

John E. Spillan, John A. Parnell, and César Antúnez de Mayolo

## EXPLORING CRISIS READINESS IN PERU

### Abstract

---

Organizational crises are inevitable and place a significant demand on resources, diverting firms from their central focus on serving customers. Effective crisis management can minimize the impact of these events on the organization. Recognition and information are two major components of an appropriate crisis management approach; they help organizations respond to crises quickly and effectively. While the crisis management literature is abundant concerning larger organizations in developed nations, little has been written on this subject concerning businesses in emerging countries. This exploratory study examines the perceptions and experiences of Peruvian managers in relation to crisis events. Findings indicate that a majority of these organizations lack adequate crisis preparation, including crisis management plans. Recommendations for management are presented.

---

*Key Words:* crisis management, business strategy, strategic groups, commitment to learning, Peru

**John E. Spillan, John A. Parnell**

*University of North Carolina-Pembroke, USA*

**César Antúnez de Mayolo**

*PAD School of Management - Universidad de Piura, Peru*

**Correspondence: John E. Spillan**

School of Business, UNC-Pembroke, Pembroke NC 28372 USA

E-mail: john.spillan@uncp.edu

## INTRODUCTION

Organizations are facing increasingly turbulent environments, resulting in crises of higher frequency and complexity. Although crisis management has been recognized as an important management activity, many organizations have invested insufficient time in crisis planning and readiness. This failure to act can be destructive and costly for managers, other employees and the entire organization.

Crisis management has received growing attention in the management literature over the past two decades. In the early 1990s, it was reported that about 80 percent of companies lacking an effective contingency plan go out of business within two years of suffering a major disaster (Brown, 1993). Yet, fewer than 60% of the Fortune 1000 industrial companies had established operational crisis management plans (Tiller, 1994). Unfortunately, the lack of preparation common to organizations in the 1990s has remained largely unchanged throughout the 2000s (Crandall, Parnell, and Spillan, 2010).

Some executives do not view crisis preparation as a priority. Many of these organizations mistakenly assume that a crisis will not happen or that the organization can negotiate one successfully without a plan in place. Others mistakenly believe that insurance can cover any losses or work interruption that may emerge from a crisis. Unfortunately, insurance does not cover the intangible items such as company reputation and customer goodwill. Others avoid crisis planning because of presumed time or resource deficiencies. While this hesitation is understandable, avoiding crisis preparation can threaten the long-term viability of the business. Effective crisis planning is a more responsible and realistic approach (Crandall et al., 2010).

Crisis management is an essential skill for managers, as all organizations will likely experience a crisis of some magnitude at some point. Leadership and crisis management go hand in hand in times of trouble. A crisis—by its very nature—can be devastating. Managers who have not experienced such an event usually do not appreciate the pressure it creates. It behooves any manager to invest the time and resources to develop a crisis management plan in advance of trouble.

Although crisis management in organizations has received increased consideration in the United States and other countries, relatively little is known about crisis management awareness among organizations in many parts of the world (Arpan and Sun, 2006; Barton, 1993; Mitroff, 2001). In particular, there remains a scarcity of research on the topic in emerging economies (Balamir, 2002; Parnell, Köseoglu, and Spillan, 2010). Crisis

management processes vary across borders because of culture and strategic reasons. These differences are significant and are often identified when organizations in developing nations are compared to those in emerging economies (Hofstede, 1980, 1991, 1993; London and Hart, 2004; Ouedraogo, 2007; Ralston, Holt, Terpstra, and Kai-Cheng, 2008; Reid, 2000; Zhang, Zhang and Liu, 2007; Zhou, Tse, and Li, 2006).

In emerging markets, external factors tend to have a greater influence on firm performance than in developed markets, so executives tend to perceive greater risks when formulating strategies. Scenario planning encourages the construction of several possible alternate futures (Simpson, 1992), while contingency planning examines only one uncertainty at a time (Schoemaker, 1997). According a global survey, these tools are used by 38 percent of executives in established markets, in contrast to 44 percent in emerging markets and 51 percent in Latin America (Rigby et al., 2009). According a recent Global CEO Survey, 56 percent of Latin American executives participate in more crisis readiness drills as additional steps to improve their strategy, in contrast to 40 percent of global executives (PWC, 2011). According a survey to global investors and equity managers in emerging markets, their main obstacle to incorporating Environmental, Social and Governance (ESG) principles in their investment process is the lack of transparency (26%), followed by lack of information/expertise (23%) (Economist Intelligence Unit, 2009). It is apparent that crisis management is not specific to just developed countries but can happen anywhere in the world at anytime and under any circumstances.

While crisis management and contingency planning perspectives have been highlighted over three decades by the popular business press and academic literature, businesses are constantly encountering an ever-changing global economy that presents new and more sophisticated internal and external threats that may affect their survival. Consequently, both academic and practitioners need to comprehend the crisis management and contingency planning activities that exist among businesses in developing nations. Because globalization issues have become basic elements of sustainable business development, one must consider: (a) what different perceptions business managers in developing countries have regarding crisis management and contingency planning, (b) what explains the differences in perception among the businesses managers, and (c) what alternative or recommendations can be offered to help these businesses managers prepare for crises.

This paper reports on crisis management research among Peruvian managers and seeks to make a contribution to the existing literature in terms of the determination of the factors affecting crisis readiness. As an exploratory study, it reviews and evaluates the crisis management processes that are present among businesses in Peru. The following sections recapitulate the state of the crisis management literature and the Peruvian management context. Next, details of a survey of Peruvian managers are presented. Results are analyzed, followed by conclusions and directions for future research.

## **CRISIS MANAGEMENT**

The term crisis has disparate meanings to different managers. Although a variety of definitions of organizational crisis exist, Wilson's (1992) perspective is invoked in this paper: Crisis management is a process by which organizations try to predict or identify potential crisis and take precautions to prevent the crisis or minimize the effects of the crisis. Moreover, a crisis refers to the perception of an unpredictable event that threatens key stakeholder expectancies and can impact organizational performance in a significant and negative manner (Coombs, 2007). This information is precisely what managers need to prepare for prospective crises.

Several ideas are frequently seen in most crisis management research: (a) Crisis incidents have a low probability of occurring and are typically unexpected (Barton, 1993; Pearson and Mitroff, 1993; Sellnow and Seeger, 2001), (b) the crisis incident can be extremely destructive (Irvine and Millar, 1997), and (c) they necessitate rapid, decisive action (Barton, 1993; Crandall and Menefee, 1996; Greening and Johnson, 1996; Marra, 1998; Seeger, Sellnow, and Ulmer, 1998). At the time of a crisis occurs, decision makers look for ways to moderate its negative effect on the organization even though positive outcomes can come about as well (Fearn-Banks, 1996). The manner in which an organization reacts to a crisis can significantly affect its competitive status, its financial performance, and even its survival (Coombs, 2007).

The area of crisis management was formally established after Johnson and Johnson encountered product sabotage when its Tylenol Extra Strength pain reliever was laced with deadly cyanide in 1982 (Mitroff and Anagnos, 2001; Pines, 2000). A crisis can cause problems ranging from an operational production failure to a public relations nightmare. Crisis situations can lead to potential legal problems that can disrupt the normal functioning of business activity. The weight of daily operations and crisis management are

so essential that organizations must establish crisis-management plans and teams to maintain business continuity.

Throughout the last three decades, crisis research has focused principally on two activities, crisis preparation and management of an ongoing crisis (Lalonde, 2007a). Some researchers have put emphasis on the four R's of reduction, readiness, response, and recovery (Evans and Elphick, 2005). They have also recognized two major types of crises. "Cobra" crises are sudden events and emerge as a total surprise. Examples include abrupt natural disasters such as the 2011 earthquake and tsunami in Japan or 9-11. "Python" crises occur gradually and are more common and less reported in many organizations. They are the smoldering type that slowly develop and are often due to management negligence.

As an academic discipline, crisis management theory is still in emergent stages (King, 2007; Lalonde, 2007a, 2007b). Recently, substantial thought has focused on complexity theory as a fundamental platform for further development of this theory. Additionally, crisis can be classified in a number of different ways. Meyers and Holusha (1986) suggested a two-by-two matrix using the criteria of control and dimension. High-control crises include situations such as corporate takeover attempts and a threatened strike by a labor union. Natural disasters can be classified as low-control events. Quarantelli (1988) classifies crisis events as either intentional or accidental. Intentional crisis include wars, product sabotage, and urban riots while accidental crisis situations comprise events that are unintentional, yet capable of causing major damage in terms of human and property loss, such as gas leaks, air disasters caused by weather, and natural disasters (Cebzynski, 2000).

Crisis management is important in both public and private organizations. While government agencies tend to plan less effectively than their for-profit counterparts (Piotrowski, 2006), there is a general consensus that many private organizations also struggle in this regard. Additionally, the more costly aspect of crisis management (Newkirk, 2001), and the need for further research and more effective methods for addressing crisis management must be emphasized.

The challenge associated with promoting crisis management practice is due in part to the fact that some managers see crisis management as "a management of exceptions" (Roux-Dufort, 2007). This point of view suggests that crisis management occurs only under extraordinary circumstances, lessening the need to engage in crisis prevention and

preparation. The long-term effects of a crisis, its links to competitive strategy, and an expanded conceptualization of what constitutes a crisis are also germane (Colins, Holzmann, and Mendoza, 1997; Coombs and Holladay, 2006; Elsubbaugh, Fildes, and Rose, 2004; Evans and Elphick, 2005). Both the occurrence of crises and the assortment of crisis types have increased markedly (Lalonde, 2007a; Robert and Lajtha, 2002).

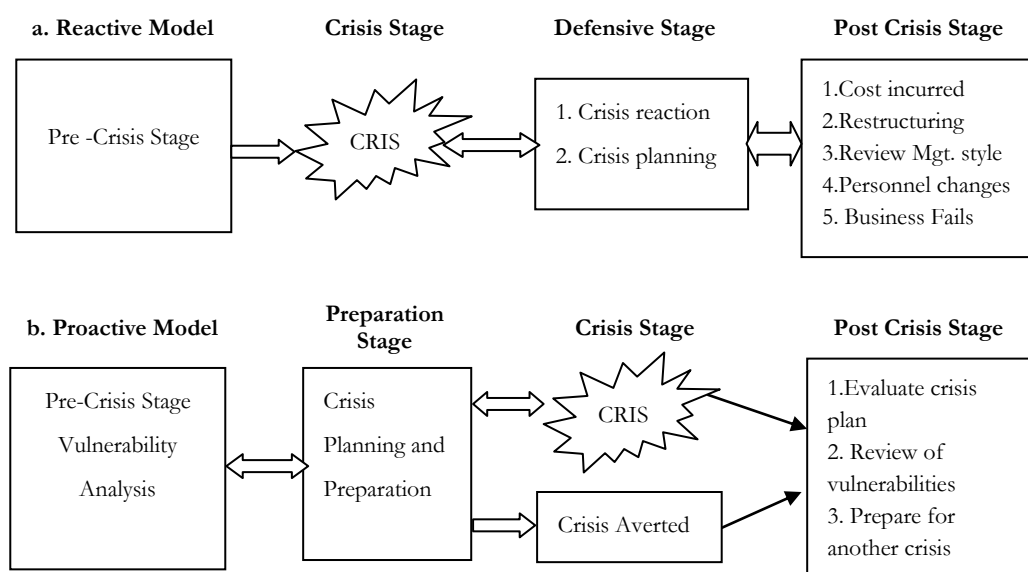
### **ANTICIPATED POTENTIAL CRISIS EVENTS**

Managers should consider several key questions with regard to crisis planning. Specifically, what crisis is of the greatest concern to a firm? Has a crisis actually occurred in the past? Answers to such questions are important for three reasons. First, a manager who lacks sufficient information about prospective crises cannot develop effective plans to address them. For example, one of the most difficult crises in a business is the on-site death of an employee. Such a crisis should be managed in a professional and dignified manner, and planning assists in ensuring that this will occur. Additionally, if the worker was a key person in conducting the day-to-day business operations, plans must be available to replace the deceased worker with one who has comparable skill and experience (Wnek, 2000). Second, recognition of potential crises can enable management to enact measures to minimize the crisis from occurring. Finally, identifying the most likely crises in organizations allows scholars and consultants to “warn” the general business community about such vulnerabilities. For example, because of the large awareness generated by the popular press and management researchers, the prospective Y2K crisis was greatly minimized.

Crisis classification is an important consideration, and a number of schemes have been proposed. Mitroff (2005) identified seven crisis families: economic-related, informational, physical, human resources, reputation-related, psychopathic acts, and natural disasters. These represent general categories, and they are not mutually exclusive. Mitroff’s typology is similar to several others frequently cited in the literature (e.g., Lerbinger, 1997; Pearson and Mitroff, 1993; Pheng, Ho, and Ann, 1999). Once crises are identified, it is possible for a crisis management plan (CMP) to be developed. Hence, the classification process provides managers with a framework from which to assess vulnerabilities and, subsequently, construct effective action plans that address potential crises before they occur.

There are essentially two ways for managers to view the resolution of a crisis situation. They can ignore the warning signs and react to the crisis or they can seek to prevent or manage a crisis. The former approach has undefined outcomes while the latter provides many more opportunities to manage the crisis situation. It may even avert the crisis altogether.

**Figure 1: Two models of the crisis management process**



(Adapted from Spillan (2003))

Figure 1 illustrates and summarizes the decision stages that exist in the crisis management process. In the reactive model, the decisions about planning take place during and after the event(s) have already occurred. In the proactive model, decision makers have already anticipated various forms of crises and have developed plans to deal with its eventuality. In addition, efforts are made shortly after the crisis to learn how to better deal with the next crisis. This critical stage of learning must occur soon after the event while the facts of the disaster are still fresh in the minds of management (Kovoor-Misra and Nathan, 2000). The consequences of each management decision are significant. Organizational leaders must evaluate the difference between the investments in planning for a crisis versus the losses that will result from not planning. If the proactive model is

followed, decision makers must eventually ask what types of crises are of most concern to the organization and whether such events actually occurred previously.

Two important questions are worthy of consideration: (1) Why is the concern for crisis events greater in some organizations rather than in others? (2) Is the crisis event the catalyst for concern, or is it a merely a consequence of having a management team that considers planning for crisis events to be an integral part of the organization's strategy? The management literature suggests that organizations are logically reactive to potential future crisis (Crandall et al., 2010; Mitroff, Pauchant, and Shrivastava, 1989; Pearson and Mitroff, 1993; Penrose, 2000). A crisis event may be the only incentive for an organization to initiate the planning process to prevent another occurrence of the same or similar events.

While no organization is exempt from crisis considerations, those demonstrating more sensitivity and concern for crisis events may establish crisis management teams. A catastrophic event may be the stimulus necessary to force organizations form crisis management teams and prepare for potential future crisis events (Crandall, McCartney, and Ziemnowicz, 1999).

How can an executive manage organizational crises effectively? The following discussion presents the decisions and actions managers need to consider before, during and after a crisis.

### **Before the crisis**

Crisis preparation appears to be the main crisis concern set forth in the literature (Elsubbaugh, Fildes, and Rose, 2004). Studies in crisis management are pervasive in offering a three-step approach to handling a crisis (Smith, 1990; Smith and Sipika, 1993). Crisis management begins before a crisis occurs, continues during its occurrence, and continues after it has ended. The emotional reaction to a crisis is essential to understand at each phase (Bone and Stainer, 2005; Cohn, Carley, Harrald, and Wallace, 2000). The purpose of establishing a crisis management plan is to focus workers on what might occur if a crisis happens and how the event can be successfully managed. The aim of the plan is to ensure that the people have the resources to take control of the crisis as quickly as possible in order to minimize the damage.

Before a crisis occurs three key steps should be addressed. First, a crisis management team (CMT) should be established (Hildreth, 2002; Podolak, 2002). The rationale for the



development of a crisis team can be very simple and explained in two ways. First, the crisis might cause the organization to react to the event(s) and implement damage control and corrective action. The event(s) can create a process of organizational learning causing management to develop contingency plans that set forth actions that can either prevent or respond to a future crisis event. Alternatively, an organizational development process that focuses on continual improvement can recognize the organizational vulnerability and begin cultivating a culture that focuses on crisis planning that leads to the establishment of a crisis management team.

The team's role is to evaluate all of the possible contingencies that might occur and plan for the worst-case scenarios. This is essentially an extension of every organization's strategic management process (Clarke and Varma, 2004; Pollard and Hotho, 2006). The crisis team is responsible for control of planning for a crisis before it occurs. Moreover, it is charged with managing the difficulties that come to light during the emergency (Parnell, Crandall, and Menefee, 1997). Designating a team make possible an organization's ability to create a crisis-oriented culture (Caponigro, 1998; Kovoov-Misra and Nathan, 2000; Penrose, 2000).

Studies on crisis management emphasize that preparing crisis management plans generally assures crisis readiness (Barton, 1993; Caponigro, 1998; Hickman and Crandall, 1997). Organizations with established CMTs display a more heightened attentiveness and unease for possible crises when compared to those without CMTs (McCarthy, Crandall, and Ziemnowicz, 1999). This elevated knowledge can be associated with two major reasons. First, top management has created a business culture that emphasizes the importance of understanding and practicing crisis management. The creation of a crisis management team requires a cultural environment supportive of the need for crisis management (Marra, 1998; Smith, 1990).

Once the CMT has been developed and trained it is to develop worst-case scenarios that are applicable to an organization's particular environment. Such scenarios train management to respond proactively with effective tactics for resolving a crisis. (Sklarewitz, 1991). These scenarios have assisted myriad universities prepare for possible crisis events in light of the Virginia Tech and Northern Illinois University incidents of 2007 and 2008.

The final consideration requires the CMT to define the standard operating procedures (SOPs) that should be used to address a crisis. An organization anticipating a labor strike,

for instance, may employ out-of-town security guards to supervise possible picket line confrontations.

### **During the crisis**

Managing a crisis as it progresses is a complex task. Through this phase the organization must communicate effectively and responsibly with the various stakeholders who are affected by the crisis (Mullins, 2005). Three steps are crucial to the successful management of the crisis. First, management should focus on stakeholder requests for information. Crisis situations such as strikes, industrial accidents, product sabotage, and employee violence invite the public's attention. The approach management uses to address the media is a signal to the public as to how the crisis is being handled. If management appears to be defensive or reluctant to comment on questions connected to a crisis, then the public will sense this response negatively (Brewton, 1987; Mano-Negrin and Sheaffer, 2004).

Second, a designated spokesperson should be selected to speak with the media. This decision makes certain that inconsistent accounts do not emerge from the organization. Without this mechanism of communication management can appear to be confused and disjointed. The Internet can also be a valuable tool in communicating necessary information (Perry, Taylor, and Doerfel, 2003).

Finally, the communication to the public via the media should be conveyed in a professional manner. Rushed interviews of management are not encouraged. Planned encounters with the press using formal press releases, press kits, and news conferences are desirable because they present management with the resources and time to put forth their best positive image (Barton, 1993). The function of the media in assuaging the effects of the crisis has received scarce attention in the management literature (Pollard and Hotho, 2006).

### **After the crisis**

The recovery stage of any crisis should focus on identifying the cause of the crisis and communicating effectively with key stakeholders. Research has shown that many episodes such as industrial accidents are not isolated and unpredictable. Rather, some merely represent the final step in a sequence of events that began much earlier (Smith,

1990). A study of Union Carbide's tragedy at Bhopal demonstrates how the accident in reality had its genesis months before the MIC leak ever occurred (Shrivastava, 1987).

Communicating with stakeholders is also critical (Carlsen and Liburd, 2007; Ulmer, 2001). Important stakeholders in crisis management include employees, customers, the media, stockholders, and the local community. Stakeholders insist that management share information on the status of the crisis and how it is being managed. Following Hurricane Andrew's devastation of South Florida, Miami-based Burger King established a toll-free telephone line to answer employee questions regarding their jobs and also to offer assistance if the employees' needed help (Mahoney, 1993).

## **CRISIS MANAGEMENT IN PERU**

The process of crisis management varies across economic contexts. Hence, what is commonly referred to as generally accepted crisis management practice has not yet been integrated into many organizations in the developing world, where crises are often an accepted part of contemporary management life (Parnell et al., 2010). Within this context, a closer look at Peru is warranted.

The Peruvian economy has experienced significant growth and development throughout the past decade. An increasing level of governmental consistency and growing economic strength has led to growing confidence from within. With a population of more than 29.5 million people, Peru represents a growing and dynamic economy (CIA Factbook, 2009).

While organizational crises occur daily in Peru, a discussion of them does not become headline news outside of the country. Only those very severe events such as earthquakes, major fires or large human tragedy prompt the media to report on the crisis in Peru. As a consequence, this study provides a lens for understanding the basic essential of crisis management from a land that is totally different in its management perspective regarding management of crises.

Several examples illustrate the extent of the vulnerabilities that exist in Peru. As a developing country, Peru has struggled with a variety of crisis events that have affected companies, people and the nation's response capability. Natural disasters have had a major impact on various parts of Peru. In February 2010 El Nino created a major problem. Peru's deficiencies in disaster prevention policies and measures—coupled with climate inequities in South America—resulted in the loss of dozens of lives and thousands of

homes in this Andean country. Torrential rain caused damage in northern Peru, but the worst precipitation occurred in Cuzco, in the south, where a month's worth of rain fell in just three days (Salazar, 2010).

An earthquake struck Peru on August 15, 2007, and killed over 500 people and injured more than 1,500. Because public and private organizations were insufficiently prepared, significant international aid was required to assist in helping those affected with medicine, housing and food. These are only two major disasters, but they demonstrate that when natural disasters occur in a developing country with limited resources and competencies like Peru, its effects can be devastating.

An ongoing crisis relates to the water allocation and shortages in Peru. The escalating number of conflicts as a result of historic and structural problems indicates that water management is becoming a critical concern throughout the country. The water crisis is one of governance, not just a matter of economics or technology. Connected with these events is the sewage crisis that Lima had to experience. This calamity is not due to a lack of funds or investment projects, but is instead a result of poor management (Ruiz, 2008). Such disruptive events have caused major problems with families, businesses and other organizations in Peru.

Crises are also prevalent in the mining sector. Peru is one of the most important mineral producers in the world. The rich soil of the Andean mountains contains vast reserves of copper, silver, lead, gold, zinc and other natural resources. Instead of becoming a tool to improve the lives of Peruvians, mining has actually become a curse for millions of poor workers and farmers (Mines and Communities, 2008). Peru's Casapalca mine has a record of being one of the most dangerous in Latin America. Further tragic evidence of this came in early February when eight miners went to their deaths.

The Tia María mining project of Southern Peru is one of the largest copper producers in the world. It is owned by the Mexican conglomerate Grupo Mexico and has been involved with mining operations in Peru since 1952. With an investment of 950 million U.S. dollars, this project was projected to increase output in the region by some 120,000 tons per year, with production scheduled to start in mid-2011. However, local residents were worried that the mine would pollute the water that feeds the farms or deplete underground water resources. Because the company failed to give the local community adequate information about its plan, the ministry of mining requested additional public hearings with area residents. Peruvian law does not require the local

communities' approval, but on September 2009, more than 90% of 3,131 residents of the rural district of Cocachacra in the state of Arequipa voted through a popular referendum against the mine project or the use of underground water for the project (La República, 2009). Arequipa's regional president had suggested that Southern Copper use desalination of water from the Pacific Ocean for its operations at Tia Maria, which the company is aiming to bring into production in mid-2011. The project remains paralyzed. Such a crisis in the lives of the miners has created substantial economic and health hardships on the families of that village.

In another crisis, Edelnor—a Spanish electricity supplier in Lima—faced a terrible problem as result of an electricity blackout in June 2010. A man who depended on artificial breathing died during the blackout, which lasted for seven hours. The man suffered from intraneural cervical neurilemoma (tumor at the spinal cord) and as soon as the blackout happened, the relatives started using batteries to operate the portable breathing. They called Edelnor and then an ambulance, but because of the blackout the ambulance was delayed for an hour. Unfortunately, the man died on his way to the hospital. In a press release, an Edelnor representative communicated that it did not know the causes of the blackout and apologized for the incident, offering support to the father of the victim (El Comercio, 2010). Edelnor compensated the family for the funeral service, but the relatives were considering legal action.

Crisis can also affect different companies in different industries. Public relations crises are common in many nations, and Peru is no exception. LAN Perú, a component of the Chilean airline LAN, became unpopular with the Peruvian government in 2005 due to a scandal over an in-flight video. The video depicted negative features of Lima, including old images of a man urinating in the street and gutters filled with litter. This episode appeared to have revived old grievances between Peru and Chile, and Peruvian President Alejandro Toledo said he would sue LAN for damages. He argued that the material misrepresents the capital Lima it has devastated Peru's image, tourism, and the Peruvian people (Terra, 2005). Moreover, legislators complained that the video, which was intended to promote adventure tourism, showed Peru as a pigsty. The airline delayed its reaction, and after several days, apologized and withdrew the film, firing three of its senior executives. Based on the above review we can now frame the following hypotheses.

## HYPOTHESES

As can be seen, crisis events are common in Peru. While some organizations are prepared to address the challenges they engender, many others are not. Part of the lack of preparation may be attributable to the emerging context of the Peruvian economy (Parnell et al., 2010). This paper seeks to determine if a link between crisis planning and strategy content exists as well.

Strategy is the creation of a unique and valuable position (Mitzberg, 1990). It requires the firm to make trade-offs in competing—to choose what not to do—and is strongly linked to core competences, as it involves creating fit among a company's activities (Porter, 1996). The link between crisis management and strategic management is well established (Crandall et al., 2010). Effective crisis planning before, during, and after crisis episodes requires an analytical, strategic perspective. Many of the same processes are involved, including environmental assessment, resource allocation, and cost-benefit analysis. Although the link between the *processes* of crisis and strategic management is well founded, little work has been done to test for links from a *content* perspective.

While a firm's corporate level strategy considers the broad direction of the organization—growth, stability, or retrenchment—a business strategy focuses on such factors as markets, competition, and positioning organizations craft business strategies intended to translate their resources and capabilities into competitive advantage, and ultimately superior performance (Parnell, 2008).

Business strategy typologies are frameworks that identify broad or generic competitive strategies utilized by businesses (Parnell, O'Regan, and Ghobadian, 2006; Veett, Ghobadian, and Gallear, 2009). According to Porter's (1980, 1985) strategy framework, a business can pursue superior performance by establishing either a cost leadership position or through differentiation. Either approach may be accompanied by focusing efforts on a particular market niche. A business pursuing a low-cost or cost leadership generic strategy seeks to produce and distribute its products or services at the lowest cost in the industry. In general, cost leadership is consistent with a de-emphasis on new products, unproven technologies, or other risk-laden operations (Porter, 1980). Crisis preparation can be an expensive process. As such, organizations emphasizing a low-cost strategy may tend to allocate less time, energy, and resources in terms of crisis preparation.

Conversely, a business pursuing a differentiation generic strategy seeks to distinguish its products or services from those of its competitors, thereby eliciting sales even if costs

and prices are not relatively low. Differentiation tends to represent an ongoing challenge, as businesses seek to find new and create innovative ways to develop offerings that are perceived as different from others in the marketplace (Porter, 1980). Hence, differentiation infers some degree of risk-taking, as new ideas and approaches are not always successful. Successful ventures can be highly profitable. Differentiated businesses are willing to tolerate a number of failures if they are countered by corresponding and profitable successes. As such, a greater emphasis on differentiation and innovation should also be accompanied by increased crisis readiness.

Crisis planning necessitates the allocation of substantial financial and other resources. Juxtaposing cost leadership and differentiation, it is expected that businesses emphasizing a cost leadership strategy will be less likely than differentiated businesses to allocate sufficient resources to the task (Parnell et al., 2006). Because low cost strategies are more common in developing nations, support for such an assertion can help explain why organizations in nations like Peru are often ill prepared for crisis situations. Hence, two hypotheses are proposed.

*Hypothesis 1: There will be a negative association between strategic emphasis on low costs and crisis readiness.*

*Hypothesis 2: There will be a positive association between strategic emphasis on innovation and crisis readiness.*

## **METHODS**

The instrument utilized in the present study included the modified crisis readiness scale developed and tested by Rousaki and Alcott (2007). The first eleven items in the scale assess the organization's internal functionality (OIF). The last three items assess the perceived likelihood of a crisis (PLC). The instrument also utilized in this study contained Pelham and Wilson's (1996) innovation strategy and low cost strategy scales, and Parnell, Lester, and Menefee's (2000) performance satisfaction scale. Both scales were selected because of their previous validations and their Likert orientation. Demographic and personal items were also included, such as age, gender, management and organizational experience, and position in the firm.

Data were collected from managers in the Peruvian city of Piura, capital of Piura, the second most populated state in Peru. Undergraduate students were trained to conduct the

survey under the supervision of one of the authors. Due to the low interest in collaboration from the population of study, the sampling procedure selected was non-probabilistic. The target population was managers working in the region with at least two subordinates.

A total of 123 responses were completed. Males (n=87; 70.7%) outnumbered females (n=36; 29.3%) in the sample. The typical respondent had over ten years of managerial experience and almost five with his or her present organization. The average age of the respondents was 39 years.

**Table 1: The sample**

		Frequency	%	Mean	Standard Deviation
<b>Gender</b>	Males	87	70.7%		
	Females	36	29.3%		
	<b>Age</b>			38.61	11.14
	<b>Management Experience (years)</b>			10.47	7.75
	<b>Experience with Organization (years)</b>			4.75	4.77

## FINDINGS

Results from the Peruvian sample largely supported the integrity of both dimensions of the crisis readiness scale, but with exceptions (see Table 2). All items in both scales produced factor loadings in excess of .500 except for OIF5 (.267) and OIF6 (.487). Coefficient alphas were .825 and .666 for these scales. Support for the innovation emphasis, cost emphasis, performance satisfaction, and commitment to learning scales was strong, with all loadings greater than .600 and all alphas exceeding .700.

Factor scores were computed to serve as composite measures of OIF, PLC, strategy-innovation, strategy-cost, and performance satisfaction. A factor score of zero can be interpreted as the mean. Positive and negative scores reflect (in standard deviations) the extent to which a particular response is above or below the mean for the group.

*H1 was not supported.* Strategic emphasis on low costs was significantly and positively associated with crisis readiness.

*H2 was supported.* Strategic emphasis on innovation was significantly and positively associated with crisis readiness.



Interestingly, OIF and PLC were *significantly and negatively correlated* ( $-0.316$ ;  $p = .000$ ) (see Table 3). In other words, organizations with a higher internal functionality were less likely to expect a crisis. Experience, age, and gender were not significantly correlated with either OIF or PRC except for a negative association between PRC and managerial experience ( $-0.219$ ;  $p = .017$ ), suggesting that less experienced managers perceived a greater likelihood of crises than their older counterparts.

OIC was significantly and positively correlated with commitment to learning, both strategic emphases, and performance satisfaction. Among these other constructs, PLC was significantly correlated only with performance satisfaction.

## DISCUSSION

The rejection of H1 and the support of H2 suggest that crisis readiness is not necessarily a function of resource deployment like other resource considerations. In other words, businesses emphasizing *either* cost containment *or* differentiation were likely to report a higher degree of crisis readiness than their counterparts with a lower emphasis on both strategies. Hence, crisis readiness appears to be associated with an emphasis on strategic planning regardless of approach.

Additional testing was deemed necessary to assess the linkages. The cases were cluster-analyzed along OIF and PLC to further assess the links among crisis readiness, commitment to learning, strategy, and performance. Ward's method was employed and four clusters were forced to create a two-by-two matrix. Group size ranged from 22 to 45 cases (see Table 4).

The cluster solution provides some interesting results. The highest performing cluster included organizations with high OIF and low PLC scores. These organizations also demonstrated a relatively high commitment to learning and a strong emphasis on cost leadership. The lowest performing cluster included organizations with low OIF and very high PLC scores. These organizations appear to lack preparation for crises; they emphasize neither cost leadership nor differentiation as well.

Other studies among larger organizations have found higher percentages of CMTs in place than in the present study, even two decades ago (Fink, 1986; Mitroff, Pauchant, and Shrivastava 1989). In their analysis of internal auditors representing organizations both large and small, Crandall, McCartney, and Ziemnowicz (1999) found that 51% of the responding organizations had teams in place.

**Table 2: Factor analysis results**

Variable	Item	Loading
<b>Organization's Internal Functionality (alpha=.825)</b>		
OIF1	Accessibility to crisis resources	.614
OIF2	Adequate crisis budget	.638
OIF3	Adequate crisis management plan	.656
OIF4	I am informed about crisis resources and tools	.780
OIF5	Crisis management viewed as corporate goal	.267
OIF6	Adequate crisis training	.487
OIF7	Quick recovery after a crisis	.632
OIF8	Rewards individuals for crisis prevention	.734
OIF9	Key individuals are informed about crisis resources and goals	.696
OIF10	Authorized to use the budget to cope with crisis	.610
OIF11	Culture promotes crisis management	.545
<b>Perceived Likelihood of Crisis (alpha=.666)</b>		
PLC1	Likelihood of a bomb threat	.801
PLC2	Probability of a crisis	.809
PLC3	Likelihood of an information system failure	.712
<b>Commitment to Learning (alpha=.796)</b>		
COMLEARN1	Organizational learning is key to competitive advantage	.703
COMLEARN2	Organization values learning as key to improvement	.833
COMLEARN3	Employee learning is an investment, not an expense	.844
COMLEARN4	Organizational learning is key to organizational survival	.744
<b>Strategy-Innovation (alpha=.793)</b>		
STRATINN1	New product development	.739
STRATINN2	Strict quality control	.799
STRATINN3	Developing and refining existing products	.762
STRATINN4	Innovation in production	.648
STRATINN5	Produce in higher priced markets	.783
<b>Strategy-Cost (alpha=.822)</b>		
STRATCOST1	Pricing below competitors	.835
STRATCOST2	Overriding concern for low costs	.891
STRATCOST3	Produce in lower price market segments	.852
<b>Performance Satisfaction (alpha=.853)</b>		
PERSAT1	Operating profit	.669
PERSAT2	Profit to sales ratio	.767
PERSAT3	Cash flow	.850
PERSAT4	Return on investment	.839
PERSAT5	Return on assets	.833

**Table 3: Factor score correlations**

	Organization's Internal Functionality (OIF)	Perceived Likelihood of a Crisis (PLC)	Commitment to Learning (ComLearn)	Strategy-Innovation (StratInn)	Strategy-Cost (StratCost)	Performance Satisfaction (PERSAT)
<b>OIF</b>	1.00					
<b>PLC</b>	-.316*	1.00				
<b>ComLearn</b>	.376*	-.096	1.00			
<b>StratInn</b>	.337*	-.055	.355*	1.00		
<b>StratCost</b>	.220*	-.113	.177	.322*	1.00	
<b>PERSAT</b>	.374*	-.185*	.337*	.545*	.254*	1.00

**Table 4: Cluster solution**

	Low Crisis Readiness	High Crisis Readiness
<b>High Perceived Likelihood</b>	<i>n</i> =26 OIF = -.504 PLC = 1.328 ComLearn = -.206 Strat-Inn = -.387 Strat-Cost = -.141 PERSAT = -.272	<i>n</i> =22 OIF = .527 PLC = .414 ComLearn = .349 Strat-Inn = .511 Strat-Cost = .084 PERSAT = -.086
<b>Low Perceived Likelihood</b>	<i>n</i> =27 OIF = -1.201 PLC = -.181 ComLearn = -.428 Strat-Inn = -.216 Strat-Cost = -.255 PERSAT = -.296	<i>n</i> =45 OIF = .754 PLC = -.901 ComLearn = .310 Strat-Inn = .116 Strat-Cost = .289 PERSAT = .405

Organizations incur risk and the consequences when crises occur. If a business has not experienced a crisis event or no vulnerability is identified, then planning for it does not tend to be a priority. Management books and the popular press continuously report about and discuss case studies of businesses of all sizes that have failed because of their inability to manage a crisis event. The challenge is to encourage all owner/managers, particularly those in small and medium sized enterprises (SMEs), to employ appropriate crisis management techniques.

Many SME owners and managers do not plan for crisis events because they believe that the probability of such an event is minimal. The "it can't happen to us" mentality can lure an organization into complacency. For managers who are not concerned, the inescapable truth remains; crisis events are part of organizational life. Chastang (2000) notes that many businesses do not begin serious crisis planning until after the catastrophe has occurred, and by then it may be too late. After a crisis occurs, the majority of managers exhibit greater concern for those crisis events going forward.

Managers and business owners need to think seriously about actions that are necessary to avoid a crisis. While there is no panacea for prevention, (1) forming a CMT, (2) knowing how to detect pre-crisis symptoms or conduct a crisis vulnerability analysis (CVA), (3) training everyone to be vigilant, prepared and responsive, and (4) remaining flexible to the changing environments are all important considerations in developed and emerging nations (Coombs and Holladay, 2006; Elsubbaugh, Fildes, and Rose, 2004; Evans and Elphick, 2005).

The first recommendation is to form a CMT. Organizational size and economic development status notwithstanding, an appropriate team can and should be established. The team may consist of the owner and a single employee, but that can be sufficient in small organizations. In larger firms, the team should consist of key representatives of the company such as operations, marketing, and accounting. If the team is new, it may be worthwhile to consult with experts who can provide the team with a framework for operation. This may be done through consultants who can schedule a one- or two-day training session for the core members of the team (Fink, 1986). While the size of the team depends on the particular type of business, it is suggested that it be kept to fewer than ten members (Barton, 1993). In addition, the CMT should meet at least twice a year to develop and refine a crisis management plan that outlines how the organization will respond to crisis events and who will be in charge of managing various aspects of the effort.

The second recommendation involves a CVA, a process of identifying the most significant exposures in the business and prioritizing them to ensure that management is addressing their potentiality. The best way to complete a CVA is to ask questions and be perceptive about warning signs (Caponigro, 1998). This should be an ongoing activity that requires management and employees to be vigilant at all times.

The third recommendation suggests ongoing training of key individuals in the firm. Developing a business culture that includes an appreciation for the possibility that a crisis could occur at any time is crucial. Managers must develop a culture of awareness so that staff can identify crisis symptoms and respond. Concern for crisis is important and must be part of the culture but it must not be so intense that it interrupts daily business. Crisis planning can help prevent such an environment. Offering both formal and informal training to management and employees is an important ingredient in the crisis management equation. The more knowledge an employee has about the warning signs of a potential crisis, the easier it is to identify and address it in a timely fashion. This is why creating a corporate culture that is sensitive to the crisis management concept is so important. It can be much less costly to prevent a problem than to address a full-blown crisis after it occurs.

Finally, the CMT should remain flexible, especially in developing nations like Peru where economic and other challenges may be more pervasive (Parnell et al., 2010). In managing a crisis, the decision makers must not be locked into rigid inflexible plans. Responding to a crisis is a fluid process that requires a similarly fluid decision making approach (Fink, 1986).

## **CONCLUSIONS AND FUTURE RESEARCH**

The present study assessed crisis readiness in Peruvian organizations. Results indicate that a majority of these organizations lack adequate crisis preparation, including crisis management plans. While the study focused the crisis management readiness, other areas also need exploration. First, replications of the study in other emerging nations may identify factors that are common to developing nations. Without such research, the generalizability of these findings to other emerging economies will remain tenuous (Parnell et al., 2010).

Second, there is a need to investigate more closely the appropriate leadership before, during, and after a crisis, particularly in emerging economies like Peru. It can be argued that upbringing, cultural characteristics, business environment, educational processes affect quality of the leadership, and the changes brought about by all of these factors (House, Wright, and Aditya, 1997). Moreover, leadership can affect organizational culture as much as organizational culture affects leadership (Bass, 1990, 1996).

Third, cross-cultural survey refinement is also an important consideration. Although sound research encourages one to maintain methodological consistency, problems invariable exist when constructs and surveys are modified or translated to suit samples in other cultures. Such changes invariably present judgmental decisions that must be made by the researcher. Punnett and Shenkar (1994) warned against interviews, experiments and observational approaches where great religious differences exist between the researcher's home culture and that being studied. In addition, survey research is feasible when any language barriers are overcome, but less reliable when educational differences are also highly pronounced. Further, one's values can influence item interpretation and create response bias.

Following this logic, because many management constructs developed in advanced Western nations may be inappropriate in emerging economies, new constructs may more accurately explain management behavior such as crisis readiness. There is also a need for modified research approaches to compare and contrast practices among widely divergent cultures without forcing one culture into the construct definition appropriate in another. Researchers must seek applications of management concepts so that existing theory can be applied to developing countries while at the same time allowing for substantial theoretical modifications when prevailing models cannot readily explain findings.

Finally, the link between technology and crisis-related decision-making is also important. The increasing influence of technology increases creates both opportunities for more effective crisis management and threats for more serious crisis events. This may be particularly relevant in emerging economies where technology adoption is more sporadic.

## REFERENCES

- Alegria, J. F. 2007. Director of rural water supply and sanitation project for Southern Andes of Peru: Avenue Arequipa N°4458-G, Lima 18, Perú.
- Arpan, L. M. and H. Sun. 2006. The effect of country of origin on judgments of multinational organizations involved in a crisis. *Journal of Promotion Management* 12 (3, 4): 189-214.
- Balamir, M. 2002. Painful steps of progress from crisis planning to contingency planning: Changes for disaster preparedness in Turkey. *Journal of Contingencies and Crisis Management* 10 (1): 39-49.
- Barton, L. 1993. *Crisis in organizations: Managing and communicating in the midst of chaos*. Cincinnati: Southwestern Publishing Company.
- Bass, B. 1990. *Handbook of leadership: A survey of theory and research*. New York: Free Press.

- Bone, C. and A. Stainer. 2005. The unlearning of management: An ethical challenge. *International Journal of Management and Decision Making* 6 (3/4): 244-256.
- Brewton, C. 1987. Managing a crisis: A model for the lodging industry. *Cornell Hotel and Restaurant Quarterly* (November): 10-15.
- Brown, B. 1993. The disaster business. *Management Today* October: 42-48.
- Caponigro, J. 1998. *The crisis counselor: The executive's guide to avoiding, managing, and thriving on crises that occur in all businesses*. Southfield, MI: Barker Business Books, Inc.
- Carlsen, J. C. and J. J. Liburd. 2007. Developing a research agenda for tourism crisis management, market recovery, and communications. *Journal of Travel and Tourism Marketing* 23 (2/3/4): 265-276.
- Cebrzynski, G. 2000. Experts say Pokemon recall unlikely to tarnish Burger King's image. *Nation's Restaurant News* 34 (2): 1, 75.
- Chastang, C. 2000. Regrouping, rebuilding, and remaining: Disaster recovery from a small business perspective. *Contingency Planning and Management* 5 (1): 30-32.
- CIA Factbook. 2009. *The world factbook*. [www.cia.gov/library/publications/the-world-factbook/geos/pe.html](http://www.cia.gov/library/publications/the-world-factbook/geos/pe.html) accessed September 2010.
- Clarke, C. J., and S. Varma, 2004. Strategic risk management: The new competitive edge. *Long Range Planning* 32: 414-476.
- Cohn, R., K. M. Carley, J. R. Harrald, and W. A. Wallace. 2000. Emotions in crisis management: An analysis of the organizational response of two natural disasters. *International Journal of Technology Management* 19: 313-335.
- Colins, F., O. Holzmann, and R. Mendoza, 1997. Strategy, budgeting, and crisis in Latin America. *Accounting, Organizations and Society* 22: 669-689.
- Coombs, W. 2007. *Ongoing crisis communication: Planning, managing, and responding* (2<sup>nd</sup>ed.). Thousand Oaks, CA: Sage.
- Coombs, W. T. and S. J. Holladay. 2006. Unpacking the halo effect: Reputation and crisis management. *Journal of Communication Management* 10 (2): 123-137.
- Crandall, W. R. and M. Meneffee. 1996. Crisis management in the midst of labor strife: Preparing for the worst. *SAM Advanced Management Journal* 61 (1): 11-15.
- Crandall, W. R., J. A. Parnell, and J. E. Spillan. 2010. *Crisis management in the new strategy landscape*. Los Angeles: Sage.
- Crandall, W. R., M. McCartney, and C. Ziemnowicz. 1999. Internal auditors and their perceptions of crisis events. *Internal Auditing* 14 (1): 11-17.
- Economist Intelligence Unit. 2009. *Sustainable investment in emerging markets: Unscathed by the financial crisis*. London: Economist Intelligence Unit.
- El Comercio 2010 (June 22). Por apagón fallece padre de familia. [www.elcomercio.com.pe](http://www.elcomercio.com.pe).
- Elsabbagh, S., R. Fildes, and M. B. Rose. 2004. Preparation for crisis management: A proposed model and empirical evidence. *Journal of Contingencies and Crisis Management* 12 (3): 112-127.
- Evans, N. and S. Elphick. 2005. Models of crisis management: An evaluation of their value for strategic planning in the international travel industry. *International Journal of Tourism Research* 7 (3): 135-150.
- Fearn-Banks, K. 1996. *Crisis communications: A casebook approach*. Mahwah, NJ: Lawrence Erlbaum Associates.

- Fink, S. 1986. Crisis management planning for the inevitable. New York: AMACOM
- Greening, D. and R. Johnson. 1996. Do managers and strategy matter? A study in crisis. *Journal of Management Studies* 33 (1): 25-51.
- Hickman, J. and W. R. Crandall. 1997. Before disaster hits: A multifaceted approach to crisis management. *Business Horizons* 40 (2): 75-79.
- Hildreth, D. 2002. Master your disaster. *Security Management* 46 (6): 76.
- Hofstede, G. 1980. Motivation, leadership and organization: Do American theories apply abroad? *Organizational Dynamics* 9: 42-63.
- Hofstede, G. 1991. *Cultures and organizations: Software of the mind*. London: McGraw-Hill.
- Hofstede, G. 1993. Cultural constraints in management theories. *Academy of Management Executive* 7: 81-94.
- House, R., N. S. Wright, and R. N. Aditya. 1997. Cross-cultural research on organizational leadership. A critical analysis and a proposed theory. In P. C. Early and M. Erez, editors, *New perspectives on international industrial/organizational psychology*. San Francisco, CA: Lexington Press.
- Irvine, R. and D. Millar. 1997. Multiplying the effects: Factors influencing media coverage of business crisis. *Proceedings of the 6th Annual Conference on Crisis Management*, Las Vegas, Nevada.
- King, G. III. 2007. Narcissism and effective crisis management: A review of potential problems and pitfalls. *Journal of Contingencies and Crisis Management* 15 (4): 183-193.
- Kovoor-Misra S. and M. Nathan. 2000. Timing is everything: The optimal time to learn from crises. *Review of Business* 21 (3): 31-36.
- La República. 2009 (September 28). Pobladores de Cocachacra rechazan dar paso a Proeycto Minero Tía María. [www.larepublica.com.pe](http://www.larepublica.com.pe).
- Lalonde, C. 2007a. Crisis management and organizational development: Towards the conception of a learning model in crisis management. *Organization Development Journal* 25 (1): 17-26.
- Lalonde, C. 2007b. The potential contribution of the field of organizational development to crisis management. *Journal of Contingencies and Crisis Management* 15 (2): 95-104.
- Lerbinger, O. 1997. *The crisis manager: Facing risk and responsibility*. Mahwah, NJ: Lawrence Erlbaum Associates.
- London, R., and S. L. Hart. 2004. Reinventing strategies for emerging markets: Beyond the transnational model. *Journal of International Business Studies* 35: 350-370.
- Mahoney, J. T. 1993. Strategic management and determinism: Sustaining the conversation, *Journal of Management Studies* 30 (1): 173-191.
- Mano-Negrin, R., and Z. Sheaffer. 2004. Are women “cooler” than men during crises? Exploring gender differences in perceiving organizational crisis preparedness proneness. *Women in Management Review* 19 (1/2): 109-122.
- Marra, F. 1998. Crisis communication plans: Poor predictors of excellent crisis public relations. *Public Relations Review* 24 (1): 461-474.
- McCartney, M., W. R. Crandall, and C. Ziemnowicz. 1999. Why plan for something bad if it may not happen? (Or- is crisis management stuff just another fad?). *Internal Auditing* 14 (1): 11-17.
- Meyers, G. and Holusha, J. 1986. *When it hits the fan*. Boston: Houghton Mifflin.



- Mines and Communities. 2008. Zippy Info. <http://www/Peru%20Crisis%20Data/Mines%20and%20Communities:%20Peru:%20Eight%20miners%20killed%20following%20safety%20abuses%20in%20Casapalca%20-%20Las%20muertes%20en%20Casapalca.html>, accessed on 10/26/10.
- Mirtoff, I. 2005. Why some companies emerge stronger and better from a crisis: 7 essential lessons for surviving a disaster. New York: AMACOM.
- Mitroff I. and G. Anagnos. 2000. Crisis in crisis management. *Corporate Counsel* 8 (2): 58.
- Mitroff, I. 2001. Crisis leadership. *Executive Excellence* 18: 19-20.
- Mitroff, I., T. Pauchant, and P. Shrivastava. 1989. Crisis, disaster, and catastrophe: Are you ready? *Security Management* (February): 101-108.
- Mitzberg, H. 1990. Strategy formation: Schools of thought. In J. W. Fredrickson, editor, *Perspectives on strategic management*. Philadelphia, PA: Harper Business.
- Mullins, S. 2005. Ethical crisis management. *International Journal of Management and Decision Making* 6: 372-381.
- Newkirk, R. T. 2001. The increasing cost of disasters in developed countries: A challenge to local planning and government. *Journal of Contingencies and Crisis Management* 9 (3): 159-170.
- Ouedraogo, A. 2007. Crisis management and corporate strategy in African firms: Towards a contingency approach. *Journal of Contingencies and Crisis Management* 15 (4): 220-231.
- Parnell, J. A. 2008. Strategy execution in emerging economies. *Management Decision* 46: 1277-1298.
- Parnell, J. A., Lester, D. L., and M. L. Menefee. 2000. Strategy as a response to organizational uncertainty: An alternative perspective on the strategy-performance relationship. *Management Decision* 38: 520-530.
- Parnell, J. A., M. A. Köseoglu, and J. E. Spillan. 2010. Crisis readiness in Turkey and the United States. *Journal of Contingencies and Crisis Management* 18 (2): 108-116.
- Parnell, J. A., N. O'Regan, and A. Ghobadian. 2006. Measuring performance in competitive strategy research. *International Journal of Management and Decision Making* 7: 408-417.
- Parnell, J. A., W. R. Crandall, and M. L. Menefee. 1997. Management perceptions of organizational crises: A cross-cultural study of Egyptian managers. *Journal of the Academy of Strategic and Organizational Leadership* 1 (1): 8-19.
- Pelham, A. M. and D. T. Wilson. 1996. A longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimensions of small-firm performance. *Journal of the Academy of Marketing Science* 24 (1): 27-43.
- Penrose, J. 2000. The role of perception in crisis planning. *Public Relations Review* 26 (2): 155-171.
- Perry, D. C., M. Taylor, and M. L. Doerfel. 2003. Internet-based communication in crisis management. *Management Decision Quarterly* 17: 206-232.
- Pheng, L., D. Ho, and Y. Ann. 1999. Crisis management: A survey of property development firms. *Property Management* 17 (3): 31-51.
- Pines, W. 2000. Myths of crisis management. *Public Relations Quarterly* 45 (3): 15-17.
- Piotrowski, C. 2006. Hurricane Katrina and organization development: Part 1. Implications of chaos theory. *Organization Development* 24 (3): 10-19.

- Podolak, A. 2002. Crisis management teams. *Risk Management* 49 (9): 54-57.
- Pollard, D. and S. Hotho. 2006. Crises, scenarios and the strategic management process. *Management Decision* 44: 721-736.
- Porter, M. 1980. *Competitive strategy*. New York: Free Press.
- Porter, M. 1985. *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Porter, M. 1996. What is strategy? *Harvard Business Review* (November): 2-20.
- Punnett, B. J., and O. Shenkar. 1994. International management research: Toward a contingency approach. *Advances in International Comparative Management* 9: 39-55.
- PWC. 2011. *14th Annual Global CEO Survey*. London: PriceWaterhouseCoopers.
- Quarantelli, E. L. 1988. Disaster crisis management: A summary of research findings. *Journal of Management Studies* 25: 373-385.
- Ralston, D. A., D. H. Holt, R. H. Terpstra, and Y. Kai-Cheng. 2008. The impact of national culture and economic ideology on managerial work values: A study of the United States, Russia, Japan, and China. *Journal of International Business Studies* 39: 8-26.
- Reid, D. M. 2000. Chaos in Korea: Discerning opportunities. *International Journal of Management and Decision Making* 1: 44-67.
- Rigby, D. and B. Bilodeau. 2009. *Management tools and trends 2009*. Boston, MA: Bain and Company.
- Robert, B., and C. Lajtha. 2002. A new approach to crisis management. *Journal of Contingencies and Crisis Management* 10 (4): 181-191.
- Rousaki, B. and P. Alcott. 2007. Exploring the crisis readiness perceptions of hotel managers in the UK. *Tourism and Hospitality Research* 7: 27-38.
- Roux-Dufort, C. 2007. Is crisis management (only) a management of exceptions *Journal of Contingencies and Crisis Management* 15 (2): 105-114.
- Ruiz, I. J. 2008 (April 21). Living in Peru: Lima sewage crisis due to poor water management. *El Comercio*. 16: 30.
- Salazar, M. 2010. El Nino throws a tantrum. <http://ipsnews.net/news.asp?idnews=50448>.
- Schoemaker, P. J. H. 1997. Disciplined imagination: From scenarios to strategic options. *International Studies of Management and Organization* 27 (2): 43-70.
- Seeger, M., T. Sellnow, and R. Ulmer. 1998. Communication, organization, and crisis. *Communication Yearbook* 21: 231-275.
- Sellnow, T. and M. Seeger. 2001. Exploring the boundaries of crisis communication: The case of the 1997 Red River Valley flood. *Communication Studies* 52 (2): 153-167.
- Simpson, D. G. 1992. Key lessons for adopting scenario planning in diversified companies. *Planning Review* 20 (3): 10-22.
- Sklarewitz, N. 1991. Cruise company handles crisis by the book. *Public Relations Journal* (May): 34-36.
- Smith, D. 1990. Beyond contingency planning: Towards a model of crisis management. *Industrial Crisis Quarterly* 4 (4): 263-275.
- Smith, D. and C. Sipika. 1993. Back from the brink—post crisis management. *Long Range Planning* 26 (1): 28-38.

- Spillan, J. E. 2003. An exploratory analysis of a model for evaluating crisis events and managers' concerns in nonprofit organizations. *Journal of Contingencies and Crisis Management* 11 (4): 160-169.
- Terra 2005 (April 21). Indignación por video denigrante para el país en aviones de Lan Perú. *www.terra.com.pe*.
- Tiller, M. 1994. Is your disaster plan effective? *Management Review* (April): 57.
- Ulmer, R. E. 2001. Effective crisis management through established stakeholder relationships. *Management Communication Quarterly* 14: 590-615.
- Veett, N. M. K., A. Ghobadian, and D. Gallear. 2009. *Business-level strategy and performance: Evidence from manufacturing firms*. Paper presented at the Annual Meeting of the Academy of Management, Chicago, IL.
- Wilson, B. G. 1992. *Crisis management: A case study of three American Universities*. Unpublished doctoral dissertation, University of Pittsburg, PA.
- Wnek, R. 2000. Helping employees recover. *Contingency Planning and Management* 5 (4): 26-29.
- Zhang, Y., Z. Zhang, and Z. Liu. 2007. Choice of entry modes in sequential FDI in an emerging economy. *Management Decision* 45: 749-772.
- Zhou, K. Z., D. K. Tse, and J. J. Li. 2006. Organizational changes in emerging economies: Drivers and consequences. *Journal of International Business Studies* 37: 248-263.