TOWARD AN EFFECTIVE CRISIS MANAGEMENT MODEL

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ABSTRACT

In this paper we develop a model of the crisis management process, based on the feedback structure of decision-making and the learning process that characterizes all adaptive systems. This model differs from prior models in that it is more comprehensive and adaptable, as required for rapidly changing, critical circumstances. It organizes the elements of crisis management in an organic, teachable, and understandable way for everyone who might have to deal with crisis. The resulting integrated approach offers enhanced communication and an integrated decision-making system linking all the stakeholders who must cooperate to resolve a crisis.

Key words: Crisis management, Collaborative system design, Strategic decision-making

INTRODUCTION

We have learned much from past crises, but that learning needs to be organized and effectively shared for society to benefit. Learning means evolving better mental models and education is the systematic transfer of those models (Bruner 1960). While we have learned much, our understanding of crises has been cluttered by inconsistent definitions based on the kind of crisis, its impact, its visibility and the stakeholder groups affected. This may be due to the relative infancy of the subfield of crisis management in organization studies. A computer search on the words “crisis management” revealed that 80% of research in this area was published after 1985 (Pauchant 1988; Pauchant & Mitroff 1992). Management scholars generally agree that most crises represent decisive moments or significant turning points which, if handled well, may lead to greater success, or if poorly handled, may threaten the organization’s very existence (Brockner & James 2008). Researchers have underscored the importance of understanding crises because of the increased frequency of their occurrence, the extensive damage they cause, and their cost to organizations and society (Shristava et al. 1988). We believe that in order for organizations to be better prepared to deal with crisis situations it is necessary to begin with a clearer understanding of a crisis (Irvin & Millar 1996). We begin with a review of the literature on organization crises. This is followed by an overview of the corporate responses to the attacks on the World Trade Center Twin Towers in 2001 gathered from interviews with key managers at six firms that were directly affected by the attacks. A general discussion of the insights and lessons learned from the experience is offered. The paper ends with a conclusion and suggestions for future research.

LITERATURE REVIEW

In everyday usage, the term “crisis” takes a variety of meanings. The dictionary defines crisis as an emotionally significant event or radical change of status in a person's life, e.g., a midlife cri-
sis; or an unstable or crucial time or state of affairs in which a decisive change is impending with the distinct possibility of a highly undesirable outcome. In organization studies, earlier writers defined crisis as a situation characterized by surprise, high threat to important values, and a short reaction time for the organization (Holsti 1978). Later, authors declared crises to be events that potentially exceed the containment capacity of even the best-prepared firms (Mitroff & Pearson 1993, Mitroff et al., 1988). Few organizations can effectively prepare for the wide spectrum of potential crises that can arise in today’s turbulent environments (Lerbinger, 1997, Silva and McGann, 1995). More recent writers define a crisis as a major unpredictable event that, in its aftermath, may have a severe impact on the organization as a going concern by damaging its human resources, its products or services, its market potential, and its reputation (Barton 1993, Campbell 1999, Mitroff & Anagnos 2001). Others highlight the fact that a crisis represents a low probability, high impact situation that is perceived by critical stakeholders to threaten the viability of the organization (Pearson & Clair 1998, Sommer & Pearson 2007). The picture that seems to emerge is that in the management literature there may be as many definitions of the term as there are scholars writing on the subject. Part of the problem arises from the fact that the crisis field itself is still ill-defined, resembling a hodgepodge quilt of specialist academics that are scattered over many disciplines (Dayton 2004).

In systems terms, a crisis is an event that causes a major disturbance in the homeostatic functioning of the system (Katz & Kahn 1966). We caution, however that the homeostatic assumptions taken for granted in this description of crisis have been challenged by some from a human psychological perspective (Von Bertallany 1951, Taplin 1971). Such a disturbance overwhelms the adaptive capacity that the system would ordinarily possess. Under normal conditions there are many adequate adaptive and re-equilibrating mechanisms in a system built to buffer it from such disturbance (Thompson 1967). In a crisis situation, however, the coping capacity of these mechanisms is exceeded, leading to a rapid deterioration of the system as a whole. Some of the features of crisis events include severe threat, destructive and often life-threatening change to the target, a high degree of uncertainty, need for prompt action, and critical, potentially irreversible decisions (Breecher 1979, Kouzmin & Jarman 2004).

The significant impact of a crisis, which may lead to the firm's demise, makes it critical for managers to understand and effectively manage these events. Crises come in many forms, including natural disasters such as earthquakes or meteor impacts, and in the form of firm-level disruptions such as labor strikes or executive malfeasance. Our research focuses on firm-level strategies for managing crises triggered by events that have an exogenous origin. In the paper we will use the term "crisis" to refer to organizational crises. The organizational crisis literature focuses on myriad factors that influence strategies for crisis management, including the psyche of managers, the nature of crisis-triggering events, organizational structures and processes, and environmental variables (Pearson & Clair 1998). Research on the organizational response, however, has primarily focused on industrial crises (Sharma 1999, Smith 1990).

**MODELS OF CRISIS MANAGEMENT SYSTEMS**

According to observations made by Fink (1986), there may be as many as four distinct stages in the evolution of a crisis, i.e., (1) the prodromal crisis or crisis warning stage, (2) the acute crisis stage – a point of no return when some irreversible damage has been done, (3) the chronic crisis stage – the clean-up phase, and (4) the crisis resolution stage – when things are being restored to
normality. In his discussion of a disaster or crisis cycle, Myers (1993) identifies the four phases of a crisis as (1) the normal stage that precedes the onset of a crisis, (2) the emergency response phase – the period immediately following a crisis, (3) the interim processing phase – during which temporary measures are taken to support essential functions, and (4) restoration phase – when efforts are made to bring operations back to normal. The problem with the crisis management literature is its characteristically unsubstantiated claims and anecdotal proclamations. Empirical work in the subfield of crisis management has been relatively sparse, uneven and non-cumulative as can be seen on Table 1.

<table>
<thead>
<tr>
<th>Author(s)</th>
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<tr>
<td>D'Aveni &amp; Mac-Millan, 1990</td>
<td>Communication among top executives</td>
<td>Sample of 57 bankrupt firms + 57 matched surviving firms</td>
<td>Executives of failing firms deny or ignore output factors during crisis and pay more attention to the input and internal environments.</td>
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<td>Irvin &amp; Millar 1996</td>
<td>Refuting four stereotypes of crises</td>
<td>Content analysis of 60,000+ records in Institute for Crisis Management (ICM) database.</td>
<td>Current beliefs about crises are false stereotypes: business crises have not increased. Crises need to be re-conceptualized to emphasize prevention and debunk the stereotypes currently held.</td>
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<td>Lin, Zhao, Ismail &amp; Carley, 2006</td>
<td>Impact of restructuring following a crisis</td>
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<td>Mitroff, Pauchant, &amp; Shrivastava, 1988</td>
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The present study is our attempt to offer a structure that makes the discourse on crisis management more coherent so that it can operationalize what has recently been learned and thus accelerate evolution of the field. In the sections that follow we present a new Crisis Management Process Model and some insights from its application. We briefly discuss the findings from our empirical research and conclude by discussing the implications and lessons learned. In a comparable study Argenti (2002) found that following a crisis, internal communications take precedence in order to rebuild the morale of the employees. He further identified five key lessons for companies facing crisis, namely, (a) the need to get on the scene as quickly as possible, (b) the essentiality of a careful choice of communication channels, (c) the importance of staying focused on the
business, (d) the need to have a plan in place, and (e) the need to improvise, but from a strong foundation. We believe that an adequate model of the crisis management process will support the insights of prior research, and delineate the essential communication flows and content so that these lessons can be understood and applied.

THE CRISIS AT THE WORLD TRADE CENTER

The present research was approached with three basic questions, which were the focus of an earlier study we had conducted (Gazillo & Mangaliso 2005). First, we wanted to find out how the organizations that suffered the immense losses of 9/11 responded to the crisis. For example, how did they organize, communicate, and rise to the challenge of assisting employees and victims’ families in the aftermath of the attack, even while they were silently suffering from the loss of fallen colleagues? Second, we were interested in how effectively the organizational leadership provided direction, assistance, and comfort during a time of crisis. What were the qualities of leadership that emerged as most valued during a time of crisis and tragedy? Third and finally, we wanted to identify the important lessons that could be learned from the way these organizations handled the World Trade Center tragedy. A mixed-method design was adopted for conducting this research. This method has been recommended for conducting inferential evidence-based field research (Cook & Campbell, 1979; Eisenhardt 1989). We relied on a number of articles and books on the subject, we content-analyzed several of the documents we obtained from some of the companies, made personal observations of the efforts of the organization for which one of the authors worked; and, most importantly, we relied on semi-structured personal interviews conducted with eight leaders or managers who had direct responsibility for their organizations’ efforts to cope with human loss, business disruption, and rebuilding required to put these organizations back together. Further details of the study methodology were excluded from this paper for space reasons.

CORPORATE LEADERSHIP RESPONSE

The September 11, 2001 attacks were unique in American corporate history. In the face of such drama, how did some of corporate America’s most prominent human resources respond? Were they effective? Were they ill prepared for such a disaster? Did they rise to the challenge? What did they do well? What can we learn from this to help us prepare to deal with future tragedies?

It is well documented that the majority of victims’ families of the companies reviewed were fairly well provided for, though there are subtle differences in benefits from one company to the next. This study examines how individuals responded and, through comparative analysis, highlights common threads that run through the responses. Based on the results of our interviews and the literature review conducted for this study, there are several similarities in the responses of company leadership in the first few weeks following 9/11. Special teams commonly formed to make decisions in times of crisis. In some cases, as with Washington Group and Marsh & McLennan, HR departments were joined by other senior managers in crisis teams. The next section presents a new crisis management model that represents the functioning of these crisis decision-making teams.

THE CRISIS MANAGEMENT PROCESS

There has been a proliferation of crisis management models, but none is at once parsimonious and complete, with the requisite feedback loop structure. An important insight of Norbert Weiner
in Cybernetics (1948) was that the same essential structure underlies any process that operates to accomplish a purpose. Cybernetics covered “...the study of communication and control, whether in the animal or the machine.” Cybernetics structure was thus a discovery rather than an invention. This basic model has direct application in human decisions (Simon 1958, Senge 1994, Mangaliso et al. 1998). Figure 1 essentially represents the basic process of crisis management.

**Figure 1: Basic Process of Crisis Management**

A crisis is a present or forecast ‘problem’ that is outside the normal range specified by the ‘objectives.’ It is beyond the usual control limits of the system. Rather than a 'creative tension,' in Senge’s (1990) terms, the elastic is stretched to the breaking point. A 'crisis' event impacts the system in crisis to the point of disrupting or even destroying it. On 9/11 the planes literally impacted the system - the Twin Towers. The decision makers, cognizant of their own objectives and those of stakeholders, observe changing feedback, ‘facts’ about the system and its outputs, and detect the actual or imminent crisis. The initial feedback is seen in the visual images from the scene. Decision makers seek to identify the causes in order to decide on ‘alternative solutions.’ Criteria, including cost, time, feasibility, and undesirable side effects, are applied to the various alternatives to arrive at the best alternative, the ‘decision.’ A detailed action plan is then formulated for implementation. As action proceeds, subsequent iterations of the decision model reveal changing feedback, which indicates the extent to which the crisis is contained or averted. The Crisis Management Model suggested by Pearson and Clair (1998) omits this feedback loop. In their model the process ends with success or failure and there is no representation of the system that faces a crisis. A ‘triggering’ event appears like a bolt of lightning between management ‘preparations,’ ‘reactions’ and ‘responses,’ which are directly followed by ‘outcomes.’ A more useful model of crisis management should include the system being threatened and the environmental influences on it, its inputs and outputs, and the plans and actions directed at it. Reactions and responses will come from those within the crisis system and from the decision makers trying to manage the whole crisis system.
Features emphasized by other authors may easily be incorporated in our model. For example, Pearson and Clair (1998) include, ‘Executive perceptions about risk.’ In our model, these are clearly defined as ‘problems,’ based on comparison of perceptions of the ‘facts’ about the system facing crisis, and the positive expectations of that system’s performance, the ‘objectives.’ Perceptions of risk are not the only problems, of course. Rising water or falling buildings might be others. ‘Institutionalized practices’ and ‘industry regulations’ rather than providing vague ‘environmental context’ are more clearly appreciated as additional ‘objectives,’ defining more potential ‘problems.’ ‘Crisis management preparations’ are in prior action plans and have been implemented in features of the system.

**LESSONS LEARNED FROM THE 9/11 ATTACKS**

The new Crisis Management Model serves to organize and systematize the lessons of 9/11. The most significant lesson from the Ground Zero experience may be the age-old principle recently popularized by Pfeffer (1998) in *The Human Equation*, to put people before profits. This is the most obvious lesson, the easiest to understand, and yet the hardest to practice in its fullest sense. All the subjects we interviewed agreed on this. Our model illustrates the decision process inevitably followed by every individual and group involved in a crisis. The many decisions are sometimes nested, sometimes parallel, and sometimes sequential. The process explains the content of communication and decision-making. Overall, they compose the fabric of decisions constituting the organization’s adaptation. A number of practical aspects of coping with 9/11 emerged in its aftermath.

**Leadership and physical presence**

Leaders need to be visible, accessible and communicative. Their decisions need to inform and be informed by the decisions of all others involved in the “crisis system.” It is especially important that communication flow both ways. Leaders may not have all of the answers, but they need to do their best to share what they can. And they need to listen, especially to those who are in their hour of need. Also, the power of personal contact is invaluable. While sometimes a phone call is all that can be offered, there is no substitute for face-to-face expression of compassion and empathy (Goleman et al. 2002). Effective crisis leadership is characterized by rapid response offered in situ rather than from a distant place, and intense, short-term work, in the here and now (D'Aveni & MacMillan, 1990; Myers, 1993; Waldron, 1984). A parent company, whose subsidiary located miles away is struck by a disaster strike miles away should assume that it cannot know all that is going on there unless someone physically goes there and takes the time to find out. Media reports cannot substitute for direct fact-finding on location. There may also be subtle or not so subtle cultural differences that exist between the headquarters and the subsidiary where the tragedy has struck that should be taken into account. The Crisis Management Model also represents the classic communication process, in which the decision maker is the sender of “decisions and action plans” and the receiver is in the “crisis system.” A crisis usually involves an increase in the amount of “noise” in the communication “channels.” Physical presence of leadership reduces the noise level, clarifies role dynamics, enhances the leadership process, and increases motivation; all decision processes essential to successful crisis management.

**Role of the Social media**
In contemporary times, successful crisis management means using electronic and social media to full benefit. Websites, email, and social media such as Twitter and Facebook have evolved significantly in the decade following 9/11. For instance, Twitter was a huge help during the 2010 earthquake in Haiti. Some firms are known to have developed programs used on Twitter to help physically locate victims using coordinates. These are essential communication tools that must be designed by an organization for response to crises. Even so, these may not be the only way or the best way to communicate. September 11 also changed how IT departments need to organize. For example, it made little sense to have the main server that holds all of the firm's important data located in the same office as the firm's headquarters. At a minimum, a truly reliable back-up should be kept elsewhere. In the post 9/11 Era, companies have heeded this lesson, knowing that despite everyone’s best intentions and IT plans, much data were lost and never recovered in the aftermath of the 9/11 crisis.

The human dimension

There is a vast array of responses and behaviors that falls into the overall “human” dimension of effectively confronting a crisis. This includes everything from assistance and benefits to the families of victims, to grief counseling, and to quickly finding new office space. More than one company we studied suffered longer than they should have due to delays in obtaining office space. The power of human spirit should not be overlooked either. Humans want to rise to the occasion. Humans are extremely resilient, and when called upon, have the ability to meet the greatest of challenges. This is the spirit that elsewhere is called ubuntu – the notion of caring and sharing in times of tribulation, that your suffering is mine, and that we are all in this together and together we can do more than any of us can individually (Mangaliso 2001, Tutu 1998). A key element of those firms that were effective in dealing with the 9/11 crisis was that teams were established from the earliest moments: crisis teams, HR teams, leadership teams, and recovery teams. The notion of working together in teams had its biggest test run ever.

DISCUSSION AND CONCLUSION

We begin our conclusion with a disclaimer about the methodology adopted in the study. This is then followed by a summary of the substantial issues that came up in the course of conducting this research. By all historical accounts the 9/11 attacks were an unprecedented event in U.S. history. The fact that by its design our study was qualitative opens it to some criticisms. The authenticity of the findings from qualitative studies is often criticized since the format relies on the respondents' recollection of complex and difficult events, which may be inaccurate (Hoffman 1960; Phillips 1981; Slovic 1969). The main source of inaccuracies is the cognitive limitation of people as information processors (March and Simon 1958). It should be noted, however, that our empirical research was conducted almost immediately after 9/11 (beginning in 2002) and did include some quantitative data. In that sense it would be categorized as a form of mixed-method design, and thereby allay some of the above concerns (Cook & Campbell 1979, Harrison 2013). Furthermore the immediacy of conducting it so soon after the 9/11 crisis lends an authenticity to it that would have been lost had we not conducted the research when we did.

The Crisis Management Model is a framework for explicating these perceptions not only in research but also in the crisis itself. Perceptions of crisis depend on our cultures, our personal expe-
periences, and on our mental models of the crisis system, including other decision makers. Cognitive psychologists have found that people display predictable biases when responding to questions or confronting problems (Tversky and Kahnemann 1974). When dealing with complex problems, people often rely on heuristic principles and cognitive simplification processes (Schwenk 1984; Duhaime and Schwenk 1985). This does not mean that executives’ cognitive propensities completely overwhelm reality, but it does indicate that their mental representations significantly bias their interpretation of the organization and its environment (Ireland et al. 1987). One example is the over-response to vivid or dramatic information that imbues it with a larger role in influencing opinion than justified by its objective content (Nisbett & Ross 1980).

An essential element of the crisis management model and of all decisions is diagnosing causes. The importance of this is obvious in the medical context. Merely treating symptoms means they will recur. The 9/11 crisis was unique in some ways, but it was one among many acts of terrorism. We would do well to look beyond 9/11 at the patterns of violence, inequality, and ignorance that motivate terrorists. We don’t want to imagine there could be any justification for such acts, so we rarely inquire about the decision processes that lead to them, but we should. Across all crises there are patterns that we recognized when examining 9/11. Our model supports integrating these insights into new ones for evolving improved crisis management in the future for students, executives, and society.

REFERENCES


Toward an Effective Crisis Management Model


