Introduction

A significant issue that often arises during a major crisis, such as the severe acute respiratory syndrome (SARS) outbreak in 2003 and September 11 terrorist attack, is the problem of information asymmetry. An information asymmetry exists when one party has more information about a particular state than another party. For example, a used car seller has more information about the quality of the car being sold than a potential used car buyer. In medical insurance, the information asymmetry is between the insured party and the insurance company on the state of the insured party’s health. Similarly, the information asymmetry during the SARS crisis is between the people who are healthy and those that are sick. Furthermore, the problem of information asymmetry can lead to “irrational” behaviors and disruptions in business and economic activities. At the very extreme, asymmetric information problems can also result in a complete breakdown of markets.1

Hence, a key component of crisis management involves the management of asymmetric information problems. However, the nature and seriousness of these problems are often not well understood and addressed in crisis management. Drawing on the experience of the recent SARS epidemic, we examine in this article the nature of the asymmetric information problems that typically prevail during a crisis, the costs associated with it, and the various mechanisms to address the problems. We find that the asymmetric information problems in the event of a crisis can be severe and potentially costly if the problems are not adequately resolved. © 2009 Wiley Periodicals, Inc.
The remainder of this article is organized as follows: the second section provides details about the SARS crisis, while the third section discusses the asymmetric information problems during a crisis. The fourth section examines the costs associated with the asymmetric information problems, and the fifth section provides several solutions to the asymmetric information problems. The sixth section examines the relevance of asymmetric information problems in business crisis management. The seventh section concludes the article.

The SARS Epidemic

On November 16, 2002, Chinese officials reported the first known case of a pneumonia-like disease later known as SARS, or severe acute respiratory syndrome, when a businessman from the southern town of Foshan contracted the disease and infected hospital workers in Guangdong province. Further revelation of the disease appeared on February 11, 2003, when Guangdong authorities reported that between November 16, 2002, and February 9, 2003, five out of 305 people that contracted atypical pneumonia in the province died. On February 22, 2003, a 64-year-old medical doctor from Guangdong province was admitted to a Hong Kong hospital after falling ill while staying at the Metropole Hotel. He died on March 4, but not before infecting guests at the hotel, who then went on and transmitted the disease in Canada, Vietnam, and Singapore. On March 12, 2003, the World Health Organization (WHO) issued a global alert following the spread of the disease and three days later declared SARS a “worldwide health threat.”

At the height of the SARS outbreak in 2003, the following excerpt was reported in the Richmond Times-Dispatch (April 17, 2003) on the SARS situation in Toronto:

“People treat us like monsters. They say we eat like rats and live like pigs,” the daughter of the woman who contracted the disease in the Hong Kong hotel told one newspaper. The daughter recovered from the disease, but she lost her mother and brother to SARS. “Even though I’ve recovered, people are still scared of me,” she told CBC Radio. “They don’t want to see me face to face.” Her car dealer didn’t want to see her until a month after her lease was up. The funeral home that cremated her brother didn’t want to let her husband in, even though he never came down with SARS. . . . Public-health officials have been forced to say repeatedly that SARS is not an ‘ethnic disease’.25

The Times (April 15, 2003) reported that in Singapore:

fear quickly engulfed the former British colony. Many of the 800,000 expats, particularly those with children, fled to their native countries to sit out the crisis as far away from the island as possible . . . . Nobody shakes hands any more and we wash our hands frequently. . . . Some taxi firms are prepared to take passengers to the airport but will not pick up arrivals. Those that do are disinfecting their cabs several times a day . . . the presence of SARS cases is affecting the psychology of the people, affecting the economy and the society.26

CNN’s Jason Carroll (April 19, 2003) reported that in New York City’s Chinatown, “Businesses here are taking a major hit. Business owners [are] telling us that their customers are telling them that they’re simply too afraid to come down to the area because of fear of SARS.”27 The Hamilton Spectator (May 7, 2003) reported that in China: “There is no proof that dogs and cats can spread SARS, but . . . people are still throwing their pets out and abandoning them . . . . Or worse, in a well-publicized case, a Beijing man threw his Pekinese out the sixth-story window of his building but failed to kill it, so he walked downstairs and buried the dog alive.”28

SARS Is an Asymmetric Information Problem

Are such behaviors during the SARS epidemic irrational? No, it is actually perfectly rational from an economics viewpoint. SARS, apart from being a medical issue, is an asymmetric information problem. The problem of asymmetric information can be traced to the Nobel Prize–winning article by George Akerlof in 1970 on the “lemons” problem in markets where information asymmetry exists between the sellers and buyers of a certain product.6 In a used car market, for example, buyers have less information than sellers about the quality of the cars being sold and, hence, are willing to pay only an average price for it. In the presence of asymmetric information, good cars and bad cars are lumped together and sold at the same price. This creates an adverse selection problem because the average price offered is likely to be more attractive to sellers of bad cars than to sellers of good cars. Consequently, more bad cars (lemons) will be offered for sale than good cars.

Rational car buyers would anticipate this adverse selection problem and expect that at any given price, they are more likely to get a lemon than a good car. The buyers, therefore, would be less willing to pay and demand a deep discount on the car. Sellers of a good car would eventually withdraw from the market because not only can
he not receive the true value for his car, but he cannot even get an average value for it. Unless the asymmetric information problem is resolved, the above process may lead to a complete breakdown of the market, because the bad cars will eventually drive out the good cars in the same way bad money drives out the good.

The problem of asymmetric information is also largely prevalent during the SARS epidemic. The information asymmetry during the SARS crisis is between the healthy individuals and those who are sick. Because of well-publicized information regarding the symptoms of the disease, sick individuals are in a better position to determine if they are afflicted with the disease or not. Healthy individuals, however, simply cannot distinguish if the other person that they come into contact with in public has or does not have SARS during the epidemic. Also, in comparison to the government and public health authorities, the general public is less informed because of the lack of access to aggregate-wide information about the incidence as well as the severity of the epidemic. Information asymmetry can also arise when the authorities have advance knowledge on the extent of the crisis or when there are substantial delays in the dissemination of information to the public. Furthermore, the information asymmetry between the general public and the authorities is even more acute when the information provided by the authorities is not credible. Some authorities, for example, may not reveal the true extent of the crisis if their objective is to cover up and hide the bad news from the public.

Hence, because of the presence of asymmetric information, one is likely to assume the worst and lump everyone together as potential carriers of SARS, just as in the case of the lemons problem. Not knowing whether the other person has SARS or not, people thus appear to behave “irrationally” (i.e., they stop shaking hands with others, avoid going to Chinatown and densely populated areas, take flight from SARS-affected countries, cancel their travel plans, become suspicious of others, and throw out their pets in some instances).

**Asymmetric Information Problems if Unresolved Can Be Costly**

It is generally difficult to put an exact figure on costs associated with asymmetric information problems during crisis periods, but anecdotal evidence indicates that such costs can be very substantial. And, in comparison to the medical costs, the asymmetric information costs associated with an infectious disease epidemic, such as SARS, are likely to be many times higher. For example, because of the problem of asymmetric information, the *Richmond Times-Dispatch* (April 17, 2003) reported in Toronto that: “The mall was quiet not because of shoppers who have SARS, but because people are so afraid of catching it. Business in Toronto’s various Chinese neighborhoods has plummeted by up to 70 percent.” America’s top cancer researchers canceled their annual meeting in Toronto because of the fear that they might contract the disease and spread the virus to sick people when they returned. SARS is also estimated to have scared away one-fifth of Toronto’s billion-dollar film, television, and commercial business and cost the film industry CAD $163 million.8

The asymmetric information problems also caused people to cancel their travel plans. Thus, tourism-related businesses suffered during the SARS epidemic. Air Canada, for example, is estimated to have shed CAD $5 million a day during the SARS outbreak in Toronto.9 Cathay Pacific Airways reported a loss of HK $1.241 billion in 2003 as the SARS epidemic emptied planes and forced the airline to cut more than half its flights.10 The Beijing Capital International Airport, moreover, reported a 22.5% drop in 2003 net profit.11 According to Chinese authorities, the estimated losses in Beijing’s tourism sector ranged from U.S. $1.9 billion to U.S. $4.8 billion due to the outbreak of SARS.12 Hong Kong authorities estimated that losses in the retail sector, airlines, hotels, and restaurant industries ranged from HK $33 billion to HK $46 billion.13
According to Asian Development Bank (ADB) chief economist Ifzal Ali, “when SARS hits an economy, it causes uncertainty generated by fear and this has direct and indirect effects like a loss of consumer confidence; tourism suffers, investment drops and government revenue also drops.” An ADB 2003 report estimated that the SARS epidemic could have cost Asia as much as U.S. $28 billion in loss economic output. Australian economists, moreover, estimated that the SARS epidemic could have cost the world’s economy between U.S. $40 billion and U.S. $140 billion.

How Does One Deal With Asymmetric Information Problems? SARS Crisis Offers Some Useful Lessons

One probably cannot avoid the costs associated with asymmetric information problems entirely, but there are ways to minimize such costs. In the sections that follow, we provide a detailed discussion of the various methods on mitigating asymmetric information problems associated with an infectious disease epidemic such as SARS. A summary of different methods of dealing with asymmetric information problems during a crisis is given in Table 1.

Separating the Good From the Bad

One approach that can be used to resolve the asymmetric information problem is to separate the good from the bad, such as in the case of the “egg-grader,” where eggs of different grades are first sorted and labeled before sold to the public. Similarly, being able to isolate the sick individuals from the healthy ones during the SARS epidemic not only helped in preventing the disease from spreading further, but also helped to prevent mass hysteria arising from asymmetric information about who among the population had SARS and who did not.

Once the symptoms of SARS were identified, such as high fever, runny nose, dry cough, and breathlessness, many countries tried to isolate those infected by the disease from those who were not. A good example of the isolation measures adopted during the SARS epidemic is in the case of Singapore, where anyone suspected of having SARS was immediately quarantined for ten days. The suspected person then had to answer twice-daily telephone calls, which checked on his/her condition. Electronic wrist tags were used to closely monitor individuals who did not answer the twice-daily telephone calls. The penalty for violating a quarantine order was a heavy fine and, in certain instances, could include a jail term. Singapore, in addition, had effectively used contact tracing to track those who had come into contact with the infected persons. This is an important process to ensure that those who were infected or could be potential carriers of the disease were quickly attended to and isolated from the rest of the population.

SARS screening is also an important tool in preventing potential SARS carriers from entering the country and infecting the local population. Together with thermal scanners, which are installed at the international airport and other ports of entry, nurses and military medics vigilantly screened arriving passengers for anyone who is unwell and shows any symptoms of the disease, such as a high fever. At the peak of the epidemic, Singapore also required visitors from SARS-infected areas, such as parts of China, Hong Kong, and Vietnam, to undergo a mandatory ten-day quarantine.

Information Disclosure

“Tell the truth and tell it fast” –Norman Augustine. In any crisis, the provision of accurate, timely, and transparent information on the nature and extent of the problem is important in containing the crisis and reducing fears and uncertainty arising from information asymmetries. Any under-disclosure of information would result in second-guessing and panic among the general population. Incomplete and nontruthful disclosures would also

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**TABLE 1** Seven Methods on Mitigating Asymmetric Information Problems During a Crisis

| Method                        | Description                                                                 |
|-------------------------------|------------------------------------------------------------------------------|
| 1. Separating the good from the bad: | Screen and isolate the infected individuals from the rest of the population. |
| 2. Information disclosure:    | Provide accurate, timely, and transparent information.                       |
| 3. Reputation and trust:      | Establish confidence and trust—a good reputation provides credibility.       |
| 4. Certification:             | Obtain certification by an independent and credible third party.             |
| 5. Signaling:                 | “Put your money where your mouth is.”                                       |
| 6. Warranty and guarantee:    | Provide assurances to individuals.                                          |
| 7. Restoring normalcy:        | Get the customers to come back after the dust has settled.                  |
create distrusts and result in a loss of reputation when the real information is eventually revealed.

Despite the importance of information disclosures in resolving asymmetric information problems, the SARS crisis shows that the disclosures of information were handled differently in a number of countries. Singapore, for example, was commended for its quick and transparent approach in dealing with the crisis. China, on the other hand, came under heavy international criticisms for its delayed response and secrecy in dealing with the epidemic. In Taiwan, cover-up and misdiagnosis of SARS at some hospitals, such as the Taipei municipal Hoping Hospital, are blamed for aggravating the spread of SARS in the country.

There could be a host of reasons on why some countries did not provide quick and full disclosure of information about the SARS epidemic. China, for example, blamed its inadequate Chinese public health network for the initial under-reporting of the true scale of China’s outbreak. The lack of “psychological safety net” in reporting and whistleblowing also discourages quick and truthful reporting. Hospital officials, for example, may either cover up or underreport because of the fear of losing their jobs and reprisals from the authorities. Finally, some countries might under-disclose the seriousness of the problem because of the concerns that full disclosures would have a negative impact on the country’s trade and tourism.

Reputation and Trust

Reputation is an important mechanism in resolving asymmetric information problems as well. In the presence of information asymmetries, individuals often rely on the reputation of the other party when making investment decisions, product choices, and career decisions. An individual’s reputation provides information about his/her trustworthiness, quality of products and services, and prospects. Good reputation helps to mitigate asymmetric information problems and allows firms to charge premium prices on its product, attract better employees, and built investor confidence.

In managing any crisis, confidence and trust need to be established quickly. A good reputation, therefore, gives credibility to the individual or institution that provides the solutions as well as the information disclosed. During the SARS epidemic, the public is more likely to trust someone with a good reputation than one with a poor reputation. The lack of trust and confidence, in fact, generates paranoia and can thus exacerbate the information asymmetry problem during a crisis. As a consequence, tourists are more likely to avoid countries with a poor reputation of handling the epidemic than countries with a good reputation. A good reputation, moreover, feeds upon itself. Singapore’s effective management of the SARS crisis, for example, has earned kudos, trust, and a tough reputation that would go a long way in dealing with any future crisis.

Certification

Information asymmetries in the used car market can be mitigated if we allow third-party mechanics to examine and certify the quality of the used cars. Credit rating agencies, similarly, play an important third-party certification role in resolving information asymmetries about a firm’s credit quality. During the SARS epidemic, the Geneva-based World Health Organization assumed the role of an independent and credible party in providing accurate and timely information as well as issuing health advisory warnings for the global community. Based on its own field studies and research, and interactions with the respective governments, they provide an authoritative voice in an otherwise asymmetric information-filled environment. When the SARS outbreak was at its peak, the world often relied on WHO’s advisories to navigate their daily operations.

Just as WHO can issue advisory warnings, the organization also issues commendations on the efforts of governments in containing the spread of SARS. WHO has praised the governments of Thailand and Malaysia for their efforts to help contain the spread of the deadly SARS virus. Likewise, WHO also applauded Singapore’s government and its public health officials for the openness with which they have responded to SARS and the rapid precautions taken to manage the SARS situation in the country. The follow-on certification by WHO that Singapore is SARS-free is an important and clear indication to the global community that this health issue was no longer a threat to any visitors or inhabitants in the country.

Signaling

“Put your money where your mouth is.” In finance literature, signaling is a mechanism that firms can use to mitigate asymmetric information problems. For example, owners of good firms can signal the firm’s value as well as future performances to the public by retaining a high proportion of the firm’s equity. This signal is costly and difficult to imitate by owners of bad firms because it prevents the owners from holding a completely diversified portfolio and exposes the owners to firm-specific risk.

Signaling, similarly, can be used to mitigate asymmetric information problems during any crisis. For example,
To prevent any market failures due to information asymmetry, both the government and businesses have to work hand in hand to signal and instill the sense of confidence that daily operations can continue despite the crisis.

Warranties and Guarantees

In product markets, the sellers can provide warranties, guarantees, and refunds to resolve quality uncertainties over their products. In a used car market, for example, the sellers of good cars can get a better sale price if they provide some form of warranty and guarantee on the quality of their cars. Warranties and guarantees are similar to product insurance, which compensates the buyers when problems arise with the products they purchase. In the credit market, a loan guarantor compensates the bank in the event that the borrower defaults on the loan.

During a crisis, warranties or guarantees can serve, to a certain extent, as a form of assurance to individuals when confronted by asymmetric information situations. For example, confident that its preventive measures were of such high standards, Thai Airways promised to pay U.S. $100,000 to any passenger who became infected with SARS while flying on the national carrier. In another bid to remove anxiety and rumors over SARS, the Thai government promised to pay U.S. $100,000 to the families of anyone who contracted SARS locally and died from the viral disease. However, such warranties would be meaningless if the task of proving that one had contracted the disease on the flight or in Thailand is extremely contentious.

Restoring Normalcy—Getting the Customers to Come Back After the Dust Has Settled

Even when the crisis is finally over, there will still be some lingering doubts and information asymmetries. Vital to rebuilding in the aftermath of a crisis is the need to restore a sense of normalcy as quickly as possible. One of the ways to remove lingering information asymmetries is to tackle the issue from ground zero. For example, many SARS-affected countries immediately launched major campaigns to invite visitors back to their countries after they are certified SARS-free. Promotions such as free...
tours; huge discounts on shopping, airfares, and hotel accommodations; attractive lucky draws and prizes; and discounted medical checkups at hospitals were aggressively marketed to get the customers to come back. Business conferences, seminars, and trade fairs were also held to draw back international visitors as well as locals who had stayed away from meeting people or visiting the towns during the crisis.

The important thing is that when visitors come on these attractive packages to see for themselves that businesses in these countries are up and running as usual, they return home to spread good words and provide on-the-ground information to others who may be second-guessing or doubting if the crisis situation in the SARS-affected countries is really over. By word of mouth and well-publicized media events, any lingering information asymmetries can thus be quickly eliminated within the local and international community.

### Application to Business Crisis Management

Crisis in business are inevitable. Every organization runs the risk of encountering some situations that, if they are not managed appropriately, may cause damage to the organization. Today’s successful organizations are characterized by the ability to adapt effectively to the challenges posed by their environment. In this article, we provide a common framework for understanding and dealing with potentially costly problems arising from information asymmetry during a crisis. Asymmetric information problems are not only prevalent during a major health crisis, but are applicable during a business crisis as well. Such problems, however, are often not well understood in business crisis management. There are many instances where businesses have suffered because of the lack of understanding and failure to deal with asymmetric information problems during a crisis.

For example, Mackenzie reported that a German direct mail company that takes telephone orders for computer accessories faced a business crisis when one of its three warehouses caught fire on December 23, 1988.18 Taking advantage of the two weeks of breathing space provided by the Christmas holiday season, the company reorganized so that it could deliver from its other warehouses. Subsequently, the company was able to reopen in time for business on January 3, but no one called. This happened because of the information asymmetry that arises during the crisis. There had been widespread media coverage of the warehouse fire and, hence, all its customers had placed their orders elsewhere because they did not think that the company would be able to recover in time to service them.

In this case, the company was too preoccupied with the logistical aspect of disaster recovery and failed to recognize the importance of dealing with asymmetric information problems. The company failed to disclose and convey to the public its reorganization efforts and that it would be able to reopen in time for business. The various methods outlined in the previous section provide some guidance on what the German company should have done to successfully deal with the above asymmetric information problems. First, while the company was handling its disaster recovery, it should have reached out to assure its customers that it would be able to reopen in time for business by constantly providing accurate, timely, and transparent disclosure of information about its recovery efforts and ability to deliver on time. Second, the company should have provided further assurances to its customers by issuing warranties and guarantees on its ability to deliver on time. For example, the company could compensate its customers for any losses and inconveniences that result from its failure to deliver on time. Finally, to restore normalcy, the company should have engaged in a major promotional campaign to “get the customers to come back after the dust has settled” by offering substantial discounts, free gifts, and/or lucky draws.

In another example, the United Way became embroiled in a major crisis in 1992 when news broke that William Aramony, the United Way of America’s president at that time, had expropriated organization funds to finance an extravagant and lurid lifestyle. The local United Way offices were immediately besieged with calls to cancel donation pledges. The asymmetric information problem that local United Way offices encountered was that contributors were upset that their money was inappropriately used for the private benefit of Aramony. In reality, however, less than 1% of the monies raised by the local United Way offices actually goes to the United Way of America. The local United Way offices responded by distancing themselves from the United Way of America. They did so by withholding dues and getting word out through mailings, newspaper ads, and local media that the local offices are independent entities that are run by community volunteers who set policies and determine the distribution of funds to agencies and charities in their communities.

However, the actions undertaken by the local United Way offices were not sufficient in dealing with the problem of information asymmetry. Many months later, people were still concerned about where their donations were going. The lingering asymmetric information problems affected the local offices’ annual fall fund raising nega-
tively. Voluntary direct withholding contributions from employees’ paychecks, which traditionally accounted for nearly all the gifts, dropped to 55% of total funds raised. According to Chris Salerno, the director of marketing and communications for the United Way of Henderson County, “We never did feel we had overcome the problem. We couldn’t seem to impress upon people that we are not part of the United Way of America. It tarnished the image. We expect that we’ll be dealing with it a few more years.” The United Way crisis shows that the severity and persistence of asymmetric information problems are often not well understood and, hence, inadequately resolved during a crisis.

The local United Way offices had not distinctly separated themselves from the United Way of America (separating the good from the bad) and, hence, were unable to resolve their crisis adequately. They also did not manage to fully restore their “reputation and trust” among the public because the people were still concerned about where their donations were going. To establish confidence and trust, the local United Way offices should have credibly “signaled” to the public by committing the donated funds to a trust account that is managed by an independent reputable third party and earmarked to be used for charitable purposes only. Another credible signal would be to get a high-profile and reputable individual to openly donate to the charitable organization. Overall, the “certification” provided by independent and credible third parties would have been important in assuring the public on the proper usage of donated funds and, therefore, in building “reputation and trust.”

Although each crisis is unique from the causal point of view, the problem of information asymmetry during a business crisis is common to all. Also, the need to deal with asymmetric information problems is applicable to all the four different and distinct stages of a business crisis: prodromal, acute, chronic, and crisis resolution. During the prodromal crisis stage, a firm should not only focus on crisis prevention plans. Even the best preventive plans may not help, because a crisis can develop suddenly and the circumstances surrounding the crisis may be beyond the control of the organization and driven by the external environment. At this stage, firms should also prepare to manage a potential crisis. Proactive planning requires a firm to lay the foundation to deal with potential asymmetric information problems that arise during a crisis. As pointed out in the previous section, reputation is an important tool in mitigating asymmetric information problems during a crisis. However, a good reputation takes time to develop and cannot be built overnight. Thus, firms must take concrete steps during the prodromal crisis stage to establish credibility and trust with the public. Firms that have established a good reputation prior to a crisis will find it easier to deal with asymmetric information problems during a crisis.

The acute crisis stage sets in with the onset of the crisis, which can happen suddenly. At this stage, firms must immediately deal with the asymmetric information problems that arise during a crisis. To do so, as suggested in the previous section, firms should “separate the good from the bad” and provide accurate, timely, and transparent disclosure of information. Self-denial and any attempts to cover up the crisis would only further contribute and aggravate the asymmetric information problems. For example, USAir, which experienced five crashes between 1989 and 1994, resolutely maintained that the crashes were unrelated and not part of a larger problem. A month after the Pittsburgh crash, however, the New York Times published a front-page investigative report that detailed USAir’s history of preflight safety violations, inadequate training programs, and poor management oversights. The whole incident affected USAir’s credibility, created mistrusts, and further contributed to the information asymmetry problem about the safety of USAir’s planes. USAir’s debacle in this case is attributable to its failure to provide accurate, timely, and transparent “information disclosure” to the public. In contrast, Johnson & Johnson overcame the asymmetric information problem about the quality and safety of its products during the 1983 cyanide-laced Tylenol crisis by being honest in its communication. The firm also acted quickly to separate the bad products from the rest of the good products by repurchasing millions of capsules from stores and customers and redesigning its packaging to enhance safety and protection. Through its concerted efforts to “separate the good from the bad” and to provide accurate “information disclosures” to the public, Johnson & Johnson was able to quickly re-establish confidence and trust in its brand and, hence, preserve its reputation successfully.

The chronic crisis stage refers to the lasting effects of the crisis. Even after the crisis has occurred, the effects of the crisis may still linger on. As previously discussed, the asymmetric information problems associated with the United Way crisis can be very persistent and linger on even after the crisis event itself. The chronic crisis stage is sometimes called the clean-up phase of a crisis situation. To mitigate asymmetric information problems at this
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stage, one may resort to the use of “certification,” “signaling,” and “warranties and guarantees.” For example, in the case of a product contamination or tampering crisis, once the crisis is under control, the organization can reassure the public about the quality of its product by getting a credible regulatory agency to certify that its products are safe. In addition, the CEO of the organization can publicly consume the products himself/herself to “signal” to the public that its products are safe. At this stage, warranties or guarantees can also serve, to a certain extent, as a form of assurance to individuals about the product quality.

The crisis resolution stage is when the organization comes back to normalcy and resumes full functionality. As discussed previously, there is a need to “restore normalcy” and get the customers to come back even after the dust has settled. For example, the SARS epidemic was an exceptional crisis for hotels in Singapore even as they advanced to near normalcy. Even after Singapore was declared SARS-free by WHO and travel warnings were downgraded, worries persisted that the virus might return. In response, the hotels in Singapore redefined their business strategies and devised promotional packages that target the local residents to holiday in their own country. Some hotels also engaged in advertising campaigns and collaborated with airlines, travel agencies, and the Singapore Tourism Board in assorted promotional campaigns to attract more tourists. Through these efforts, the hotels in Singapore were able to reassure customers, build confidence, and fully restore a sense of normalcy.

Finally, “information disclosure” remains an important tool in dealing with asymmetric information problems even when normalcy returns. The organization must continue its ongoing relationship and communication with the media, government regulators, the financial community, customers, suppliers, shareholders, and employees to prevent any misperception or misinterpretation of information.

Conclusion

Effective management of asymmetric information problems is critical during periods of crisis. The SARS epidemic provides a good illustration of the asymmetric information problems that typically prevail during a crisis and how one can deal with it. Asymmetric information problems also arose during the September 11 incidents, but the effects tended to be less significant. The information asymmetry costs associated with the SARS epidemic in comparison are substantial, but limited by the fact that SARS affected mostly Canada and the Asia-Pacific region. In the event of a worldwide avian flu pandemic, however, the asymmetric information problems associated with it are likely to be more severe, and the potential costs are probably many times higher if asymmetric information problems during the crisis are not adequately resolved.

Overall, the case study that we present in this article is a useful guide for policy decision makers and crisis management teams when dealing with asymmetric information problems during a major crisis. Although the case study is related to a major health crisis, the issues addressed in this article are also relevant to business leaders and managers during a major business crisis such as the Johnson & Johnson cyanide-laced Tylenol crisis in 1983, the United Way crisis in 1992, USAir’s series of airline crashes between 1989 and 1994, and GlaxoSmithKline’s 2007 scandal involving misleading vitamin C claims in its Ribena drink.
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