### RISK TECHNIQUES

# Gifts of Sight

Put risk management and strategic planning together with a new generation of scenario development tools and approaches, and the chaotic and uncertain future just may become easier to grasp and navigate.

By KATHERINE HEIRES

isa, the global payment card and processing network, has to ponder a wide range of strategic questions, threats and risks that are not atypical for a company of its size and multinational reach. It faces regulatory issues in, for example, the Credit Card Accountability, Responsibility and Disclosure Act, which banks in the U.S.

have been studying and working to comply with since its passage in 2009. Last year, Visa's Web operations had to contend with the cyberattack of a loosely organized group of "hacktivists" protesting its and other banking and payments companies' cutoff of services to the controversial WikiLeaks organization.

Those problems are known and being dealt with. Looking ahead, San Francisco-based Visa, which earned \$3 billion in its 2010 fiscal year on \$8.1 billion in revenue, considers questions like these: Might Apple, Facebook and Google emerge as direct competitors in the payments arena? Has consumer caution and conservatism become the new normal, and if so, how will that affect the payments business? Should Visa enter the fastgrowing gaming market as a facilitator of payments?

According to experts in corporate planning, multinational enterprises would do well to incorporate systematic scenario planning processes – the preparation of responses to a wide range of possible market changes and contingencies – into their overall strategic planning efforts. Indeed, in the aftermath of the credit crisis, amid a halting economic recovery and in view of social unrest in various places, many organizations are awakening to the benefits of structured scenario planning. But, consultants say, such exercises – often conducted in a workshop setting with corporate executives and topic or domain experts in attendance – need to draw from a wide range of perspectives and be aligned from the start with risk management.

Advisers also emphasize that scenario planning is not some kind of crystal ball, but rather is a tool for learning and preparedness that can help a firm, its strategic planners and, increasingly, risk managers understand alternative futures, de-

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velop their narratives and, ultimately, lead to better decisions when guick reactions to changing events become essential.

"Scenario planning is absolutely not about predicting the future," asserts Thomas Chermack, director of the Scenario Planning Institute at Colorado State University and author of a recently published book, "Scenario Planning in Organizations: How to Create, Use and Assess Scenarios."

Chermack, who has facilitated planning projects at such companies as Cargill, General Mills, Motorola and Saudi Aramco, views scenario building as "a technique to help people have conversations about complex problems – the opposite of the ideas espoused in [Malcolm Gladwell's book] 'Blink' or the idea of instant decision-making." For risk managers, he goes on, "it is a critical skill" for developing the mental flexibility to consider possible futures and competitive challenges in collaboration with senior management.

results and allowing a value to be attached to the practice that will help to advance it further. At the same time, advocates say the lesson from recent risk experiences – think 9/11, the Gulf of Mexico oil spill or Toyota's reputation-damaging auto recalls – is that traditional planning tools need to be blended with newer future-analytic techniques. The end-result is expected to supplement and even supercharge scenario planning.

The newer approaches, including crowdsourcing, red teaming and serious gaming (see "Glossary"), "are particularly relevant to companies with distributed workforces or very complex supply chains and partner relationships," says Noah Raford, who is doing Ph.D. research at the Massachusetts Institute of Technology's department of urban studies and planning and does scenario planning work for San Francisco-based Global Business Network (GBN).

# After 9/11, many people came to realize that bad things could

#### **Suited for Complexity**

It is precisely for these reasons that Visa has been utilizing scenario planning since its initial public offering in 2008.

Julian Sevillano, Visa's senior business leader, global enterprise risk, says the company uses the tool "on a selective basis, when we have risks that are complex in nature or require a lot of cross-functional understanding of issues." He leads a team that maintains an inventory of enterprise-wide risks that might be financial, operational, legal, regulatory or strategic in nature. He reports to Visa's head of enterprise risk management, Rick Shahab, who in turn reports to the chief enterprise risk officer, Ellen Richey (see the Risk Professional CRO Interview, December 2009).

Sevillano says that because Visa "not a bank, though we service the financial industry," it does not have a typical financial institution risk profile and therefore has had to develop its own, collaborative approaches to understanding potential risks. Visa views scenario planning as a useful, closely integrated complement of its corporate strategy efforts, says Sevillano. (Because of their sensitivity, he declines to provide specifics about risks that have been addressed of late.)

In aligning scenario planning tools with risk and strategic planning efforts, Visa is indicative of a broader trend building for the last three to five years. Experts view this as a positive development that is generating interest in and demand for better, more sophisticated tools for acting on scenario planning

#### A Boost from the Crisis

Scenario planning has its roots in military strategy. It was pioneered in the corporate sector in the 1960s, most famously by Royal Dutch Shell, which effectively anticipated the oilsupply shocks of the 1970s and rose to become the No. 2 oil company at the time.

Although the Shell case study encouraged many corporations to hone their strategic planning, it was not until the September 2001 terrorist attacks and the concurrent economic downturn that "many people realized that bad things could happen to good companies," says Rita McGrath, a strategy consultant and professor at Columbia Business School in New York. She adds that "the use of scenario planning tools has only accelerated in the wake of the credit crisis and recession." In a sign that this is going more mainstream, consulting firm Oliver Wyman in January published "The Financial Crisis of 2015: An Avoidable History." Describing how a hypothetical, future bank failure could unfold, the report, presented at the World Economic Forum in Davos, Switzerland, identifies cracks in the banking system, strongly suggesting that many of the risks that existed before the crisis remain.

According to a bi-annual survey by Bain & Co., after 9/11, 70% of companies employed some form of scenario planning. By 2009, the percentage had dropped to 42, though some consultants believe it has since rebounded to the high 70s, in part a reaction to the BP oil disaster and unrest in the Middle East and Africa.

Mark Carey, a partner in Deloitte's enterprise risk service practice, contends scenario analysis and planning in one form or another is "extremely prevalent." Less so – to the detriment of strategic planning overall – is the use of such tools in a way that consistently enhances risk management.

To address that deficiency, Deloitte has developed a software tool called Severity Tree to guide discussions on three key questions: What might trigger a notable risk event or disruption to a given business in the future? What are possible intermediate events leading up to a risk event? And what would be the severity of its impact?

Identified risks are then assigned a percentage measure of the likelihood of occurrence, so that planning teams can determine how best to mitigate the risk or business challenge, what preparations are necessary, and what strategies can be

## happen to good companies.

employed to reduce the impact on the business.

The advantage of strategic planners' using such tools in concert with risk managers, Carey says, is that it integrates these important processes and avoids treating the risk component as just a "bolt-on" function. Done correctly, strategic planning is imbued with a "far more articulated view of risk." Carey notes that risk managers thus gain more relevance in corporate decision-making. He warns it is too late "if you wait until the end of any strategic planning effort to participate. The decisions are made, the resources are allocated."

#### Make It Routine

Colorado State's Chermack contends scenario planning is "critical for risk managers" and should be a fixture in their tool boxes. He says risk managers are in a position to put a value on a scenario planning effort by assessing: Did it save us from disaster? Were we able to mitigate the effects? What were the cost savings that resulted?

He concedes that the past literature on this subject has not looked closely enough at how to make effective use of the information derived from these efforts to generate valuable insights or bring about corporate change. By applying the scenario planning findings in a more purposeful way, Chermack says, decision-makers will ultimately see their established strategic choices in a new and different light and cultivate a joint understanding of how to proceed with a fresh understanding

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#### GLOSSARY

Scenario planning: A technique for improving the quality of executive decision-making, leading to better, more resilient decisions, particularly during times of sudden marketplace change or stress. Increasingly, firms are melding risk management with scenario planning efforts and supplementing them with online and off-line resources such as crowdsourcing, red teaming and serious games. Readings: "The Art of Strategic Conversation," by Kees Van Der Heijden; "The Art of the Long View" by Peter Schwartz; "Scenario Planning in Organizations" by Thomas Chermack.

**Crowdsourcing:** Reliance on a crowd or large group, usually via the Internet, to make sense of emerging trends and risks. It is seen as a way to do in a collective, faster and less costly fashion what might be more difficult or impossible to accomplish individually or with a single organization's resources. For example, World Without Oil in 2007 attracted 2,000 participants to an exercise that yielded over 2,000 forecasting documents and tens of thousands of blog posts. See: The MIT Center for Collective Intelligence (http://cci. mit.edu); Noah Raford's blog (http://news.noahraford.com/).

**Red teaming:** A military training term that refers to instances where outsiders intentionally break, foil or surprise a given activity. In scenario planning or risk management, it refers to a stress test designed to uncover unseen weaknesses and points of failure. See Wikipedia (http://en.wikipedia.org/wiki/Red\_team) and the Red Team Journal blog (http://redteamjournal.com/).

**Serious gaming:** Games designed for the purpose of solving a real-world problem. Resources: "Reality Is Broken: Why Games Make Us Better and How They Can Change the World," by Jane McGonigal; and McGonigal's talk at http://www.youtube.com/ watch?v=dE1DuBesGYM. Also, Serious Games Institute (http:// www.seriousgamesinstitute.co.uk/) and Serious Games Market blog (http://seriousgamesmarket.blogspot.com/).

Sources: Noah Raford, Thomas Chermack and Risk Professional

#### **Collective Intelligence Flow (Detail)**



of how to cope in an ever changing environment.

Scenario planning is one of many forecasting tools employed at the Institute for the Future (IFTF), a Palo Alto, California-based think tank spun off from Rand Corp. that supports long-term corporate planning. According to Rod Falcon, a researcher there for 16 years who has recently worked on a project to map the outlook for health and health care in 2020, the most interesting new development in scenario planning can be perceived in terms of who is participating in the exercises, as well as new media. It does not have to be limited to groups with a business enterprise.

"Traditionally, we would gather experts in relevant fields and elicit points of view, aggregating expert opinion," says Falcon. "But social media presents the opportunity and ability to create an online platform - a Web site or Web-based game - that allows you to engage hundreds if not thousands of people at a time, to get them to consider a potential future" and contribute in that way to a planning exercise.

#### **More Heads Are Better**

Last year, IFTF launched "Breakthroughs to Cures," an online idea-generating game designed to help the institute and its sponsors quicken the pace of response to a medical disaster scenario. Participants were asked to devise new, rapid-response research models to cope with the onset of a neurological disease that could infect as many as 100 million people in the U.S. More than 400 players - including medical experts, patients and students - shared ideas.

GBN's Raford regards this as a form of crowdsourcing, or outsourcing to a crowd to gain insights or knowledge from "distributed cognition." When utilized well, an online crowd can bring to bear a great diversity of opinion at far less expense than other forms of research, workshops or interviews.

The idea has spawned technological innovation. Crowdcast, a four-year-old, venture-capital-backed company in San Francisco that counts General Motors Corp. and NERA Economic Consulting among its customers, sells an "enterprise collective intelligence" or "social business intelligence" tool, using the motto, "Your people know, so ask them."

For more than half a decade, Google has been inviting its employees to aggregate their views and attitudes by making "investments" in an internal prediction market, thereby predicting given scenarios or outcomes. Perhaps not coincidently, Google's venture capital arm bought a stake last May in Recorded Future, a Boston company that scours online sources to produce "predictive analytics" for financial industry research and trading, competitive intelligence and other uses.

Crowdsourcing "can cost a fifth or a tenth of what a traditional scenario planning effort can cost, with most of the expense going to setting up the platform, which you can then use again and again to explore multiple issues with multiple populations," explains Raford.

He makes note of other online tools as well. Red teaming, sometimes in the form of a short video – that serves as a provofor one, refers to reliance on outsiders to intentionally break, cation of a potential future, that gets people thinking about the foil or surprise a strategic planning or risk mitigation process. potential impact and encourages them to identify other impacts It serves to test assumptions and reveal points of weakness that make up a scenario," he says. or vulnerability. Then there are "serious games," online con-At the same time, McGrath points out, one has to be very tests or simulations designed to solve serious problems, but in skilled at knowing how to frame questions so as not to be "leadan enjoyable setting that encourages participants to identify ing the witnesses." and understand core risks and collaborate on solutions. Both Falcon and Raford stress that when it comes to assess-

## Why not channel gaming enthusiasm into real-world solutions?

#### **Serious Play**

ing future risks, challenges and uncertainties, crowdsourcing and gaming tools can and should be employed alongside other, In her book "Reality Is Broken: Why Games Make Us Better and How They Can Change the World," Jane McGonigal, dimore traditional scenario planning and analysis. Falcon notes rector of game research and development at the IFTF, points that IFTF offers a tool kit that uses a "foresight-insight-action" out that 69% of U.S. heads of household and 97% of youth untechnique in the form of cards and maps to assist others in the der 18 – not to mention hundreds of millions of people around implementation of scenario-planning findings related to health the world – play computer and video games. She asks, why not care. Its format is based on the work of IFTF distinguished channel that enthusiasm into serious games that challenge and fellow Bob Johansen, author of "Get There Early: Sensing the engage and contribute to real-world solutions for business and Future to Compete in the Present." societal risks? A case in point was World Without Oil, a multi-To what degree are global corporations using such tools? player, Web-based simulation positing a worldwide oil shortage "For now, we don't bring people from outside the company to and exploring methods of coping (see Glossary.) participate in our scenario planning efforts," notes Sevillano

Raford finds it ironic that at this early stage of crowdsourcing development, when businesses coping with hard economic ing crowdsourcing or distributed cognition approaches in the times and strategic challenges might be expected to be open to future. it, governments appear to be leading the way. He cites the gov-For now, Visa relies on regular, face-to-face scenario planning ernment of Singapore, in the aftermath of the Avian flu and the workshops to assess market risks and opportunities. In a poseconomic crisis, as "a real leader" in the ongoing employment sible sign of how Visa identifies a change vector and grabs an of such tools. However, companies such as IBM, Marketocracy opening, the company in March acquired PlaySpan, a privately held, Silicon Valley payment technology company that focuses and Netflix have also employed crowdsourcing platforms to assess risks or advance their service or business performance. on the transactional needs of online games, digital media and Columbia University's McGrath points out that the use of social networks.

crowdsourcing platforms tends to broaden the distribution of respondents and make it easier to get feedback from outside Katherine Heires, founder of MediaKat llc, is a freelance business and technology journormal information channels. "It has also been shown that in nalist based in the New York area. Her last Risk Professional feature was "Better Behavior" in December 2010. some cases, when you pool the predictions of crowds, you can

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get a far more accurate estimate of a likely future," she says. New Yorker magazine columnist James Surowiecki documented the phenomenon in his 2005 book "The Wisdom of Crowds."

But crowd formation is not automatic, and all crowds are not equal to all tasks. Falcon of IFTF says it is critical to hit the right targets in terms of the audience and its level of engagement, which can take time, effort and expense. "We often find ourselves having to create artifacts or images from the future -

of Visa, though he would not dismiss the possibility of add-