

## Information Technology

### CHANGING THE FUTURE OF RISK MANAGEMENT

By Bruce Kaechele

**Over the last five years, KPMG estimates that risk managers have invested more than \$8.4 billion on technology solutions designed to measure, monitor and mitigate risk.** Not surprisingly, almost all of that was spent in the private sector to meet the demands of the 2002 Sarbanes-Oxley Act. While risk managers in the public sector have been slow to embrace these solutions, their private sector counterparts did not exactly welcome them either. In fact, spending on risk management applications in 2004 was 10 times higher than it was in 2003 as corporations attempted to comply with the legislation nearly two years later.

Despite the delay in spending, private sector investments have produced many cost-effective and targeted risk management solutions—all of which are making their way to the public sector and redefining the way that risk managers approach their jobs.

#### TECHNOLOGY—ACCELERATING CHANGE

Every individual—from the most senior government worker to a student in high school—is impacted by technology. Its effects cannot and should not, be avoided. Technology creates change. This change, good or bad, is unavoidable and astute managers develop a technology vision to oversee its implementation and drive organizational benefits. To illustrate this, there is no better example than the mobile phone industry—an industry that is less than 25 years old and driven by continuous technological innovation.

In 1973, Motorola introduced DynaTAC, the first consumer cell phone. Unfortunately, with a cost of \$3,995 (over \$8,000 in today's currency), 30 minutes of talk time and a 10-hour recharge cycle, the birth of the cellular phone era was

ushered in with barely a whimper. It took almost 20 years for the second generation, G2, to replace the original cellular platform. This new platform made mobile phones smaller, less expensive and easier to use. In 1984, approximately 92,000 annual subscriptions for cellular service were sold in the U.S. and by 1992, there were roughly 11 million cell phone subscribers. In three years, that number more than tripled to nearly 34 million and two years later, there were more than 55 million active mobile phone users in the U.S. and 214 million worldwide. Motorola introduced the RAZR in 2004 and more than 120 million units were sold in less than three years. At this point, technology was just beginning to change the habits of Americans. While it took more than 20 years to replace the original cell phone platform with the second generation (G2), just 10 years later (in one-half the time), G3 technology was introduced—offering high data speeds. Today, there are more than 260 million cell phone subscribers in the United States (85 percent of all Americans) and 4 billion worldwide.<sup>1</sup>

At the same time Motorola was competing against Nokia, Samsung and LG for market leadership, “smartphones” were introduced—empowering users to do more than rely on their phones for just conversation. Without much warning, Motorola was faced with two new competitors: Apple and Google. Suddenly “talk time” became a commodity and iPhone™ “apps” became the motivator for many buyers to purchase a G3 phone. Ironically, today it appears that the majority of Smartphone utilization is for purposes other than making phone calls.

Why focus on the cellular phone industry when talking about risk management technology solutions? Because it provides many lessons concerning the role technology plays in changing behavior and, ultimately, impacting how we work. For example:

- ❶ The rate of technology innovation is accelerating and with it, the amount of change organizations and individuals are experiencing is accelerating as well.
- ❷ In many cases, the primary or intended use of the technology becomes secondary over time as new uses are engineered on the initial platform.
- ❸ The “user interface,” if properly designed, encourages use and expands the adoption of new technology while stimulating the development of new uses.
- ❹ Individuals and organizations are seeking a “single platform” rather than multiple platforms to become more productive.
- ❺ Early adopters of new technologies derive significant value and return on their investment while having influence on the future direction of the technology.
- ❻ Innovators in many cases are not the market leaders in a technology arena.

Risk management technology solutions will have a significant impact on all organizations in the future, just as cellular technology has changed how people and institutions operate today. We can already see the effects of that by looking at how some risk managers are using technology.

### DEPLOYING TECHNOLOGY IN THE RISK MANAGEMENT FIELD

Initially, the technology solutions developed for risk management focused on online training, with the goal of changing unsafe and unacceptable employee behavior in an effort to reduce incidents, claims and costs. This type of training might include topics such as the legal, mandated protocols required when a supervisor suspects an employee of abusing drugs. Prior to delivering this training online, organizations relied on a standard instructor-led training model, requiring the: **1)** development of training materials (internally or by hiring an outside expert); **2)** scheduling of employees (typically in groups of 25-35); **3)** reservation of meeting space and coordination of logistics; **4)** creation of training material or handouts; and **5)** documentation of employee participation. Considering travel time and other expenses, the typical cost to train one employee on one topic might range from \$26 to \$42. More importantly, however, employees who were unable to attend the scheduled session never received the necessary training, increasing the organization’s overall risk.

Today, technology is being used to deliver more than just training content. Online registration, testing, certificate creation and reporting are now included in many learning

management systems. By automating these functions, the cost to deliver training has dramatically decreased—to between \$2 and \$10 per course per employee. A large southern California city, for example, recently administered the state’s mandated AB-1825 sexual harassment training to all of its supervisors at a cost of \$3 per employee—resulting in 100 percent compliance and savings estimated between \$150,000 and \$200,000. Other organizations that have implemented technology to help them better manage employee training have experienced similar cost savings:

Location of Organization	Employees Trained	Net Savings
MICHIGAN	1,400	\$1,300,000
FLORIDA	200	\$324,000
FLORIDA	50	\$17,000
GEORGIA	700	\$174,000
CALIFORNIA	54	\$41,000

Outside of the training arena, technology is also playing a critical role in other risk management functions, such as the monitoring of employee driving records. Historically, organizations tracked their drivers on a spreadsheet—annually preparing the state-mandated paperwork required to receive copies of their records. If employees were found to have excessive traffic tickets or convictions, they were prohibited from driving the employer’s vehicles in the future. The time and administrative costs to oversee this type of risk management program were substantial, to say the least. Take, for example, one large, northern California public entity, which had three dedicated staff members preparing, reviewing and filing paperwork with the state. Today, in California, there are four state-certified providers that deliver automated Employer Pull Notice (EPN) solutions—notifying organizations electronically, in near real-time, of any employee who has received a conviction, failure to appear, license suspension, or any other action taken against their driving privilege by the California Department of Motor Vehicles.





Automating this function has reduced the staff required to manage the process to less than one full-time employee and eliminated lost records and errors.

Technology solutions like these have succeeded not only because they reduce costs and administrative effort but, most importantly, because they are sustainable and deliver enterprise-wide accountability—enabling risk managers to decrease their risk exposure and, in turn, their organization's total cost of risk.

### DEVELOPING A TECHNOLOGY VISION

To help overcome the technological divide that exists between the private and public sectors, today's public sector risk managers need to develop a "technology vision." In this vision, the risk manager first identifies what is possible and then builds the strategy required to reach the desired goal. In creating a detailed roadmap, the risk manager can clearly define the deliverables, resources, budgets and deadlines required—all of which are necessary to achieve the overall vision.

Although many people consider this another element of operational or strategic planning, it is not. In fact, it is very different, since it relies on a model of the future that has not yet been realized. For example, when the DynaTAC was first introduced, technology vision would have anticipated 50 percent of the professional workforce having cell phones in 25 years and, in another 10 years, 80 percent of the total population owning cell phones. Had Motorola done that, how would it have planned its future communication infrastructure differently?

While a good technology vision is necessary, it is not easy to develop. However, there are things that risk managers can do to nurture the vision and use it to their advantage, such as:

#### ❶ Learning about emerging technologies, even if they do not appear to have a direct impact on the organization.

Investigate eBooks, iPhones, streaming video, blogs and other seemingly useless technologies. Now, close your eyes and visualize a world where everyone is using that technology—what has changed? How is it being used? Keep in mind that it is not the fact that newspapers became obsolete due to the emergence of the Internet; newspapers never saw how the Internet would impact their industry until it was too late. Some newspapers with vision, like the *Wall Street Journal*, not only embraced the Internet, but created another revenue stream using it.

#### ❷ Identifying your core process and "product," then visualizing your organization without it.

Did the U.S. Post Office visualize overnight package delivery? Federal Express did. Did manufacturers of

98 percent of television picture tubes in the U.S. visualize something other than the vacuum tube? Japanese manufacturers did, seeing a world with transistors. Be aware that being tied to a core process, service or product might feel like a boat anchor some day.

#### ❸ Looking at what your peers in private sector are doing.

In the book *Moneyball*, Michael Lewis noted that all management in major league baseball came from major league baseball. The industry never hired from outside and, consequently, innovation was non-existent. When Billy Beane, the manager of the Oakland Athletics, hired two Harvard MBAs to analyze data, the game was forever changed. Public sector risk managers also tend to hire and promote from within, which can lead to the same adherence to the status quo.

#### ❹ Looking at your industry thought leaders and heretics.

What are they saying and doing? What is behind their conclusions and actions? If they are right in five or 10 years, what are the implications to your organization? The time to explore topics like enterprise risk management or the value of an organizational presence on Facebook is not when 60 percent of your peers have adopted it, but instead, when two percent of the industry's leaders are talking about it.

#### ❺ Creating a sense of urgency and a commitment to change.

Since there is little or no competition between public sector organizations, the need to view change as a natural process is often lost. Change frightens some and invigorates others. However, the only true fact is that change will come and the leading driver of change will continue to be technology.

Creating a technology vision and learning how to use technology effectively as a risk management tool, is not easy. It typically only succeeds after hard work and some amount of failure. Take, for example, Thomas Watson of IBM who taught us that even great innovators find developing a vision of the future is not easy. Overall, though, the benefits of developing the vision and implementing technology to achieve that vision outweigh the negatives. By challenging the status quo and embracing change, you and your organization will see tangible results—results that will impact all stakeholders for generations to come. ■

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#### END NOTES:

<sup>1</sup> NationMaster.com.