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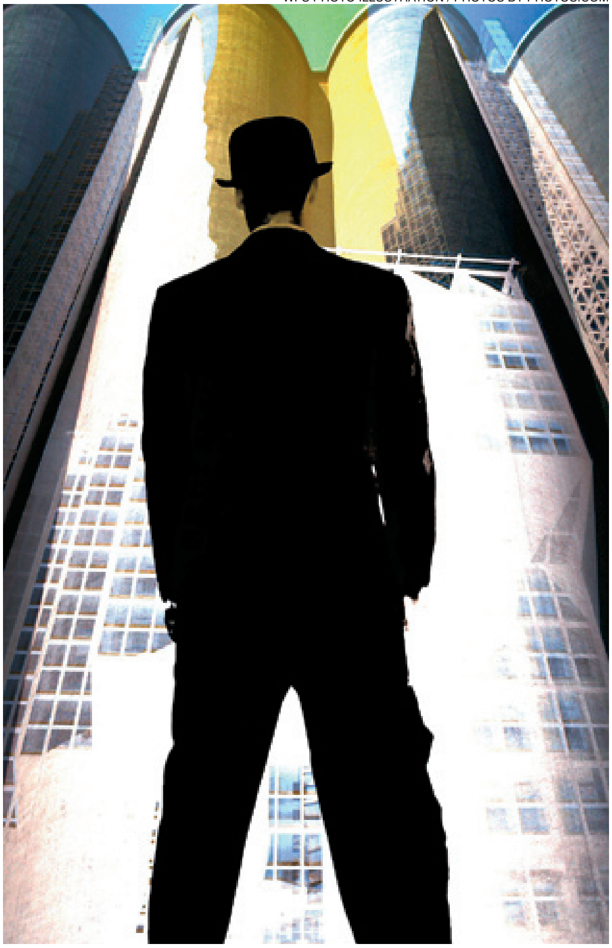

Futurizing Business Education

Global competition, accelerating technological transformation, and a myriad of other forces are altering the business landscape. A futurist and business educator offers lessons to guide tomorrow's business leaders through turbulent times.

By Paul Bracken

Good communication and teamwork are critical leadership skills. In a stable world, they are often enough to bring success. But in a turbulent world, they are not enough. They need to be complemented by a new set of leadership abilities. Turbulence is usually thought of as something bad, but it can be a real positive for those with foresight and the agility to act on what they see. Turbulence means more big problems *and* opportunities. The ability to take advantage of these is a crucial leadership skill for the twenty-first century.

For many years I have helped business and government deal with the rapidly changing conditions that each faces. But in 2007 I was asked to do something different. As part of a remodeling of Yale's MBA and Executive Education programs, I designed a course that taught foresight and agility. I immediately turned to scenarios as a basic building block of the course. Scenarios are powerful tools for thinking through a wide range of problems from different perspectives. But finding the right kinds of scenarios and related methods for a course was something I had never faced before.

A Turbulent World

The global business environment is becoming more turbulent. Companies are facing complex situations for which there is little or no experience. It isn't difficult to identify the drivers behind this. Although their importance varies by industry, four major developments characterize today's business environment.

First, technology is transforming one industry after another, from telecommunications to finance. Second, political risks are becoming more important. Choices about accounting rules in Russia or technical standards for mobile phones in China are made not just on efficiency grounds, but also to give one company advantage over another. In the United States, likewise, standards for college loans, Medicare reimbursement, and regulation of adjustable-rate mortgages have a high political content to them, whether we like it or not. Being on the wrong side of these decisions can destroy a tremendous amount of corporate value.

A third trend is the blurring of industry boundaries, with interlopers attacking new sectors outside their traditional domain. Examples: cable companies selling telephone service, Wal-Marts with health clinics, local banks offering financial services, Starbucks showcasing and selling music, and nearly everyone selling credit cards. We use terms like "cable TV," "store," "bank," and "coffee shop" as if these labels described the business these companies were in. They once did. But now it seems that nearly everyone is going after new markets beyond their own.

Finally, new competitors are appearing with different strategic personalities than traditional companies. Business capitalism was once a Western club. But it's now getting more "democratic" as multinational corporations from Brazil, Russia, India, China, and others compete globally. Gazprom and Lukoil (Russia), Haier and Lenovo (China), Infosys and Mahindra (India), Petrobras and Embraer (Brazil) are vying to become the General Electrics and Toyotas of the twenty-first century.

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Toasting a major U.S. sale for Russian energy company Gazprom is Deputy Chairman Alexander Medvedev (second from right). Gazprom is one of many multinationals vying to become the major players in twenty-first-century business.

New Leadership Skills

A turbulent world requires new kinds of leadership abilities. At one time, sticking to your craft and making modest improvements in it guaranteed success. No longer. Increasingly, foresight and agility are needed to stay ahead of the game. Surprisingly, foresight and agility have not received the emphasis that has been given to traditional leadership skills such as good communication and teamwork.

We can see the new skills at work in dynamic industries that thrive on turbulence. Ronald Cohen, a respected leader in private equity, argues that instability and uncertainty favor leaders with foresight. His book's title, *The Second Bounce of the Ball* (Orion, 2007), comes from foreseeing where a bouncing ball is headed. Judging where an industry or market is headed allows one to spot opportunities ahead of the pack (foresight), in order to take advantage of them (agility).

Foresight and agility require a broader assessment of problems that goes beyond the silos of departmental structure. Leaders have a critical need to be able to rapidly leverage resources, ideas, and people, which are not always under one's control. In a turbulent environment there usually isn't time to assemble the resources needed for success by developing them inside the organization. Apple's tremendous success with its i-product line (iPod, iPhone) came from foresight of what consumers wanted and the agility to assemble them from outsourced suppliers. Procter & Gamble, similarly, now has more than half of its new product development done by small companies. P&G found that this innovation network provides it the fresh perspectives on consumer trends that even the best-led internal bureaucracy couldn't.

Can Leadership Be Taught?

It's one thing to identify the leadership skills needed in a turbulent world, — foresight, agility, a broader perspective, and leveraging resources that are not under one's control—but it's another to teach them. However, they can be learned. It can be done the hard way, on the job: Companies can wait until a disaster happens, or a historic opportunity is missed. Or they can speed up their learning, seeing how others have seized opportunities and avoided calamities, and promoting people with foresight and agility to senior positions.

Scenarios are an ideal learning tool for this process. They are about "the next bounce of the ball"—i.e., where things are headed. Scenario thinking helps frame problems in a broader way. They enlarge perspectives on opportunities—for example, by looking at problems from different viewpoints, such as those of customers, regulators, or investors.

For Yale, my approach for business and executive education was to combine case studies and scenario exercises. Case studies are ubiquitous in business school, so there is ready acceptance of them. A case study is actually a history lesson: A disaster occurs, the causes are ascertained, and students see what went wrong and why.

Case studies are very useful, but their focus on the past, with knowledge of the ultimate outcome, isn't like the real world. Moreover, there's a passivity with case studies because students are handed something already labeled as "a problem." Most big problems and opportunities don't come with labels—at least not at first, when there's time to do something about them. Foresight means seeing them before others do.

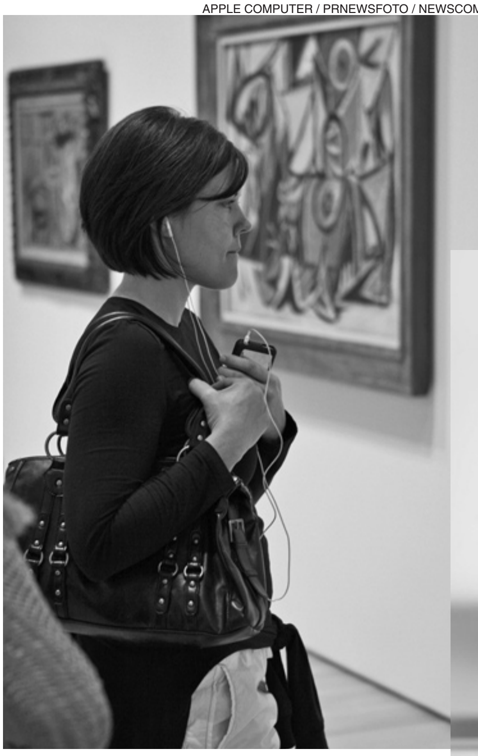
Scenarios, in contrast, are exercises about the future. They are more challenging than cases because we don't know what's going to happen. The future's unknowability makes scenarios a key tool for meeting the challenges of a turbulent world.

But the challenge I faced wasn't to teach people how to write scenarios. It was to use scenarios to change how people frame problems. Scenarios were a means, not an end.

Case Studies

My use of cases varies depending on the experience and interest of the class. MBA and Executive Education

APPLE COMPUTER / PRNEWSFOTO / NEWSCOM



Left: Podcasting enhances a museum experience. The iPod took advantage of Apple's foresight, agility, and cross-disciplinary thinking.

HAIER AMERICA / PRNEWSFOTO / NEWSCOM

Ibiza Rhapsody hopes to compete with iPod, making China's electronics company Haier the Apple of the twenty-first century.

courses have different needs, though the purpose is the same: to show that there are some very bad and some very good ways to manage in a turbulent environment.

One of my favorite cases shows how functional skills, like finance and the law, that work well in a stable world do not in a turbulent world. It involves a U.S. company that bought a water works in South America. The company used a cash-flow spreadsheet model to forecast its revenues. Not being oblivious to risk, the company varied its revenues by plus-or-minus 10% in the spreadsheet, and the planners convinced themselves that this gave pretty good bounds on the risk to their profits.

Unfortunately, the investment proved to be disastrous. Local peasants rioted when the water company raised prices. Since the government couldn't police the local province, or was afraid to do so, the riots grew in size and intensity. Absent police protection, the company fled the country one step ahead of an outraged mob.

When asked about the way it accounted for political risk, the company said that there was no column heading for it on the spreadsheet. The planners knew how to discount future cash flows, as well as how to vary the profits by a given percentage, and so they did. Political risk was thought to be a "soft" factor, not a "hard" one like the numbers in the spreadsheet. So it was never put into the model.

More astonishing was the company's next move following its hasty exit from the market. It sued the host country for failing to provide protection for the company's investment, arguing that a de facto expropriation had occurred. The lawsuit produced negative publicity around the world, and the company became something of an icon for antiglobalization protests.

The company did not display much foresight. It used two problem frameworks: a spreadsheet finance model and the law of contracts. The company did have valid arguments. It entered the market wanting to modernize a backward water supply, and it argued that contracts should be honored to encourage more foreign investment. My use of the case isn't to assess right and wrong, but to make a point: the powerful effect that different problem frameworks can have. Noble as its goals were (modernize a water system, honor contracts), the company's frameworks (cash flows of hard numbers, contract law) didn't protect its investment or its reputation.

A good scenario could have brought the really important factors to bear on the cash-flow models. A scenario offers a way to avoid strategic surprises. The issue isn't cash-flow models or scenarios, but rather how scenarios could have shed light on what is behind the hard numbers, which were not as hard as they appeared.

Another case study I use deals with how departmental structure shapes the way problems are framed. It compares two seemingly different examples: the September 11, 2001, terrorist attacks on the United States and the innovation strategy of the Sony Corporation. The goal is to show how departmental organization impacts what is labeled a "problem" in the first place. If asked beforehand whether a problem existed at all, both organizations would have said no. Experience was to prove otherwise. My intent here is to get MBAs and experienced executives to step back and ask questions that cause stress to their organizations to see how they respond to the shocks of a turbulent world.

In the 9/11 case, the U.S. government had departments that dealt with individual aspects of terrorist attack. The CIA focused on foreign threats; the FBI, on domestic ones. The FAA controlled commercial air traffic, NORAD warned of attack, and the Department of Defense planned the counterterrorism responses.

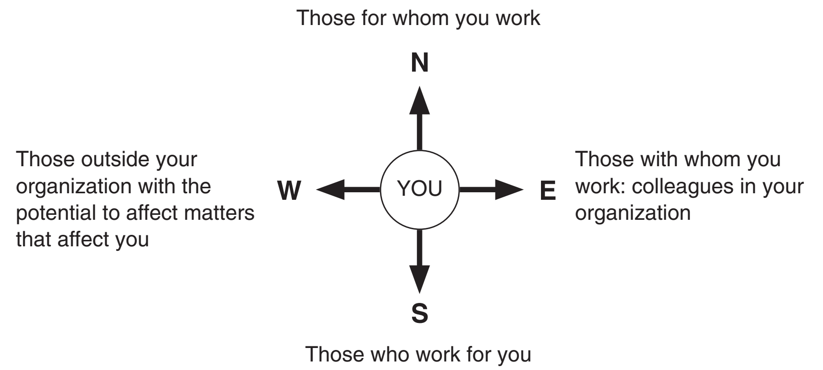
Each department was a silo with smart, dedicated people. What the whole enterprise didn't have was a common operational picture. The problem wasn't technical, the absence of a communications system to pass information back and forth. Unfortunately, this dysfunction still afflicts many parts of the U.S. government.

As the 9/11 Commission Report made clear, there was a deeper failure in that the whole enterprise, all of the silos together, hadn't developed a collective understanding of the dangers they faced. A productive conversation wasn't taking place. Each silo lived in its own universe. Communications and teamwork within a silo were good, but their insiders' world of specialists could not project vital communications to the outside world. It was like treating a sick individual with a dozen specialists, each responsible for a separate condition—heart problems, neurological, and psychiatric disorders, etc.—but without an attending physician to coordinate the care.

Silo thinking characterized the Sony Corporation in the late 1990s. Here, the danger wasn't terrorists, but Apple Computer, which was poised to attack Sony's consumer electronics market with a new technology wonder, the iPod MP3 player. At the time, Sony was the world leader in consumer electronics. It invented the Walkman, which had revolutionized the industry. And it was on the cutting edge of individual technologies: mobile phones, stereo, semiconductors, and PCs. It even had a large music division. Sony's departmental structure was organized by these technologies. But, like the U.S. government on 9/11, there wasn't any "attending physician." Headquarters gave away R&D money to the silos, who spent it developing products they liked, emphasizing the technology and wishes of the department, rather than the desires of the consumer public or even the abilities of other Sony divisions.

Apple didn't own many technologies. In the late 1990s, it was simply a computer company. In one sense, it was at a disadvantage, but it also didn't have the silo organization that kept Sony from taking a broader perspective. Apple's leaders did have the foresight and agility to attack Sony's consumer market with an innovative new product, the iPod, which was the basis for later innovations that remade Apple from a computer company into a consumer electronics powerhouse.

Figure 1: The Compass Exercise



My intent in the comparison isn't to criticize Sony. Rather, it's to sensitize students to the powerful effects of structure in framing problems. Boundary lines are blurring in one industry after another, so failing to see this can lead to big missed opportunities.

Scenario Exercises at Yale

My scenario exercises are used to go beyond case studies to get students to actively look for opportunities. There is a subtle but important point about opportunities: They usually don't spring out of nowhere to land at your front door, proclaiming, "I am an opportunity." Rather, opportunities come when you actively look for them, with a framework that doesn't kill them off. Opportunities can be killed off in a number of ways, but we have two exercises that teach how to avoid it: the *Compass Exercise* and *Seeing the Elephant*.

- **The Compass Exercise.** The Compass Exercise extends a framework developed by Richard N. Haass, former director of policy planning for the State Department and author of *The Opportunity* (2005) and *The Power to Persuade* (1995). It consists of putting the student at the center of a compass and asking him or her to plot a course to achieve some specified goal.

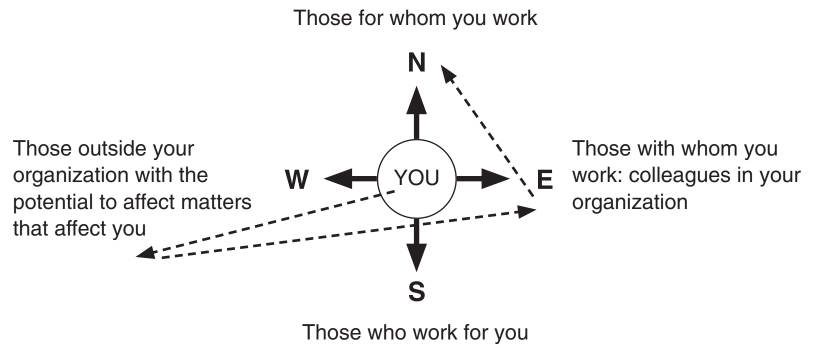
The compass points are the four directions of the journey, as in Figure 1. *North* represents the boss and those higher in the organization. *East* comprises your colleagues, associates with whom you collaborate inside the organization. *South* includes those who work below you. *West* consists of those outside the organization with the potential to affect matters that affect you. This could mean customers or others with important resources, like suppliers, consultants, or regulators. The compass explicitly broadens perspectives by showing the many possible sources of ideas, capital, and authority that exist.

With a blank sheet of paper with the compass drawn on it, students are instructed to map out a scenario for advancing some opportunity. It could be developing a new business line or attacking an adjacent industry like Apple did to Sony. The scenario is drawn on the diagram. The exercise works well for individuals or small groups working in collaboration.

Discussions about the scenarios are usually quite revealing. Some students use a rule: "Take the idea to my boss. See if she likes it. If not, *stop*, because I don't have the authority or resources to go any farther." A variation is, "If my boss doesn't like it, then neither do I." This is a North–South scenario on the diagram.

Getting opportunity-killing factors on the table for class discussion is important. It shows how organizations really frame problems. Both the U.S. government in 9/11 and Sony, vulnerable to Apple's competition, had a North–South scenario map. Neither journeyed very far outside of the narrow silos.

Figure 2: Opportunity-Seeking on the Compass



Opportunity may be found following a different path on the decision-making compass. The shortest distance between two points in an organization usually isn't a straight line.

Other students come back with an opportunity-seeking response that takes an indirect route (see Figure 2): Try to persuade your boss of the value of the idea. She just doesn't buy it. But you need her approval, because ultimately she has the needed authority and resources. So, get customers (West) to ask for it, by having them call on your colleagues (East) to tell them of their interest in the idea. Then, have your colleagues tell senior management (North), reporting what the customers said. In other words, to go North, first go West, then East, and finally North. If this sounds tortuous and inefficient, the lesson is that the shortest distance between two points in an organization is rarely a straight line.

The Compass Exercise is a great way to crystallize what it means to "lead from the middle." This is defined as opportunity seeking without the authority or resources needed to exploit it. In the old way of thinking, it was senior managers who led and middle managers who followed. The idea was that only those at the top had the breadth of experience to put the big picture together. In a turbulent world, however, it's often those in closest contact with the world who see clearest what's going on. Middle managers can be far ahead of senior leaders when it comes to spotting opportunities, but only if they are encouraged to do so. The Compass Exercise sends the signal to middle managers that they are expected to take the lead when it comes to opportunities, and not to passively await direction from their bosses.

• **Seeing the Elephant**. This exercise is designed to get a productive conversation going that overcomes silo-inhibited thinking. The class is told to frame a problem of unorganized complexity. I've used problems like whether to invest in a Chinese construction company or an NFL expansion team in London. For executive education programs, an actual challenge works well.

The class is divided into small groups, each assigned perspectives: *customers, investors, regulators, employees, competitors,* etc. The particular perspectives will depend on the kind of group and type of problem. Each group is told to come back with two scenarios that tackle the problem from the assigned perspective. For example, the customer perspective for a Chinese construction company might explore whether the firm could export out of China to global customers. A customer perspective for the London NFL team would be concerned with how to get British soccer fans to watch American football.

The groups return to a plenary session to brief their scenarios to each other. This usually leads to a very interesting mixture of insight and chaos. The insights come because there is usually a lot of talent with creative ideas. The chaos comes because the scenarios rarely align with each other. One group will come back with a brilliant scenario for investing in China, but the regulator group, playing the government of China, will react furiously and say, "You can't do that!"

This dynamic captures one purpose of the exercise, which is to demonstrate what a productive conversation is. One rule I use for this is that students are not allowed to dismiss another's scenario wholesale. They can't say, "That can't happen" or "You're crazy!" Rather, they have to go into each scenario to say exactly which points they agree or disagree with, or show where the logic breaks down. Achieving such a productive conversation is what the exercise is all about.

Seeing the Elephant gets executives to cross departmental lines. Brilliant ideas are great, but they're only a first step. The scenario perspectives must be aligned if the idea is ever to be executed.

Teaching the Future to Future Leaders

It is surprising how little exploration there has been of teaching methods to meet the challenges of our times. But there should be little doubt that this search for better methods is now taking place. The veritable explosions in executive education courses and in-house corporate education, along with a major restructuring of university business programs, are testament to this.

Just as the industrial world of stable hierarchies led to developing the talents needed to keep it running smoothly, a more turbulent world needs people with the necessary skills and talents to take advantage of its opportunities. Foresight, agility, and good problem framing can be taught. Scenarios are one powerful way to do this. ❑

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