

# **Proposing a Crisis Portfolio for Telecommunications Companies**

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## **Abstract**

The aim of the current paper is to classify crises that threaten the telecommunications sector. The design of the crisis portfolio is based on managers' assessments. Forty eight middle and senior managers working for the three major telecommunications companies in Greece were asked to rate the 16 crises on three major criteria: predictability, severity of consequences/ impact and probability to occur. Based on the results, a bubble chart was created. The present study engages three classification criteria, namely the predictability of a crisis, the impact/severity of consequences and the probability of a crisis occurring. Based on the above criteria, a new typology of totally four crises groups that has been adapted to the telecommunications industry is introduced and discussed. The concept of a crisis portfolio could strongly assist managers in preparing for and coping with crises because being prepared for one crisis in each cluster may provide valuable information for each of the other crises in the same cluster.

**Keywords:** crisis management, crisis portfolio, telecommunications companies

## **Introduction**

Despite the various descriptions and interpretations that have been given for crisis, there is a lack of a generally accepted definition mainly due to the term's complexity (Pearson and Clair, 1998; McMullan, 1997). For example, Darling (1994) argues that the definition of crisis may differ across companies. Mitroff et al. (1996) believe that in spite of the lack of a conventional definition, a crisis is an event that destroys or negatively influences the entire corporation. According to Pearson et al. (1997), a crisis imperils the health and safety of employees, customers, or local community or threatens the public's trust for the company by putting into danger the corporate reputation. Arpan and Pompper (2003) describe crises as non-predictable events that may have negative consequences for the company, the industry or the stakeholders if not handled properly. The most commonly mentioned synonyms of a crisis are incident, accident, tragedy and massacre (Shrivastava, 1992).

During a crisis, many serious decisions have to be made rapidly. All managerial processes have to be maintained and all managerial problems should be solved under urgent circumstances, when human beings' lives may be threatened (Turnet and Pedgeon, 1997). Past literature reveals that a crisis may have severe consequences on stakeholders (Pauchant, and Mitroff, 1992) and may seriously menace the survival of the company (Roux-Dufort and Metais, 1999). In addition, crises are difficult to control because the company has a limited influence on its environment (Burnet, 1998).

As crises are not easily predicted or controlled, companies should be prepared to deal with a crisis and its consequences. Effective crisis management could be considered to be an asset in the contemporary business environment. Fink (1986) defines crisis management as the art of prolonging the danger and the uncertainty. Stocker (1997) stresses that crisis management is a set of strategies and tactics which could prevent or amend the negative outcome of basic events of the company or the organization.

Only a few previous research studies have focused on services. Indeed, research on crisis management in services has been mainly limited to healthcare organizations (e.g., Hergon et al., 2005; Kiesslich et al., 2005; Yee et al., 2005; Quah and Hin-Peng, 2004; Koenig et al. 2003) and the tourism industry (Ritchie, 2004; Israeli and Reichel, 2003; Blake and Sinclair, 2003; Gillen and Lal, 2003; Stafford, 2002). There is a lack of research studying crises in the telecommunications sector. This lack of research is surprising considering that the telecommunications industry is very susceptible and vulnerable to crises. The purpose of the current paper is to propose a typology for the telecommunications industry based on three criteria, i.e., severity/impact, predictability and probability.

## **Typology of Crises**

A crisis may be expressed by various patterns and stems from various causes. Many studies have tried to classify crises according to different criteria. According to Coombs (1999), crises may range from small scale issues to earthquakes, floods and terrorism. Skoglund (2002) separates crises into two broad categories: internal (e.g., IT breakdown, product failure, fire) and external (e.g., terrorism, kidnapping, decrease of the national currency). Augustine (1994) argues that there are two types of crisis, those that "can be managed" and those that "cannot be managed." Shrivastava and Mitroff (1987) classify crises along internal-external and technical-social dimensions.

Mitroff (1988) groups crises into four clusters depending on their technical-social and severe-normal nature. Richardson (1994) makes the distinction between natural and organizational crises. Organizational crises include social-technical destructions, managerial/ economical failures, etc. The Seymour and Moore (2000) typology is founded on the way in which crises develop. They named the two proposed types of crises a “cobra” and “python.” Lerbinger (1986) proposes four groups of crisis, i.e., technological crises, confrontational crises, crises of malevolence, and crises of managerial failure. Coombs (2004) proposes a typology based on the attributions of responsibility. He recommends three clusters of crises: the victim (caused by uncontrollable external sources), the accidental (the company has partial control), and the intentional (caused by a company’s fault). Finally, the typology of Parsons (1996) contains three crisis types. Immediate crises are those which occur suddenly without serious warning. Emerging crises are developed more slowly than immediate crises and could be controlled by proper tactics. Finally, sustained crises are crises which may last for a medium to long period of time.

The large number of classification attempts and the emphasising value of crisis typologies as exposed through the relevant literature mainly stem from the benefits that come out of classifications. The proposition of typologies helps to investigate similarities and differences among crises. According to Gundel (2005), “classifying crises is the first step to keep them under control since they can be named and analysed.” Burnett (1998) argues that a crisis classification matrix expands decision making by facilitating the allocation of resources, offers a basis for setting priorities, and generally aids public relations management. Through crisis classification, complex structures may be simplified. In addition, according to Burnett (1998), classification facilitates managers in organizing the collection of information and contributes in the amelioration of strategic planning.

Table 1 in the Appendix summarizes the main crisis typologies met in the literature.

Most classification attempts use a very broadly based selection criteria for designing a proposed typology. Indeed, they propose general crisis types that may arise in all industries. Nevertheless, each industry and sector has special features and unique needs. For example, a crisis that apparently threatens the IT sector may be completely innocuous for the maritime industry. In this sense, it is required that a typology should be adapted to the individual attributes, external and internal environment of each sector. Secondly, most of the clustering studies do not depend on empirical data. They classify crises based on definitions and secondary research or common sense (e.g. natural/human crises). Only a few studies have used primary data in order to validate their results. The results of the current study derive from the experts’ assessment of an exhaustive list of crises in order to construct a crisis portfolio. A portfolio is a classification scheme that may be served as a central tool for effective crisis management.

The present study engages three classification criteria, namely the predictability of a crisis, the impact/severity of consequences and probability that a crisis will occur. A crisis is 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” (Gundel, 2005).

Apart from the predictability, the extent or impact is another feature of crises. Severity of harm in a crisis is simply translated to the effects that crisis has on stakeholders (e.g., injuries or deaths of people and animals, harm to the environment, loss of market share, decrease of profits, etc). Bigger crises are more likely to have a

more long lasting effect on stakeholders (Zyglidopoulos, 2001). Finally, probability to occur was added as a third dimension to the portfolio analysis.

## **Methodology**

The current research was conducted in two stages. The first stage included interviews with managers working in the telecommunications industry. In total, 12 interviews were conducted in which managers were asked to name types of crises that may threaten the industry, based on their experience. The interviews were conducted in the managers' offices and each interview lasted for approximately 30 minutes. All respondents were volunteers who agreed to participate in the specific study. The majority of the participants were men (8 out of 12). The 58.3% were middle managers, while 41.7% were managers in a senior level. In addition, the mean ages of working experience in the telecommunications industry were 5.3. The crises that were mentioned by the respondents were written down. Based on the interviews, a list of 16 crises was designed.

In the second stage, 48 middle and senior managers working for the three major telecommunications companies in Greece were asked to rate the 16 crises on three major criteria: predictability, severity of consequences/ impact and probability to occur. From the 48 respondents, 35 were men (73%) and 13 were women (27%). Among participants, 77% were middle managers and 33% senior managers. All respondents have been working in the telecommunications industry for, on average, 6.8 years.

Results were coded and analyzed by using excel. Based the mean scores on the three major criteria (i.e., predictability, severity of consequences/ impact and probability to occur), a bubble chart was created. A bubble chart was found to be an appropriate for creating a crisis portfolio as it could graphically show three dimensions and it could be easily used by the potential crisis management team. The horizontal axis represents the impact/ consequences of crises and the vertical axis corresponds to the probability of those crises occurring according to the managers' assessments. In addition, the predictability of crises is signified by the size of the bubbles, i.e., the bigger a bubble gets, the more the crisis is uncontrollable. The results of the study are presented in Figure 1.

## **Results**

Each bubble in Figure 1 (Appendix) stands for a crisis that managers believe may threaten companies in the telecommunications industry. The main advantage of this three dimension typology is its adaptation to the unique characteristics of the telecommunications industry and it is formed based on managers' opinions who have worked several years in this industry. Most of the typologies described in the relevant literature are not applied in a specific sector. If a telecommunications company possesses a crisis portfolio, then more effective crisis management strategies could be achieved. Based on the results, four clusters are created.

Cluster 1-low probability/low impact crises: employee death or injury, equipment malfunction, terrorism or threat, employee scandal, strike or work stoppage. Strikes and employee death or injury are the most predictable crises, while terrorism and employee scandal are crises that occur and that the company has relatively low control over. Discrimination allegations' bubble is placed between

cluster 1 and cluster 3. Crises which belong in this cluster have low probability to occur and on the same time, if they occur they would have a low impact on the company. This means that this cluster does not contain the most threatening for the company crises.

Cluster 2-Low probability/high impact crises: disruption of phone internet or other services, whistle blowing, security leakage or personal data leakage. Whistle blowing is perceived by managers as the most unpredictable crisis. Wiretapping and surveillance is a crisis positioning between cluster 2 and cluster 4. In the second cluster, crises have a low probability to occur. However, their potential consequences could be catastrophic. As a result, the company should try to act proactively and ensure that the probability of these crises to happen is minimized.

Cluster 3-high probability/low impact: Only a few crises belong to this category, i.e., protests and loss of a key executive. Also, lawsuits are between clusters 3 and 4, meaning that they have a relatively high probability of occurring, while their impacts are medium. All crises that comprise this cluster have a medium predictability level.

Cluster 4-high probability/high impact: This cluster contains the worst case scenario—crises for telecommunications companies—as those crises may have severe consequences on the company and their occurrence is not improbable. Crises positioned in this cluster are cartel arrangements, financial frauds and potential medical reports regarding the harmful effects caused by mobile phone radiation. Cartel arrangements exposure is considered to be a very predicable crisis, whilst latent medical reports and research is the most uncontrollable. Telecommunications companies should invest in avoiding such crises. The crisis management plan should focus on this cluster and offer efficient crisis management strategies.

## **Conclusion**

Gaining a deep understanding of crises, their characteristics and their types that may possibly occur in an industry can facilitate the development of more effective crisis management strategies. As a result, a crisis could be avoided or the negative effects of a crisis could be limited. By identifying the possible crisis types, managers could propose effective strategies that could meet the manipulation needs of each crisis type. In this way, types of crises could be connected to efficient crisis response strategies. The design of a crisis portfolio could be seen as the first basic stage to prepare crisis management plans for telecommunications companies. Companies need to ensure that they have a crisis plan ready, which will be used immediately after the crisis erupts. The plan could contain specific actions for each crisis cluster separately. The plan should be tested regularly so as to ensure that it is implementable.

Proactive planning is crucial as it reduces risk and uncertainty and ameliorates the allocation of resources (Heath, 1998). When the company acts proactively, more effective crisis management can be achieved (Burnett, 1998). All small-bubble crises in Figure 1 are situations where the company should act proactively. They are predictable crises, and as a result, the company should be able to design pre-crisis strategies, such as contingency planning, strategic forecasting, scenario analysis (Kash and Darling, 1998), etc. Special attention should be given to predictable high-probability crises which may have a severe impact, i.e. cartel agreements exposures, financial fraud and lawsuits.

Strategic crisis preparation is a crucial issue for companies seeking effective ways to cope with crises (Pearson and Mitroff, 1993). In some cases, acting proactively is difficult or impossible. The big-bubble crises indicate events where a crisis management plan is vital, especially for post-crises tactics. Also, personnel training and adequate equipment are also necessary. In addition, as crisis costs to companies are mostly connected to impact and consequences of the crisis (horizontal axis of Figure 1), priority should be given to high probability crises with high impact, such as the publication of medical reports about harmful mobile phone radiation. Such potential crises (big bubbles belonging to cluster 4) may be seen as a rigorous threat for the industry, as there are high probability/high impact crises with very low predictability. In such situations, the personnel should be adequately trained and the proposed crisis management plan should be analysed for all impending scenarios.

This paper proposes a crisis typology for telecommunications companies. It is based on managerial assessments and may be connected to relevant crisis response strategies. Although managerial assessments may be valuable sometimes since they distinctly know the industry, perhaps consumers' ratings are also imperative. It would be interesting for further research to investigate consumer attitudes and reactions towards hypothetical or real crisis situations included in the proposed portfolio. In this way, the measurement of impact could be more objective. Lastly, it would be appealing for further research to measure consumer perceptions so as to construct a crisis portfolio based on consumer perceptions and to examine the company's preparedness for the above mentioned crises.

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## **Appendix**

**Table 1: Crises Typologies**

<b>Crisis Type</b>	<b>Source</b>
<ul style="list-style-type: none"> <li>▪ Internal</li> <li>▪ External</li> </ul>	Skoglund (2002)
<ul style="list-style-type: none"> <li>▪ Crises that “can be managed”</li> <li>▪ Crises that “cannot be managed.</li> </ul>	Augustine (1994)
<ul style="list-style-type: none"> <li>▪ Crises caused by internal/external factors</li> <li>▪ Crises caused by technical/social factors</li> </ul>	Shrivastava and Mitroff (1987)
<ul style="list-style-type: none"> <li>▪ Severe/natural</li> <li>▪ Crises that are caused or are influenced by technical or social factors</li> </ul>	Mitroff (1988)
<ul style="list-style-type: none"> <li>▪ Natural</li> <li>▪ Organizational crises.</li> </ul>	Richardson (1994)
<ul style="list-style-type: none"> <li>▪ Cobra</li> <li>▪ Python</li> </ul>	Seymour and Moore (2000)
<ul style="list-style-type: none"> <li>▪ Technological</li> <li>▪ Confrontational</li> <li>▪ Crises of malevolence</li> <li>▪ Crises of managerial failure.</li> </ul>	Lerbinger (1986)
<ul style="list-style-type: none"> <li>▪ Victim</li> <li>▪ Accidental</li> <li>▪ Intentional</li> </ul>	Coombs (2004)
<ul style="list-style-type: none"> <li>▪ Immediate</li> <li>▪ Emerging</li> <li>▪ Sustained</li> </ul>	Parsons (1996)
<ul style="list-style-type: none"> <li>▪ Sudden</li> <li>▪ Cumulative</li> </ul>	Hwang and Lichtenthal (2000)

**Figure 1: Crises Portfolio for the Telecommunications Industry**

