

# The Six Mistakes Executives Make in Risk Management



*"Black Swan" events are all but impossible to predict. What should you do to protect your company?*

by Richard MacLean

This article was inspired by a recent piece with the same title in the *Harvard Business Review*.<sup>1</sup> While the authors structured their message to reach executives facing a broad range of business risks, it is particularly relevant to environmental professionals for two reasons.

First, preparing for low-probability, high-impact events—so-called "Black Swan" events—requires the same type of strategic thinking regardless of the nature of the potential risks.

Second, one of the greatest challenges for environmental managers is to secure the resources required to address crucial issues. Black Swan events are among the most difficult of all, since they do not present an immediate, obvious threat. The risks are sometimes esoteric or technical in nature and thus difficult for managers to grasp and place in perspective with competing business needs. It is also easy to be dismissed as an alarmist if the warnings are delivered in extreme terms.

The *Harvard Business Review* article provides an insight into business management's thinking.

## Environmental Black Swans

Management has become accustomed to believing that if the operations are in compliance with environmental regulations, especially if the facilities are concurrently ISO 14001-certified, they will not be at risk. Employee and process safety issues are another matter; there has been a continuing string of high-profile events that have made business managers aware that the mantra "safety first" is essential. But for the most part, environmental eruptions today are thought to be the result of rogue employees, companies, or even local authorities not following the rules.

The recent series of environmental issues in China

is a case study in local regulators bending or not enforcing the rules in order to boost productivity, resulting in international embarrassment and loss of reputation. Closer to home, DuPont's 2005 fine for failing to report to the U.S. Environmental Protection Agency risk information about a chemical used in the manufacture of fluoropolymers grabbed the headlines. But even this event can be rationalized away by business managers as a dispute over regulatory interpretation.

What are the significant environmental events that fall outside the realm of the regulations? I would argue that the future of all Black Swans will be unrelated to current regulations.

Regulations are established to control defined and predictable issues. For example, indiscriminate land disposal pre-Superfund was a Black Swan. Asbestos, chlorofluorocarbons (CFCs), and polychlorinated biphenyls (PCBs) were other obvious examples of miracle materials that went horribly wrong for the companies that used them in their products. Concern over global warming will inevitably lead to future Black Swan events. Back in the 1970s, the issue was completely out of the public eye and only beginning to enter the scientific and policy arena. That was the ideal time to begin a strategic, long-term strategy. In the 1990s, access to reliable water resources was a strategic issue and some companies competitively positioned themselves. Today, control of potable and irrigation water will be the source of not just business failures, but failed societies.

We are entering a fourth environmental wave based on control over both easily extractable natural resources and the rights to exotic new materials such as nanoparticles and bioengineered substances.<sup>2</sup> What will be the long-term health and environmental concerns? What new regulations will they arouse? Will wars be waged over limited

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resources? What will be the impact on famine in developing countries? It will be these major dynamics with environmental issues at their nucleus that will generate the future Black Swans for industry (and nations).

What might be the six mistakes that executives (and environmental professionals) make in managing these risks? To gain insight, let's examine the following six areas directly taken from the *Harvard Business Review* article:

### 1. We think we can manage risk by predicting extreme events.

By concentrating on a few extreme scenarios, other possibilities are ignored. Today, many business managers are obsessed with issues such as the impact of global warming and how it may spawn new regulations regarding energy consumption, regulatory permits, and fuel prices. However, there may be scores of other, unanticipated issues with as great, if not greater, impact on these same businesses. Management should instead focus on the broad consequences of resource and energy regulation and scarcity. The best defense may be long-term manufacturing and product design practices that are based on rigorous life cycle assessments. The best defense may be a policy of "getting one's sustainability act together" in the broadest sense rather than just focusing on say, the possibility of cap-and-trade regulations.

### 2. We are convinced that studying the past will help manage risk.

The past can be a good predictor of the future if, and only if, the threats are formed via identical scenarios. The previous example of Chinese regulatory noncompliance is a case in point. As the country moved from an agricultural society to a highly concentrated industrial development, it engaged in essentially identical waste disposal and uncontrolled emissions practices as those engaged in by developed nations decades ago. The environmental results were the same. In retrospect, the situation was so obvious that today we wonder, "What were they thinking?"

But "Black Swan events don't have precedents."<sup>1</sup> There are no longer typical scenarios for failure. There can be warning signs, however, and these early indicators are almost always ambiguous. The tragedy of 9/11 was unprecedented in its scope,

but it was preceded by the 1993 World Trade Center bombing. The broad threat was terrorism, but the links and magnitude of the threat escaped nearly everyone.

We currently are awash in early warning indicators of future Black Swan events, but few are systematically scanning the landscape for these signs; the attention is on fighting the crisis du jour.

### 3. We don't listen to advice about what we shouldn't do.

There is an inherent negativity about risk management. Risk managers, like lawyers, are isolated in departments that tell managers what they should not do to avoid business value loss. Compare this to marketing managers who tell executives what they can do to boost profits. Witness what has happened to the financial industry because it ignored the most basic of financial don'ts, all in lockstep pursuit of irrational exuberance over profits. Yet, preventing or preparing for a Black Swan event can have as much, if not more, of a positive impact on the company than a new product line.

The flip side of profit destruction is profit generation. Business managers who see risk management as another profit generation activity are more likely to act on advice that may someday avoid a profit-wrecking event.

### 4. We assume that risks can be measured by standard deviation.

Business managers have a certain tolerance for risk, generally much higher than that exercised by environmental professionals. As stated earlier, regulatory noncompliance is generally not a Black Swan event. Responsible business managers recognize that they cannot game compliance without risking personal liability. But when it comes to other issues they can be surprisingly risk tolerant. It is as if there is a mental process in play that assigns probabilities to these fuzzy, uncertain issues.

The problem, of course, is that Black Swan events do not necessarily follow the predictability of the bell-shaped curve. Some managers may demand proof and numerical certainty from environmental professionals, but of course, this rarely can be offered. If business managers rationalize away environmental risks as unquantifiable and thus not worthy of attention, they are inviting disaster.



The more positive the spin is that is placed on a scenario, the more likely people are willing to accept the risk.

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## 5. We don't appreciate that what's mathematically equivalent isn't psychologically so.

Psychologists have extensively studied the effects of how identical scenarios, if presented differently, can produce dissimilar responses in terms of risk tolerance. In essence, the more positive the spin is that is placed on a scenario, the more likely people are willing to accept the risk. Environmental professionals must be acutely aware of this principle when presenting risk information to business managers. The extremes are just as problematic: glossing over an issue or crying, "The sky is falling," can yield inappropriate results. A balanced and thoughtful approach must be formulated.

## 6. We are taught that efficiency and maximizing shareholder value don't tolerate redundancy.

The most highly leveraged companies during past upswings made the most money; that is until the

market clasped. Business managers lionize "lean" and "just-in-time" operations. Redundancy is waste in the minds of some managers. But in the risk management world, a Plan B can be critical. Having alternative suppliers, performing frequent governance audits, and establishing backup emergency plans can mean the difference between success and failure.

It is essential that environmental managers recognize these business management biases and consider their implications when preparing risk management strategies. The technically perfect strategy can go nowhere unless it also accounts for how managers manage business risk. **em**

## References

1. Taleb, N.; Goldstein, D.; Spitznagle, M. The Six Mistakes Executives Make in Risk Management; *Harvard Business Review*, October 2009, 78-81.
2. MacLean, R. Entering the Fourth Environmental Wave—An Examination of the Emerging Environmental Dynamics Facing Organizations; *Environmental Quality Management*, Autumn 2009, 97-104.

