation of those decisions. During a crisis, there are many actors that produce key tenets of the crisis responses. Besides leaders have an important role, they represent the anchors of the decision making process. The key question of the following text is to determined the ins and the outs of a successfully crisis responses operation.

Whatever the leader, they are confronted to choice opportunities that combine a number of specific characteristics which relate to a situation of crisis. The choices and decisions are a highly consequential; they will have a great influence on the entire organization and stakeholders, either right or wrong. They are more likely than a stable situation, the using of “tragic choices”
leading to loss are more frequent. They are baffling, the likelihood of the issues and the possible impacts are very unclear. Leaders have to be high-speed decision makers because the pressure of the time real or not, leads them to neglect some important rules of decision making like. This previous combination of characteristics put leaders in trouble. They are under the spot of the organization, everybody is looking for them. Leaders have to facilitate decisions, reduce anxiety and control their impulses.

4.14.1 The crisis decision making team

“As a rule, crisis decision making takes place in some type of small-group setting in which political and bureaucratic leaders interact and reach some sort of collective decision” Arjen Boin et al. (2005) (p.45). A crisis touched the entire organization and decisions have to be taken by leaders and their teams. In a high pressure environment, the team spirits allows, first to disperse the anxiety among the members and secondly to increase the intellectual and cognitive capacity, two brains produce more ideas than one. The authors introduce two kind of dynamic existing in a team. One is the conflict, the group explodes and the other is the conformity, the group are closed into rigid rules. They precise that the two styles, in extreme version, are inappropriate for an efficient decision making team. Too much conformity does not give way to ideas that come out for the ordinary and many conflicts cannot get things done quickly.

To make a crisis decision making team (CDMT) competitive, we must stimulate its ingenuity and its creativity by exposing them to a controlled vulnerably in order to produce any original and unusual ideas and decisions. Thanks to the following advices, leaders, as coordinator and chief of a team can reach this objective.

4.14.1.1 Newness and conformity

Despite the fact that a crisis is rarely conforming to the scholar manual, the people gathering around the decision making table have not always used to work together. Principally during a crisis, the birth of a new group where members don’t know their roles and status of the others around the table can shape vulnerability and culpability in the mind of a member. These feelings remove the need to intervene and give an opinion about the crisis. In this situation, leaders are enclosed in a “conformity bubble”, they give our opinions and people avoid the positive conflict which enables the creation of new ideas. This group behaviour is called “false cohesion”; members do not provide is point of view in order to stay in the inner circle of power. “False cohesion” produces collective ignorance, self-censuring and illusory unanimity, working in this atmosphere is inappropriate to make decision.

So, from the beginning, leaders have to actively precise the roles and the status of all the members of the group and involve them to participate in the discussion from the start. To sump, leaders have to transform a group in a real team.

4.14.1.2 Excessive cordiality and conformity

Working in a crisis team can become a place of refuge from the anxiety where the members find protection among their colleagues in a relatively intimacy. Because of this group think members become infected by an unreal optimism about their abilities to solve a crisis successfully. If a member is not touched by this “illusion of invulnerability, it will be deviate of its
path and it will feel obligate to speak about its feelings instead of the real purpose, making decision about crisis” (Hart, 1994). If the team is became a real place of refuge, it can be affected by the “bunker syndrome”. The team is living in isolation from the real world and produces our own view about the crisis without take into account the real challenges and priorities of the situation.

Besides, during a crisis, the accountability structure under which a crisis team works is also important. If a member is conscious that the accountability of its own decision is supported by all the team, it will be more efficient in the discussion and more liable to display conformity behaviour in the groupthink. Oppositely, if a member feels the weight of accountability on its own shoulders, it will be more vigilant. So, it will be less confident and will hesitate to take part in the discussion.

4.14.1.3 Centrifugality and politicking

The circumstances of a crisis and the pressure from it create intense internal conflicts in the team. In a crisis team, conflicts are practically impossible to avoid, leaders recognize that and they have to challenge with this factor. In this atmosphere, the table of discussion becomes an arena where some members use their knowledge’s, information’s or expertises as weapons or shields in order to meet their own needs rather than help the group to reach the objectives. Members are able to wipe out a colleague in front of all to win the attention of the leader in this case a colleague transforms to a competitor. The worst extremity is that members lose their confidences on the abilities of the team to find the solution and prefers saving themselves rather than preserving with the team.

During a crisis the emotional aspect influences the behaviour of a team, whatsoever for leaders or for followers (members of the group). A leader has its own sentiments and needs and under the pressure, they are rushed in all the directions. Besides, the abilities of a leader can decrease and one of solutions is to surround himself by people who will give you more trust. To reach this trusted exchange, the team has to remove and ignore the traditionally bureaucracy between each of them (without forgetting the role of everybody in the crisis decision making). By this way, the “non-favoured” and the “forgotten ones”, as they are called by the authors, can share their perspectives with the top-level member of the team. To sum up, leaders can deliberately use their powers to reduce or widen the proportion of the team in order to gain confidence for them and for the team.

4.15 Comments and Success factors

Obviously, it’s easier for a team to struggle with types of crisis are recurring rather than exceptional crisis. There are several primordial conditions to create an efficient crisis decision making team. The team has to be composed by members used to work together (Gabriel, 1985). The engine of the team must be a reasonable trust. According to Wenger, Quarantelli and Dynes (1986, conflicts must be avoided to let the place to a “domain of concusses” where decisions can be taken in a mutual respect and with the understanding of all. The role and the status of everybody are clear, the final decision maker is know, but members can share their ideas with the others being on the same footing (Drabek, 1985). The formalization of procedures for the group composition and deliberation is primordial. Those procedures enable leaders to use their
authority judiciously to optimize the sharing of information and the collaboration of a team. According to the authors, during a crisis, the procedure called “multiple advocacy” is one of the possible way to do. It helps leaders to emphasize the responsibility of everyone in the process and to preserve the curiosity of an audience. This method gets the chance to each member of the team to present his-her opinion without to be interrupt. Leaders have also the duty to ensure that all members of the team are in, all information’s are shared and all opinions are presented before that a decision are token. But it is pertinent to mitigate the benefits of this method through two points. In one hand, the strict respect of procedures under pressure is tricky to realize because sometimes leaders must force the decision due to time constraint. In another hand, pay attention to the opinions of everyone without have the real possibility to react places leaders in a delicate position. In crises, members are looking for a clear direction to follow from leaders. But this method put the team in first place and reduces the power of leaders to take position. This creates a dilemma for leaders, they must commit and not commit at the same time.

Meltsner (1990) gives one part of the solution, “there is a delicate balance between the need for the ruler to be strong-minded [in responding to a crisis, authors] and the need for openness in presenting problems and receiving advice. What is required is a ruler who appears to the external world to be in charge but who, within the inner circle, has created norms of equality to promote discussion, dissent, and multiple perspectives. . .” (p82)

4.16 Comments about decision making under pressure

The decision making task is one of the most important for leaders especially during a crisis where decisions have to be taken under pressure and in a time shorter than normal. If no decision is made, the organization will be frozen in a status quo. It is an inevitable task for leaders and avoid this process would be unthinkable.

Before to comment key elements of the different decision making models, leaders have to know that decision making includes biases that can influence the process. Some shortcuts can be use to make the process faster but they have to be used with parsimony because they can influence the judgement and so distort the decision making process. The paradox of the efficacy is also a key element of the decision making. Leaders have to do the distinction between self-confidence and overconfidence. An appropriate dosage of self-confidence is an element that a crisis leader must be able to master in his career.

Among the theoretical presentation of the decision making models, four significant aspects have emerged out from them and constitute key features for a crisis leader.

It is undeniable that the experience holds a prominent place in the decision making process under pressure. The experience is a positive function for knowledge (tacit/explicit), perception ability and the emotional maturity. Leaders with a high level of experience will have therefore a better level of knowledge, a faster perception ability and higher emotional maturity than leaders with less experience. These three elements are the bases of decision making under pressure and permit to develop the intrusiveness of leaders. The intuition can make the difference and permits to win time and to diminish the consequences of a crisis.

The experience and also the intuition are also connected to the expertise. The naturalistic decision making process emphasizes the role of the expertise and introduced the recognitional
pattern matching (RPD). To sum up Klein (1998, p. 24) explains the abilities of experts (decision makers) that use the RPD model. Leaders having a high level of expertise are able to formulate a quick and correct decision and know the impacts of their decisions under high-pressure. But the naturalistic decision making stipulated that to be able to master the RPD, leaders must possess the knowledge and experience required and the aptitude to intuit patterns.

Another feature for leaders is the improvisation inspired by the anarchy model presented by Choo (2001). He also put the light on the experience of leaders in his model but the improvisation is an interesting and original point. The improvisation permits for leaders to imagine unusual solutions for problems and sometimes the unique solution is a one that breaks standard procedures. But the organization has also a role, if leaders are in an organization that does not permit to override the unclosed bureaucratic system, they cannot have the possibility to express their improvisational skills. And organizations have to keep in mind the paradox of the bureaucratic organizational structure.

The emotions are being severely tested during a crisis but they also possess several utilities. As mentioned before, appropriate emotional responses permit to make easier and more efficient the connection between tacit knowledge and the intuitive decision making. According to L. Sayegh et al. (2004), during crises, best emotional responses used by leaders must be characterized by “a heightened state of awareness, arousal of physical systems, and acuity in thinking”. Ubel and Loewenstein (1997) also add that emotions have the particularity to be adaptive in times of ambiguity. Leaders and followers have the propensity to diminish the past fear and to amplify the future fear. This phenomenon enables leaders and followers to centre their attention on the current situation because they are afraid about the future and not paralyzed by to past fear. To sum up, if leaders are able to use appropriately their emotions, they will be better crisis leaders.

The aspects listed above leaned especially on the leaders but a crisis touches all the organization and leaders are not alone, they can be surrounded by a team. It is impossible to know everything or to generate all possible ideas about a situation or a problem. The crisis decision making team composed by experts can be a solution for leaders to optimize the decision making process and to avoid carrying the entire weight of the crisis on their own shoulders. The roles of leaders in a crisis team are multiple. Leaders must represent the catalyst and the rules maker of the group and after transform this group in a real team. They have to keep the team open-minded and create team spirit in which they take into account the conflicts. They have to stay impartial among the members of the team and not be influenced. Leaders have to promote the importance of the trust and confidence and above all it is leaders that make the final decision.

Besides, the ethic dimension has to be taken into account. As defined in the beginning the thesis, a crisis arrives not only because they lose money but if the reputation of an organization is altered the consequences can as worse as a pure financial crisis. So, the ethical decision making is important for two reasons. One, ethical decisions enable to prevent degradation of the organization’s image or in other cases to restore its reputation. And two, enable to keep the spirit of leaders free of any culpability.

Finally, crisis leaders are aware of biases of human decision making. They know that according to each individual, decisions can be very different for a same crisis. But as Taylor (1989) and Milliken (1990) said, decision makers feel more control and less uncertainty when they
structure their strategic issues as opportunities. And to perceive a crisis as an opportunity some conditions are necessary and leaders have to know that failures are an incredibly source of opportunities. This previous reasoning leads us to the next chapter.
This chapter is radically oriented toward a domain quite different than the previous one. Indeed, our thesis is influenced by optimism, so we would like to believe that a crisis is a unique opportunity and unusual of becoming better than ever, rather than considering it as a threat that organizations have to cope with. Before giving concrete examples of opportunities related to crisis, an appropriate environment has to be implemented in order to make the organization and leaders perceive the crisis as an opportunity. An opportunity brought by a crisis would be change and renewal among the organization, we will introduce this thank to Greiner’s research. Greiner explains that an organization passes through different phases characterised by different dominant management styles and dominant management problem during its growth, but the most relevant part here for our topic is each phase itself but rather the passage from a phase to a next one. Again, some illustrations will be presented with the aim of bringing a real aspect into our thesis.

5 Turn a crisis into an Opportunity

“The pessimist sees difficulty in every opportunity. The optimist sees opportunity in every difficulty”

– Winston Churchill

5.1 Introduction – a short story

The Chinese vocabulary possesses two symbols to express the signification of the word crisis (Tom Daniels, 1999). One of these symbols represents “danger” and the other one “opportunity”. When people think about a crisis, a pessimistic feeling is the first thing in which they think. But according to an optimistic view, a crisis can be seen as an opportunity. The following story shows that according to different perceptions, a crisis can be apprehended as a pessimistic or an optimistic event.

In a village, an old man possessed a very beautiful horse. The horse was so beautiful that rich people wanted to buy it but the poor man always refused.

He answered: “This horse is my friend, How is possible to sell a friend?”

But one morning, he went to the barn and the horse was gone.

People around him said: “You should better sell it. Now the horse is gone and you lose your money, what a bad luck.”

The old man answered: “Luck or bad luck, who knows?”
One week later, the horse came back with a whole horde of wild horses. The horse had seduced a mare and by the way, returned with the rest of the horde.

People surprised, said: “What luck!”

The old man and his young son began the dressage of wild horses. But a week later, during training, his son broke a leg.

People said again: “What a bad luck, your father is old and he needs you and now you are not able to help him.”

The old man said: “Luck or bad luck, how knows?”

Sometimes later, the army of the lord of the country came in the village, and forcibly enlisted all young people available.

All were enlisted, except the old man's son, who has his leg broken.

"How lucky you are, all our children have gone to war, and you, you're the one to keep with you your son. Ours will perhaps be killed ..."

The old man replied: "Luck or bad luck, who knows?"...

### 5.2 Perceive crisis as an opportunity

Despite the fact that it is a very simple example, this story put the light on one interesting fact. Some people have the particularity to recognize or perceive a crisis as an optimistic event rather than as a pessimistic event. According to Joel Brockner and Erika Hayes James (2008), under specific conditions and because of several factors, certain leaders can more easily perceive an event as an opportunity than other leaders.

In their article, “Toward and understanding of when executives see crisis as opportunity”, Brockner and James (2008) delineate the factors that guide leaders to perceive opportunity in crisis. They also believe that a crisis has the potential to be a catalyst for positive organizational change. Perceiving a crisis as an opportunity, comports several benefits for leaders. One of these benefits is demonstrated by Taylor (1989) and Milliken (1990), they assumed the fact that decision makers feel more control and less uncertainty when they structure their strategic issues as opportunities. It is important to precise that, the framing of crises is not exclusive. Obviously, leaders cannot avoid dealing with threats during crisis but under a specific environment, they can perceive a crisis as a resource of opportunities.

### 5.2.1 Two sets of variables

According to Brockner and Hayes James (2008), leaders must attain two sets of variables in order to apprehend the transition from perceiving a crisis as a threat to an opportunity and thereby setting the stage for positive organizational change.

For leaders, the first of these sets is the inclination to be captivated by the reflection and the learning. This set, possessing a general perspective, influences leaders’ learning competence
during an event (not exclusively during or after a crisis). Leaders having a learning/reflection mindset are able to understand more easily factors responsible of a positive or negative situation. This trend enables them to reach more often successful organizational results than others. The second set is more connected with a crisis situation. It is the inclination to be opened about the attainability of the potential opportunities created by a crisis situation. More the inclination of the both sets will be important more leaders will perceive a crisis as an opportunity and oppositely. Moreover, the first set is determined by organizational and individual factors and the second set is also determined by the same factors plus factors in relation with crises themselves.

5.2.1.1 Transitioning from perception of threat to perception of opportunity

Brockner and James (2008) (P. 101)

Brockner and James (2008) outline the factors that influence whether executives (leaders) make the transition from perceiving crisis as a threat to distinguishing them as an opportunity. From an optimistic view, Wooten and James (2004) said that when decision makers implement a learning orientation, crises are likely seen as sources of opportunity and Sitkin (1992) adds that one of the characteristic of crisis is to generate experience and learning. The following figure represents frameworks that executives must try to appropriate in order to accrue their perception of a crisis as an opportunity.

The onset of this figure is evidently a crisis. Without a learning orientation mentioned by Wooten and James (2004), the first perception of a crisis is to consider it as a threat which is a logical behavioural response. In addition, executives must deal with the damage control but they have especially to pass to the next action that brings them to the reflection and learning process.

5.2.2 Reflection/learning process

As indicated in the figure1, the authors (2008) insinuate that individual and organizational factors have an effect on executives’ learning orientation in face of crises. The both factors are mutually connected because one does not be effective without the other. Thanks to researches
from E. T. Higgins (2000), the authors can reinforce this positive relationship between individual and organizational factors by explaining that researches have show that members are more energized and engaged when their organization provide the problem-solving orientations.

In one hand, there are individuals (i.e. executives) that compose the organization. According to the authors, executives may influence their own learning orientation. According to Dweck (1990), the principal aim for leaders is to develop their learning orientation and crisis can be perceive as the opportunity to learn new skills and to learn mastering new situations. There are performance-oriented people that do not like unfavourable judgments and so, they possess a high learning motivation with the aim of collecting positive judgments. Moreover, Cron et al. (2005) also found that people learning-oriented have more audacity to challenge with events and they easily produce adaptive solutions to undesirable situations. As Brockner and Hayes James (2008) said, “...leaders will engage in reflection and learning subsequent to the initial responses to crisis and thereby make the transition from perceiving crisis as threat to perceiving it also as an opportunity” (p. 102). So, a combination of performance-oriented and learning-oriented is recommended to develop an effective learning process.

In a second hand, Sitkin (1992) argues that under certain conditions crises can generate several learning profits to organizations. He also adds that learning process is more likely in organizations that decriminalize failures. This trend, called “intelligent failures”, authorizes individuals to take risks and to experiment and also permits to improvise that is mentioned before can be an alternative outfit in the decision making process under crisis. Moreover, the “intelligent failures” is more focused on the outcomes than on the process. So, executives will be more likely to realize the transition when the organization put them in organizational context that maintains and favours reflection and learning. Learning from failures is a key ingredient of crises and comports several opportunities for leaders and organizations; we will deepen the subject in later.

An individual perspective combined with organizational context enables to develop the leaning process of executives and also stimulate the positive perception of a crisis.

5.2.3 Perceiving the Opportunity in Crises: motivation theory

As explained in the previous paragraph, the learning orientation is important to perceive a crisis as an opportunity. In this part, the intention will be turned on motivation theory defined by Vroom (1964) and which speculates that beliefs and behaviours are a function of what people value and what they expect. On a leadership view, the greater the perceived values and the greater the expectations for success of a decision makers from a crisis, better they will likely to perceive a crisis as an opportunity. Besides, leader’s values allocated to an opportunity during a crisis can varied according to the organizational context.

In addition and to corroborate with the following, Brockner and Hayes James (2008) remember us the two types of ways to generate opportunities from crisis. In one hand, organizations have the possibility to reduce impacts or the probability of a negative occurrence. In another hand, they can enhance impacts or the frequency of a positive occurrence. To illustrate the reduction of impacts from negative occurrence, the authors introduce the example of Texaco (James & Wooten, 2006). Texaco was accused of racial discrimination. After, the
organization included the implementation of a diversity supplier program and worked with advocates of diversity to make heavy changes in the human resources in order to eradicate these allegations. But on an optimistic view, the enhancing of frequency of positive occurrence is more interesting and subtle than the reduction of the frequency of negative occurrence. This enhancing can be translated by a positive organizational change. This kind of changes can increase the reputation of an organization and stimulate the innovation and creativity of the members.

After this little brackets, come back to the motivation. We have fixed earlier that leaders are more likely to see a crisis as an opportunity if the opportunity comes from a crisis represented a great value for them. So, opportunities coming from crisis can depend on their own values of leaders and organizational culture. Thanks to motivation theory, E.T Higgins (1998) introduced the concept of self-regulation. The self-regulation is the process of trying to accord our behaviour and self-conception with suitable objectives. E.T Higgins (1998) suggests that people employ self-regulation in two divergent ways, a promotion focus or a prevention focus. The promotion focus attracts a self-regulation characterized by “playing to win”. With this perspective, people increase the likelihood to reach positive outcomes because their motivation is to try to align themselves with their ideal selves. On another perspective, the prevention focus attracts a self-regulation characterized by “playing to not loose”. With this trend, people decrease the likelihood to make negative outcomes because their motivation is to maintain their secured situation by installing themselves in a bull surrounded by obligations and duties.

Here, the purpose is not to delineate if one focus is better than another one. Leaders have to know the values lauded by their organization and try to use the more appropriated type of way to generate opportunities.

For example, in a start-up, the objective is to be creative and to be ambitious. In this case, the best appropriate way to act for leaders seems the adoption of a self-regulation characterized by “playing to win” so a promotion-focus which promotes an enhancing of the probability of positive occurrence. In this domain for example, leaders acting by this way have more chance to perceive opportunities during crisis.

And For example, in a utility company whose goal is to keep the services running, a prevention-focus and the reduction of likelihood of negative occurrence seem to be most appropriated way to act. In this area of work, leaders keeping in mind this way to do are more likely to perceive opportunities during crisis.

5.2.4  Perceived attainability (Efficacy)

The self-efficacy, in another word, self-confidence is important for leaders coping with a crisis and also gives rise to a paradox; these two aspects are explained before in the thesis. In this case, the authors agree with Agor’s definition (1990), self-confidence is the feeling of being convinced that our potential permits us to deal with the rareness of a crisis. It is the conviction that “I am able to discern the fact that I’m taking the right decision for the current situation”. The authors add that leaders having a strong self-confidence have greater facilities to handle crisis situations and greater chances to believe that they can acquire the opportunity inherent a crisis.
This self-efficacy may be undermined if the crisis comes from the organization itself or if the organization is the victim of a crisis. More the organization is responsible of the crisis more the leaders will be unlikely to perceive opportunity from this crisis. In addition, Coombs & Holladay (2002), include that the same trend is valid for the reputation of an organization, more the organization is responsible of the crisis more the reputation will be touched.

The organizational culture can also be a catalyst for the self-efficacy of executives (leaders). In this case, it is called collective efficacy. Bandura (1997) defined the collective efficacy as “a group’s shared belief in its conjoint capabilities to organize and execute the courses of action required producing given levels of attainments” (p. 477). If the organization implements a “self-confidence system” where the “can-do” attitude is promoted through the members and also through leaders, they will more apt to perceive a crisis as sources of opportunity.

5.2.5 Behavioural manifestations

In the following point, some specific behavioural manifestations will be presented that allow leaders to be on track to perceive an opportunity during a crisis.

5.2.5.1 Treat Causes, Not Merely Symptoms

One demonstration of perceiving opportunity is to conduct a thorough analysis about the initial causes of a crisis and not just try to escape from it. This research of information can help leaders and organizations to grab an opportunity by decreasing the reappearance of crisis.

5.2.5.2 Seek the Views of Multiple and diverse stakeholders

Thanks to the multiple stakeholder perspective, leaders will be attentive to all the actors having a responsibility inside or outside the organization and will take into account their different viewpoints. This wide view will enable leaders to consider a range of solutions more important and they will be more open-minded about the potential synergy of learn from each other.

5.2.5.3 Emphasize Short- and Long-Term Outcomes

Leaders have generally to manage a crisis in short-term outcomes to resolve the problem itself. But do not fall down the long-term aspect of a crisis. They have to keep in mind that a crisis can be seen through a long-term perspective and it is the best way to envisage an opportunity from a crisis.

5.2.5.4 Establish Norms for Divergent Thinking

According to Janis (1982) and Williams (2004), the divergent thinking is the aptitude to produce a diversity of differing views and it is a central part of problem-solving and decision making process for individuals or teams. The Divergent Thinking (DT) enables to inspire the creativity of the members of the organization and indirectly permits to transform more easily a crisis into an opportunity.

As mentioned, DT also plays an important role in the decision making process. If organizations do not implement the Divergent Thinking, they take the risk that employees and leaders think about solutions for crisis on a unique way. If the DT is well put into practice, leaders will develop
more productive ways to perceive opportunity from crisis than leaders in an organization using ordinary decision making process.

In addition, Staw et al. (1981) explains that if the leaders distinguish the crisis as a threat, they will be more rigid-minded. This rigidity will emphasize the restriction of information and the centralization of authority and the decision making process which all impede the development of DT into the organization.

5.2.6 Beneficiaries of Opportunities

The two expected beneficiaries of opportunities are crisis handlers (leaders) and organizations. If a crisis is well managed by crisis handlers, they may reinforce their power, influence and reputation outside and in the organization. The authors introduce the example of New York City Mayor Rudolph Giuliani that leads the terrorist attacks of 9/11 very well. According to Dr. Fred Jacques (CACP Annual Conference 2007), Rudolph Giuliani emerged out this crisis with more reputation and consideration than before thanks to his leadership and emotional skills. He always seemed calm and gave the impression to master the situation, made the reality acknowledgeable, told the truth to the people and confessed what he knew or not. Dr. Fred Jacques (2007) also adds that during crisis people are waiting for clarity and confidence and Rudolph Giuliani managed this challenge successfully.

If organizations are able to deal with a crisis, they can use it as a catalyst. The opportunity, here, is to incorporate new technologies, strategies or systems faster than the case of nonexistence of crisis. The authors (2008) give the example of Denny’s restaurant chain. The Denny’s restaurant chain was suspected of racial discrimination and high-profile class action lawsuit. After these allegations, the organization decided to refurbish its customer and employee service models and realized several cultural and structural changes. The result was better than expected; the restaurant chain has been ranked first in Fortune’s “Best companies for minorities”. This example also shows that that a crisis can benefit to multiple actors. The employees are fairly treated, minority vendors or suppliers are more likely to deal with the restaurant chain and the organization wins in reputation and competiveness on the job market.

5.2.7 Comments

Perceiving a crisis as an opportunity is not only a question of individuals, the organizational culture is also imperative. Firstly, the individual aspect comports three distinct but dependent dimensions; the orientation, the motivation and the efficacy.

As mentioned before, individuals can be more oriented on the performance or on the learning. If leaders combine the two orientations, they will perceive more easily a crisis as an opportunity. In one hand, they do not like to fail and they will struggle with the crisis to solve it and take the opportunity to receive awards. In another hand, their thirst of learning gives us, thanks to a crisis, the unique opportunity to master new skills and develop their knowledge.

Thanks the motivation theory based on Vroom’s notions and the concept of self-regulation introduced by E.T Higgins, we can distinguish two types of “motivational mind”, the promotion focus and prevention focus. These “motivational minds” influence the leaders’ behaviour and their way to perceive opportunity according the type of organizations. The promotion focus
attracts a self-regulation characterized by “playing to win” and the prevention focus attracts a self-regulation characterized by “playing to not loose”. If the slogan of an organization is creativity and ambitiousness the first focus is appropriate to stimulate the perception of opportunity. And if the slogan of an organization is keeping the services running, the second one is more appropriate.

The efficacy is represented by the leaders’ self-confidence. Besides, some factors may alter the level of leaders’ self-confidence. The idea here is simple, more the leaders possess self-confidence more they have greater facilities to handle crisis situations and greater chances to believe that they can acquire the opportunity inherent a crisis.

Secondly, the organizational culture also plays a role for leader’s perception. Its duty is to stimulate the leaders by surrounding by an optimal environment. The learning process is more likely in organizations that decriminalize failures. This trend, called “intelligent failures”, authorizes individuals to take risks and to experiment new ideas or ways to proceed.

The organizational culture can also be a catalyst for the self-efficacy of executives (leaders). In this case, it is called collective efficacy. If the organization implements a “self-confidence system” where the “can-do” attitude is promoted trough the members and also trough leaders, they will more apt to perceive a crisis as sources of opportunity.

Finally, in an organization where the combination of specificities enumerated previously about individual and organizational part is present, the organization and also its members will obtain a high potential to perceive and recognize a crisis as an opportunity. It is also relevant to keep in mind the different behavioural manifestations which allow leaders to be on track to perceive an opportunity during a crisis.

The first step of an organization is to perceive the opportunities from a crisis. But the perception is not enough, organization and leaders have to materialize the perception of opportunities to real ones. One of them is the learning in other words the improving of the knowledge accumulated by the organization. In the following topic, it will be presented some real opportunities but in a specific context, learning from failures.

5.3 Learning from failures

A crisis is most of the time, the result of failures. But by the way, failures are an unpredictable opportunity for organization and leaders to learn and accordingly get better. In this part of the thesis, some specific opportunities arising from crisis situations will be enumerated and the learning process of organizations will be emphasized. The learning process is a vital aspect for organizations in order to evolve and become more effective by learning mistakes from the past and sometimes organizations also have to unlearn some unproductive practices. Leaders play a strategic role during learning process, so they seemed for us attractive to look into this matter.

5.3.1 Failing to learn from failure

The simple fact to survive from a crisis is not a sufficient condition to learn about it, the entire organization has to implement a learning process in order to extract knowledge from crisis.
events. To be able to reach this objective, if it is necessary, individuals (Leaders) have to change their beliefs and attitudes. Besides, these shifts of behaviours must happen in all the levels of the organization what represents a complicated mission.

According to Bazerman and Watkins (2004), if an organization and leaders are not able to learn from failures, they will be susceptible to miss the apparition of predictable surprises. In fact, Bazerman and Watkins (2004) distinguish two types of surprise. In one hand, predictable, when organization’s leadership fails to perceive evident signs of a future crisis. And in other hand, unpredictable, when the signs are no clear and unpredictable. They also indentify four ways in which organization fail to learn from failures.

5.3.1.1 Scanning failures
A lack of information or a simple moment of inattention can avoid the organization to pay close attention to potential outside or inside problems.

5.3.1.2 Integration Failures
The integration failure is the incapacity for an organization to recompose pieces of complicated information in order to produce lessons of how to avoid a crisis.

5.3.1.3 Incentive Failures
No enough rewards or consideration are give to individuals how inform against problems and act to avoid probable crises.

5.3.2 Learning Failures
The organization does not conserve important lessons from crises and does not save their memories.

Learn from his failures is a universal concept, it can be introduced in a multitude of domains. Our failures permits us better be aware of what we require to do if we want to progress and accordingly get better. Our experiences or experiences lived by others close or not to us are sources of learning from failures.

According to Sitkin (1996), failures are essential part of the learning process for an organization. In addition, he argues that failures and in particular minor ones should not be bypassed or hidden. Besides, Mittelstaedt (2005) is of the same mind. After several studies of organization, he concluded with the following paradox that making mistakes is essential to success. He also asserts that “learning to identify mistakes in an analytic and timely fashion is often the difference between success and failure” (p. 287).

Sitkin (1996) explains that organizational leadership has to be aware to understand that the members can made mistakes and failures. If the organizational leadership installs a fear atmosphere, employees and managers will be reluctant of the idea to confess small failures and may miss an opportunity to learn from it and so increase the possibility to repeat it and do not progress. So Sitkin (1996) declares that if an organization wants to be successful, it has to establish the recognition of failures/risk.
He finally concluded that not all failures are equally effective for the learning process and introduced the concept of “intelligent failures” which is characterized by five facets. Intelligent failures arise from thoughtfully planned actions that have uncertain outcomes, are modest in scale, are executed and responded to with quickness and take place in domains that are familiar enough to permit effective learning.

5.3.3 Vicarious learning

The second opportunity, called vicarious learning, is a simple concept to understand. The leaders observe and benefit from crisis experienced by similar organizations to avoid repeating the same mistakes and to act accordingly.

Sellnow, Ulmer, and Seeger (2006) exploit the example of Nike and Adidas to point up this trend. Nike was accused of not respecting human rights work in Vietnam and was also suspected of using child labour. After these allegations, college students decided to boycott all the new products of the brand. When the boycott touched a great number of universities, Nike sales began to dramatically decline. At this moment, Nike reacted and undertook radical decisions and instituted new standard of worker safety inspections and increased the minimum working age in its Asian factories. Thanks to Nike, Adidas became aware of this opportunity and established similar changes in its Asian factories in order to avoid an equivalent crisis.

So the second opportunity consists to learn about the mistakes from similar organizations and so reduce/avoid the occurrence of a similar crisis for our organization.

5.3.4 Organizational memory

As a student learning a course, if the knowledge acquired from mistakes during our crises or crises experienced by similar organization is not retained, it will disappear and the learning process would have been useless. The preservation of knowledge for an organization is called “organizational memory”. So, organizations accumulate knowledge from successes and failures either its own or those of others. A crisis has more chance to happen, if organizations are incapable to draw capital information on their memories.

The example of Union Carbide plant in India, in 1984, used by the authors is a suitable case to demonstrate the result of a lack of organizational memory. In 1984, Union Carbide knew an industrial accident which produced a cloud of toxic gas that touched the nearby town. The consequences were catastrophic, two thousand deaths and thousands more injured. According to the authors, the cause of the disaster is a lack of organizational memory. The company was in financial trouble and wanted to close this factory, so many of experimented members of this factory had been transferred in to others locations without being the opportunity to share their knowledge with the staff. In this case, we can clearly observe that the Distributing knowledge was completely missed. So, all the experience and the knowledge acquired by experimented employees (i.e. leaders) had left the factory and in addition, the safety training program has been reduced to the minimum. The affected community by the disaster has pointed the lack of experience and the lack of maintenance of the organizational memory as the main cause of the accident.
The previous example demonstrates that a perpetual maintenance of an organizational memory is imperative in order to deal more effectively with a crisis. To reach this objective, the organizational memory has to be implementing following three stages.

5.3.4.1 Acquiring knowledge
As mentioned before, organizations acquire knowledge from their failures or successes and also thanks to vicious learning.

5.3.4.2 Distributing knowledge (Leaders)
This stage of the organizational knowledge is a key element for the leaders. The knowledge is dependant from the experience and generally leaders are known and are chosen for their high level of experience in the organization. When they will leave the organization, their knowledge will go away with them. So, the organization has to give them the opportunity to share and distribute their knowledge with the employees composing the organization in order to keep the knowledge and to avoid repeating previous failures.

5.3.4.3 Acting upon knowledge
The distribution of the knowledge does not be exclusive or selective. The current employees must be naturally aware about the knowledge but a special attention must be turned on new employees. New employees have the tendency to act by its own way and they are not directly impregnated by the spirit of the organization. So, they must be immediately aware of the knowledge learned by the organization in order to be quickly integrated.

The last stage is the most problematic. The quality of the organizational memory depends of the learning motivation of the employees and of the leaders who have to learn from their predecessors. In addition, the duty of leaders is to discover people having the thirst for learning and make a connection between “compatible brains”. Mittelstaedt (2005) adds that: “Not only must we continue to learn, but until we develop 'plug-compatible' brain dumps, each new generation must start learning from scratch but at a higher level” (pp. 120-121).

5.3.5 Unlearning
Another important element of the learning process for an organization is also its aptitude to unlearn. A danger for organizations is the maintenance of an unproductive comfort that generates routines and can made blind leaders and organizations to the hurry of an imminent crisis. The unlearning is not only the action to forget something, as Huber (1996) explained, the unlearning process emerges when an organization observe that exciting procedures restrict its abilities to act in response to a crisis. According to this trend, three results may happen from unlearning.

5.3.5.1 Expanding Options
The fact to unwilling to pass by routines procedures during crisis makes very poor the reaction to unique circumstances. Unlearning of some routine processes permits to organizations and leaders to enlarge its panel of options.
5.3.5.2 Contracting Options
In some cases, organizations think that the appropriate solution to the current situation is an approach that has worked well in the past. But in the current situation, the choice of a strategy from the past can make the situation worse.

5.3.5.3 Grafting
This result is linked with the “Acting upon knowledge” described before. It is important to learn knowledge to the new employees but they also need to learn by themselves, they are individuals with their own creativity. Organizations and leaders have to preserve a part of unlearning for the employees. This “free part” enables new employees to bring new ideas by themselves that may be constructive in predicting and responding to crises.

5.3.6 Comments
The four opportunities enumerated previously are evidences that crisis and failures can be precious sources of opportunities. The point of view used in this part of the thesis was more organizational than individual but these frameworks have to be kept in mind for crisis leaders. In these organizational are, there are several points that can be relevant for leaders.

For the first opportunity learning from failures, the most evident of the four, leaders have to consider failures as an opportunity to identify a potential crisis or the opportunity to learn how to anticipate a similar crisis in the future. Besides, leaders have the task to install into the organization the concept of “intelligent failures” and give to employees the right to make mistakes.

For the second one, Vicarious learning, leaders must to learn about the mistakes from similar organizations/leaders and so reduce/avoid the occurrence of a similar crisis for our organization or mistakes made by similar leaders (same level of responsibility, leaders working in same type of organization).

For the third, Organizational memory, crises are opportunities to increase and develop the level of knowledge of the organization. A relevant point was underlined in this part, the Distributing knowledge. Leaders have to keep in mind that a necessary condition to success the distributing knowledge is that they have the crucial responsibility to maintain and share the knowledge among employees. Whiteout the respect of this duty, the knowledge acquiring from failures and vicarious knowledge will be lost and the occurrence of crisis risks being more important.

Finally, unlearning, a crisis is an opportunity for organizations to realize that some procedures are obsolete and that it should be taken into account and be unlearned. And unlearning also enables, by the billet of new employees, to generate new knowledge and creative solutions. Leaders must, at their respective level, indentify the obsolete procedures and remove it from the organization. They have also to let the employees reflect by themselves in order to generate their own ideas. The simple and entire formatting of employees’ brains with the knowledge of the organization is not the best solution. Employees need a free part in their mind to be creative and maybe improve the functioning of organizations with new ideas or solutions and reduce the occurrence of crises.
Failures are dramatic events that we can learn a lot from them. However, thanks to God, we do not always necessarily need failures to learn from, periods of turbulence may also be quite useful for us in order to learn from it. Especially if we consider the fact that before the failure happens an organization lives turbulences. In order to demonstrate this, we will introduce Greiner’s research in this field.

5.4 Greiner

5.4.1 Introduction

Greiner (1998) has determined that organizations go by a series of developmental phases during their growth. The author explains that phases start with a period of evolution, characterized by stable growth and stability, and finish with a period of revolution (stages of crisis), bringing change for the organization. The passage to a next phase of evolution is determined by the success or not concerning the solving of each phase of revolution.

Greiner (1998) states five key elements that act together and form an organization’s development. These elements are: the age of the organization, its size, stages of evolution, those of revolution, and the growth rate of the industry where the organization operates. The element having the biggest impact on an organization’s managerial problems and practices is its age, in other words, the organization adopts new practices, new ways of doing with time. A relevant example at this stage might be the concept of decentralization, because this one can be strictly applied for a period, or applied dramatically less in another one. The size of the organization has also a great impact, with time, when the sales and the number of employees inside the organization increase, organization’s structure and problems vary, so do the solutions as well. A combination of the growth these both elements engenders an evolutionary period; an organization having succeeded a crisis usually knows a regular growth from four to eight years, and apparently with no serious internal issues. It is obvious that this stable evolution will end one moment, and precisely with turbulences called a period of revolution. During this period, usual management and leadership practices are not effective any more, and the leadership’s duty for each period of revolution is to find and adopt new ways of doing (practices) for the organization, which will be at the same time the beginning of the following new period of evolution. So, these new ways of doing have a relevant characteristic, they start a new period of growth and evolution, which will also bring another period of revolution. The last element influencing organization’s development is the growth rate of the industry. This factor will influence the speed at which the organization passes through periods of evolution and revolution. If the industry grows at a high speed for example, this will have the effect of making shorter the periods of evolution and revolution and a faster progression through the phases of growth.

With these key elements in mind, Greiner (1998) explains us The five phases of growth that an organization live during its life. This growth is composed by five phases of evolution and revolution; on the one hand, every one of the evolutionary periods has a clearly defined dominant management style adopted in order to obtain a growth for the organization. On the other hand, each revolutionary period is defined by the dominant management problem which has to be resolved in order to make the growth possible in the future. We have to pay attention to the fact that each phase is the consequence of the previous one, and the source of the next one. So, the
solving of the crisis will be concluded by the adoption of a new dominant management style, which definitely means a *Change* and a *Renewal* within the organization.

For instance, the first phase that know an organization is called Creativity, and this phase is characterized by individualistic activities regardless of any leadership notions during the evolution, which is going to appear as problems when the organization grows and become a crisis by after. This crisis is the beginning of the first revolutionary period that the organization will live.

### 5.4.2 Comments

Our aim here is not to explain each phase of growth of an organization. What we really want to emphasize at this level is that for these periods of crisis, or *revolution* as would say Greiner, leaders need the different abilities and competencies presented and explained before in this work, they should also know other leadership notions, in order to be effective during this revolution in order to reach the next stage of evolution, and guarantee the organization a sustainable growth in spite of occurring crises. In addition to this, in this continually changing world organizations have to adapt themselves to new conditions, to their stakeholders, and the environment. A crisis is an opportunity in the case where leaders are able to succeed in solving it. Because by doing so, the leader will be able to bring a change for the organization, which is necessary in the organizational world, but hard to realize due to the fear among individuals concerning the change itself and its implications.

### 5.5 Decentralization

The notion of decentralization was briefly introduced previously in Greiner’s research. Since this notion seems enough relevant within the framework of our thesis, we decided to detail a bit its contribution to crisis leadership.

Boin & al. (2005) explain us that centralization seems adequate for times of non-crisis, but that it might be a problem during crisis events. They explain this with the fact that a crisis is always, partly or totally different than another one, and then the used means become obsolete. The main risk of centralization is that it can decrease the ability associated with the problem. Because of this centralization, the person who is going to handle a crisis is not essentially the most competent one, but the one who has the authority. So, a decentralization of crisis handling should be adopted in order to benefit from all the skills and knowledge available within the organization, or even from out of it (with consultancy for instance).

### 5.6 Illustration: Jack in the box

#### 5.6.1 Presentation

Jack in the Box was big and successful chain of fast food restaurants, which had many varied menus, a good reputation and satisfaction among customers. This brilliant company had several acquisitions, and by after also went public via the stock market, but the company became again private with the management’s decision. Today, the company is still expanding, continually diversifying its menu in order to follow demand from its customers.
The company has seen a crisis in 1993; a bacterium contaminated the hamburger meat, the bacteria E. coli, which made more than 600 customers sick, and three of them unfortunately died. According to the theoretical aspects that we have mentioned before, we may affirm that Jack in the Box seems to have made many mistakes during this crisis handling, but has corrected them at last.

First of all, the company acted slowly in recalling the product. As we explained before, a crisis is a period where leaders need to think and act quickly, otherwise the threat will become stronger. Second, they did not manage their image and reputation among Medias and customers at all, which is of leader’s duties, especially during the third phase of a crisis (as explained before). Moreover, the company blamed the supplier at the beginning instead of discussing with them to solve this matter, which is totally opposite to what should be definitely done, we mean that they had to guarantee their stakeholders’ well-being, and act with them so as to satisfy the collective interest and solve the crisis together.

However, the company has quickly corrected its mistakes, for instance they took care of the most affected stakeholders, their customers, by paying all their medical fees. Also, Jack in the Box implemented several systems about the management of food safety and quality in order to recover their stakeholders’ trust in the company. Besides, the company made different partnerships with consumer organizations in order to teach the public about how to prevent food poisoning. Thanks to the crisis that they lived, they learned the existence of the necessity to implement such systems and make those partnerships.

By referring to Sitkin (1996), and specifically to his work about the Organizational Memory, it seems plausible for us to relate this illustration to Sitkin’s work. First, they acquired new knowledge about the issue, and then they shared this knowledge with their employees. In this special case, customers became also part of the process. Finally, every new staff member will have to acquire this knowledge in order to keep this knowledge from disappearing.

5.6.2 Comments

It seems that the company has learned many things from that crisis, and now they are doing their best to prevent and avoid this kind of threat in the future. At least, even if the same kind appears, their leaders will be able to act in a better way thanks to their previous experience of crisis.

5.7 Illustration: Toyota

5.7.1 Presentation

As we all know, a great economic crisis hit the global economy in 2008. Besides of it, oil prices have reached high levels. Due to these both facts, the automobile industry struggled a lot, but the difference between Toyota and the other automakers is that, while automakers have closed plants, fired workers, decreased budgets for research and development, an cut costs as a reply to the crisis, Toyota has continued its activity as usual. Surprisingly, Toyota’s results were better than what expected, for instance its production increased, and the company became profitable again in 2009. This shows us the Toyota Way, which is adaptability, resilience, and living
its values. Another crisis happened because of a technical problem (about the gas pedal) appearing in Toyota’s one model in August 2009, and then the company had to recall more than ten million automobiles to fix this problem.

Likert and Ogden (2011) explain us that 4 lessons may be learned from how Toyota turned these both crises into opportunities. In spite of these crises, in the end of the year 2010 Toyota got the largest retail market share in the US, and received more awards for quality compared to its competitors. The authors explain in four lessons how Toyota succeeded it.

The first lesson is about Culture, because turning a crisis into an opportunity is mainly about culture, and not other individual action. Which is relevant are the actions taken by groups and teams in order to prepare the company before that the crisis occurs. In Toyota’s case it seems that the company’s most important choice in order to handle the economic crisis was their financial positions (lots of available cash, brilliant credit rating before the crisis...), which made possible for the company to invest in people and processes, in spite of its loss due to the crisis. The second is that a culture of responsibility always wins against a finger-pointing culture. An organization supporting sense of responsibility and problem solving is always ahead of the one tolerating the finger-pointing. Several leaders took responsibility among Toyota for these both crises instead of pointing fingers to each others. By this way, they made possible avoid frustration and keep their energy for improvement. They simply began by paying attention to customers, which has been done properly and with a remarkable speed. So, they succeeded in using their energy to improve each function in order to repair faster the damage caused by the second crisis. The third lesson that the authors give us is that even an organization having the best culture will develop weaknesses. In spite of its past glorious sixty years, Toyota knew some difficulties generated by weaknesses due to its culture. Toyota failed at reaching some of its own standards in different domains. This shows that even if a company has the best culture with continuous improvement, it will generate weaknesses, and will be mostly threatened by its success. The fourth and last lesson from this case is that globalizing culture implies a constant balancing act. The main strength of Toyota’s culture is that it is shared, for a multinational company it is never easy to implement a shared culture among different national cultures, and this is a huge challenge for this kind of organization. Toyota has highly evolved at this level, however the stability between centralized and decentralized, global and local stay still enough hard to realize. So, after having lived the crisis Toyota concluded that its culture was too much centralized and decided to decentralize more by giving more power and authority to local leaders.

5.7.2 Comments

This illustration from Toyota brings us new ways of handling opportunity different than the ones presented before. Moreover, this illustration may be the source for new theoretical reasoning in particular through the four lessons explained by the authors.

Toyota has showed via its investment in strong culture for continuous improvement, which means taking responsibility but also using problems as opportunities so as to learn from it and get better in the course of time.
6 Conclusion

We distinguished an organizational problem from an organizational crisis, this was essential due to the fact that they are not the same and people may easily confuse them both. A crisis is different of a problem by at least four characteristics, its rarity, its significance, the effects on stakeholders, and the publicity.

Research in the area of crisis leadership is so huge that it may possible to find as many typologies as authors writing about this topic, depending on the dimensions used by the authors. Some referred to predictability, others to the external control and intentionality at the same time, or even to the origin for instance.

A crisis does not appear suddenly, but it rather appears gradually with several chronological phases. A good understanding of these phases would be useful for leaders and managers in order to better manage the crisis due to the fact that each step requests different competencies and things to pay attention. We have to emphasize here that some crisis (not all of them) can be predicted at the beginning and be avoided if the leader is able to see the warning signals and act accordingly. This would be the best scenario for an organization, saving time and resource. However, leaders should be aware that crises cannot be always predicted or avoided, and then they will have to handle it, as he/she should always be ready to do. Also, they need to know that they will not have all the time they would like to have in order to take effective decisions, and information will arrive heavily less than usual. In other words, they should be psychologically prepared to work quickly in such conditions under pressure and uncertainty. At the end of a crisis, the organization tries to recover from the caused damages, so the leader’s effort is to find the situation before the crisis occurs, by trying to restore calm among followers and trust among stakeholders. Concerning the “after-crisis”, every author seems to agree that we can learn from crisis, and use it as an opportunity by analysing the weaknesses of the organization but also by bringing appropriate changes.

A crisis leadership requests some special competencies, such as creativity, resilience, agility, etc... An organization will be more resistant to crises and its handling will become easier if the leadership owns those competencies and behaviours. We have to emphasize that some of them are specifically more relevant according to the occurring phase of the crisis. Moreover, competencies and abilities needed in crises events may probably be different than the ones needed in normal situation. We tried to explain in detail each competency or behaviour appropriate in each phase of crisis, and make leaders aware that their followers’ effectiveness will be different during a crisis, in a good or bad way, depending on each person.

In nowadays organizations people work in teams rather than working alone, due to the many advantages it brings. A preestablished crisis management team is really helpful for times of crisis, this kind of team acts already for potential crises before any signal detection. They build up some procedures within they train to detect and reply for potential crises. In this way, the team learn to avoid problems and find out creative resolutions. Beside of this, team members get used to work together and this will decrease their stress during a crisis thanks to the team’s prior experiences.
De Wit and Meyer (2010) explain that it is necessary to be aware of the difference between a leader and a manager. According to De Wit and Meyer (2010) one of the most important functions of leadership is the decision making. This one is especially much more relevant in period of crisis due to the lack of information, the presence of uncertainty, and the short time that leaders have at their disposal to take decisions.

Decision making means the process that leaders have to make when they must take decisions concerning the organization, and of course it goes without saying that an organization’s objectives achievement depends on the effectiveness of those decisions made by the leader. Also, leader’s decision making can have an influence on followers’ attention focus, and influence on their behaviour by this way.

Leaders have to know that decision making includes biases that can influence the process. Some shortcuts can be use to make the process faster but they have to be used with parsimony because they can influence the judgement and so distort the decision making process.

Four significant aspects have emerged out from theoretical reasoning about decision making and they constitute key elements for “crisis leaders”.

It is undeniable that the experience holds a prominent place in the decision making process under pressure. The experience is a positive function for knowledge (tacit/explicit), perception ability and the emotional maturity. Leaders with a high level of experience will have therefore a better level of knowledge, a faster perception ability and higher emotional maturity than leaders with less experience. These three elements are the bases of decision making under pressure and permit to develop the intrusiveness of leaders. The intuition can make the difference and permits to win time and to diminish the consequences of a crisis.

The experience and also the intuition are also connected to the expertise. One of the model presented, the naturalistic one, emphasizes the role of the expertise. Leaders having a high level of expertise are able to formulate a quick and correct decision and know the impacts of their decisions under high-pressure.

Another feature for leaders is the improvisation inspired by the anarchy model presented by Choo (2001). The improvisation permits for leaders to imagine unusual solutions for problems and sometimes the unique solution is a one that breaks standard procedures. But the organization has also a role, if leaders are in an organization that does not permit to override the unclosed bureaucratic system, they cannot have the possibility to express their improvisational skills. And organizations have to keep in mind the paradox of the bureaucratic organizational structure.

The emotions are being severely tested during a crisis but they also possess several utilities. Appropriate emotional responses enable to facilitate the functioning of the intuitive decision making process. To sum up, if leaders are able to use appropriately their emotions, they will be better crisis leaders.

As mentioned before, they can be surrounded by a team. It is impossible to know everything or to generate all possible ideas about a situation or a problem. The crisis decision making team composed by experts can be a solution for leaders to optimize the decision making
process and to avoid carrying the entire weight of the crisis on their own shoulders. Leaders have to make the final decision.

Besides, the ethic dimension has to be taken into account. The ethical decision making is important for two reasons. One, ethical decisions enable to prevent degradation of the organization’s image or in other cases to restore its reputation. And two, enable to keep the spirit of leaders free of any culpability.

Perceiving a crisis as an opportunity is not only a question of individuals, the organizational culture is also imperative. Besides, a crisis is an opportunity at the same time whether leaders are able to succeed in solving it. By doing so, the leader will be able to bring a change for the organization, which is necessary in the organizational world, but hard to realize due to the fear among individuals concerning the change itself and its implications. So, crises are occasions to bring a change, an adaptation, and a renewal for the organization.

As mentioned before, individuals can be more oriented on the performance or on the learning. If leaders combine the two orientations, they will perceive more easily a crisis as an opportunity.

The promotion focus attracts a self-regulation characterized by “playing to win” and the prevention focus attracts a self-regulation characterized by “playing to not loose”. If the slogan of an organization is creativity and ambitiousness the first focus is appropriate to stimulate the perception of opportunity. And if the slogan of an organization is keeping the services running, the second one is more appropriate.

Moreover, the organizational culture also plays a role for leader’s perception. Its duty is to stimulate the leaders by surrounding by an optimal environment. The learning process is more likely in organizations that decriminalize failures. This trend, called “intelligent failures”, authorizes individuals to take risks and to experiment new ideas or ways to proceed. a “self-confidence system” where the “can-do” attitude is promoted trough the members and also trough leaders, they will more apt to perceive a crisis as sources of opportunity.

So, in an organization where the combination of specificities enumerated previously about individual and organizational part is present, the organization and also its members will obtain a high potential to perceive and recognize a crisis as an opportunity.

The four opportunities enumerated previously are evidences that according to our humble opinion and with the assist of theoretical reasoning, crisis and failures can be precious sources of opportunities.

For the first opportunity learning from failures, the most evident of the four, leaders have to consider failures as an opportunity to identify a potential crisis or the opportunity to learn how to anticipate a similar crisis in the future.

The second is vicarious learning. Leaders must to learn about the mistakes from similar organizations/leaders (outside or inside the organization)
For the third, *Organizational memory*, crises are opportunities to increase and develop the level of knowledge of the organization. But leaders have to keep in mind that a necessary condition to success the distributing knowledge is that they have the crucial responsibility to maintain and share the knowledge among employees.

Finally, *unlearning*, a crisis is an opportunity for organizations to realize that some procedures are obsolete and that it should be taken into account and be unlearned. The simple and entire formatting of employees’ brains with the knowledge of the organization is not the best solution. Employees need a free part in their mind to be creative and maybe improve the functioning of organizations with new ideas or solutions and reduce the occurrence of crises.

6.1 **Some notions to keep in mind**

6.1.1 *Improvisation*

During time crisis, leaders can profit of an organizational culture that assumes to put into brackets standards operating procedures, routines and rules in order to give free rein to the improvisation. The improvisation permits for leaders to imagine unusual solutions for problems and sometimes the unique solution is a one that breaks standard procedures. Be careful, the improvisation without experience is a question of luck and is very dangerous.

6.1.2 *Centralization*

The main risk of centralization is that it can decrease the ability associated with the problem. Because of this centralization, the person who is going to handle a crisis is not essentially the most competent one, but the one who has the authority. So, a decentralization of crisis handling should be adopted in order to benefit from all the skills and knowledge available within the organization, or even from out of it (with consultancy for instance).

6.1.3 *Reputation*

Leaders and organization must turn a special attention on the reputation. If the organization knows a loss of reputation, the consequences can be disastrous and put it in the trouble.

6.2 **Three paradoxes to keep in mind**

6.2.1 *The paradox of the efficacy*

Leaders have to do the distinction between self-confidence and overconfidence. An appropriate dosage of self-confidence is an element that a crisis leader must be able to master in his career. Because, self-confidence enables appropriate emotional and professional responses but overconfidence can produce biases. More the leaders possess self-confidence more they have greater facilities to handle crisis situations and greater chances to believe that they can acquire the opportunity inherent a crisis.
6.2.2 Paradox of chaos/control

Leaders who want their organization to progress with innovation and creativity in order to use fully the potential should not try to control everything from the top, but rather empower people, and even tolerate some chaos to appear.

6.2.3 Paradox of improvisation

A high bureaucratic organizational structure is principally established in order to decrease the uncertainty among the organization that is appropriate under crisis conditions. Oppositely, the appropriate environment to generate leader’s improvisational skills has to be untied from organizational procedures chains. But in this case, the uncertainty of a situation can increase and make the situation more critical than before. So, the organization has to find the balance between the proportion of respect of organizational procedures and the proportion to let leaders used their improvisational skills.

A leader could be ready as much as possible, if a crisis is unpredictable, it will happen. However, in the case where the leader is enough prepared to handle those kind of events, it will become easier to solve it, moreover caused damages will be less important, less time and less resources will be needed to recover to a normal situation.

Finally, each crisis is unique and illustrations used in our thesis are good example and the solutions of them are contingent so conclude specific solutions are very difficult so we advise you to refer to the comments about all the illustrations.

6.3 Final words for young, bright and beautiful leaders

Concerning decision making process under pressure, a specific aspect deserves further studies. The principal source of all these models is the experience. But what is the possible solution for a young leader whiteout experience and who faces for the first time a crisis. According to our previous researches several solutions seem to be conceivable. One of them is the improvisation. But using improvisation whiteout experimentation comport too much risks and bet the live of an organization only on an immature and improvised decision is not recommended. So, you can bet on the improvisation but be carefully and be persuaded that it is the unique and best decision. Another solution is to be surrounded by a crisis team having a high level of expertise. This solution seems to be the most appropriate and less risked but young leaders have to keep in mind that the final solution is taken by them. Of course, leaders can made mistakes and so learn from it and become more effective for the next time. This trend brings us to some aspects of the chapter presented previously that includes also kinds of answer.

Be open-minded, a young leader possess a high level of motivation and an inexhaustible thirst for learning. Taking advantages of this good mood to improve your perception of the life, work and so on. By the way, perceive a crisis as an opportunity and not as a threat, it is maybe a unique chance for you to learn new skills and to master new situations. Mistake and failures what horrible words for ambitious leaders, do not worry, learning from failures is peculiar to human. It is also a chance to increase your experience, knowledge and so on. In fine, have an optimistic view about crisis and failures. It is the opportunity to become better than ever.
Last but not least, you are young, bright and beautiful but also humble and respectful. The vicarious learning is a precious tool for young leaders. Take advices from experimented and experienced leaders and try to learn from them and avoid making the same mistakes.

7 **Proportions of research questions for future thesis**

- If you are young and have a function of leadership in a company where members are unskilled and inexperienced, what are the solutions according to decision making perceptive? For instance, if a group of new graduated young bright and beautiful people found a company together.

- Is the acquired knowledge and experience from a crisis still valid for the next one? Since crises are different one than another...Paradox?

To close this thesis, we have chosen a quote from Anton Chekhov who with a touch of humour reminds us the real challenge of our existence and desecrates the crisis by pretending that it is a simple step of our life.

« *Any idiot can face a crisis – it is day-to-day living that wears you out!* »

Anton Chekhov (Russian physician)
8 References

8.1 Books


Gabriel, 1985, ‘Military Incompetence: Why the American military doesn’t win’, New York: Hill and
Gilpin & Murphy, 2008, *Crisis Management in a Complex World*, OUP USA, pp.224


Hymowitz, 2001, *Companies experience major power shifts as crises continue*, Wall Street Journal


Mittelstaedt, 2005, *Will your next mistake be fatal? Avoiding the chain of mistakes that can destroy*, Upper Saddle River, NJ: Wharton


Wenger, Quarantelli & Dynes, 1986, *Disaster Analysis: Local emergency management offices and arrangements*, Newark: University of Delaware

### 8.2 Articles


Cron et al., 2005, ‘The role of goal orientation, negative emotions and goal setting when initial performance falls short of one’s performance goal’, *Human Performance*, Vol.18, pp. 55-81


Starn, 1976, ‘Métamorphose d'une notion: Les historiens et la «crise»’, Communications, n°25, pp. 4-18


Stevens, Loudon & Wrenn, 2006, ‘Marketing Research: text and cases’, Routledge, pp. 482

Sutcliffe & Vogus, 2003, ‘Organizing for resilience’, Positive organizational scholarship, Chapter 7, pp. 94-110


8.3 Conference

8.4 Video
Couric, K., 25th January 2009, ‘60 minutes’, CBS, USA
Durivage, S., 19th May 2010 (8pm), ‘Les grands reportages’, RDI, Canada

8.5 Website
http://online.wsj.com/article/SB10001424052748703612804575222482042335978.html
8.6 Interview
Giuseppe Pagano, 8th April 2011, “Belgian Political Crisis and Jean-Luc Dehaene’s Leadership, Mons, Belgium
Linnaeus University – a firm focus on quality and competence

On 1 January 2010 Växjö University and the University of Kalmar merged to form Linnaeus University. This new university is the product of a will to improve the quality, enhance the appeal and boost the development potential of teaching and research, at the same time as it plays a prominent role in working closely together with local society. Linnaeus University offers an attractive knowledge environment characterised by high quality and a competitive portfolio of skills.

Linnaeus University is a modern, international university with the emphasis on the desire for knowledge, creative thinking and practical innovations. For us, the focus is on proximity to our students, but also on the world around us and the future ahead.

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