

Narrating the Vision

Scenarios in Action

By Robert E. Neilson
and Debra Stouffer

Scenarios—stories about the future—are important forecasting tools for organizations. Two business consultants illustrate how scenarios foster strategic thinking, learning, and communication and how they can be used to develop plans, mitigate uncertainty, and guard against potential problems.

Human beings are wired for stories. Throughout history, knowledge was transferred through speech, pictures, or writing. While there is a role for using other means to convey knowledge, such as PowerPoint slides, they often do not do a good job of communication because they lack contextual meaning. Stories, on the other hand, relate context.

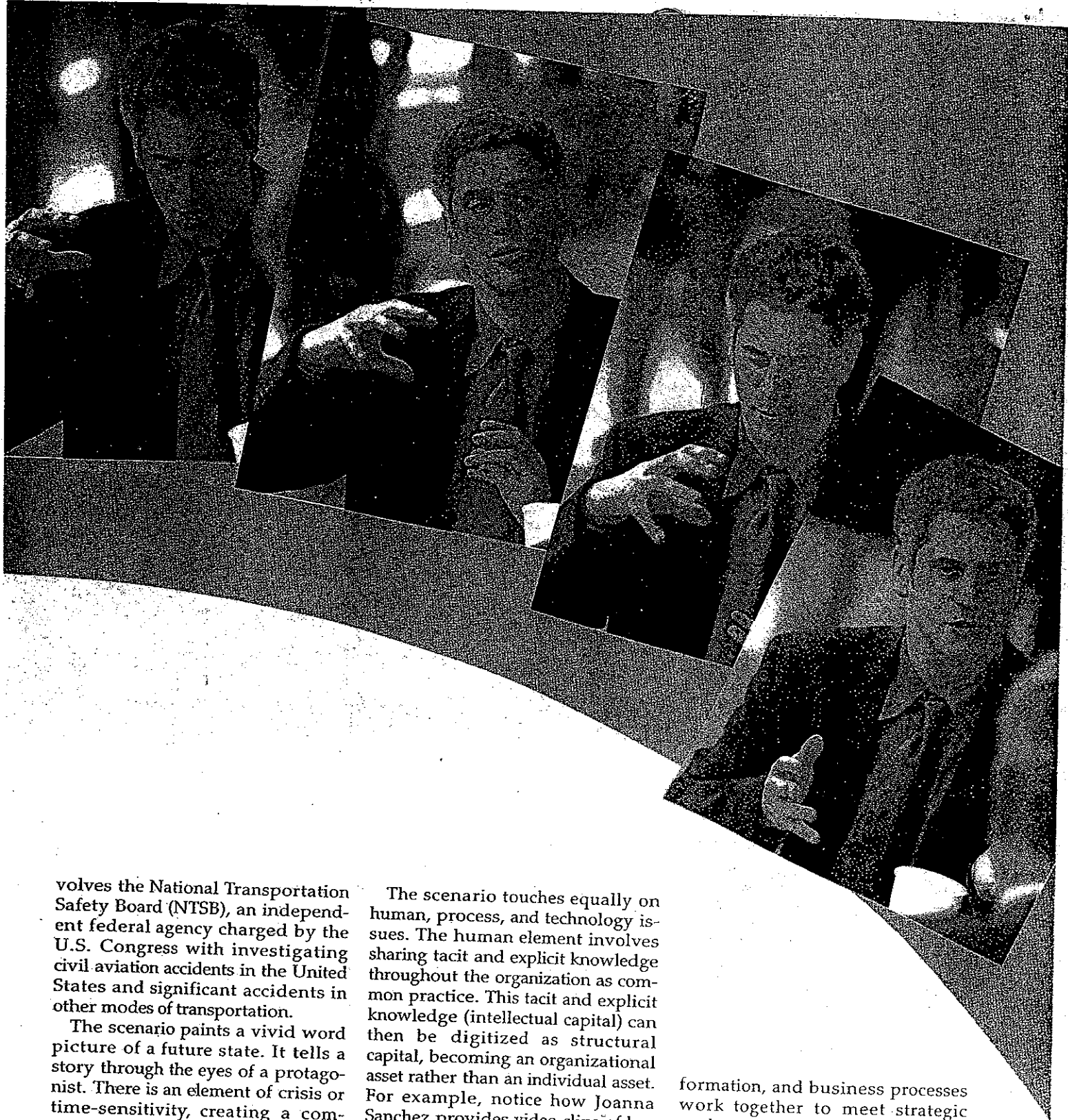
Stories, by their very nature, look backward. There is a lot to learn from the past. Nobody wants to go through life in an organization or business looking in a rearview mirror, however, so stories that look forward, or *scenarios*, are receiving increasing attention in corporate boardrooms and government agencies. Using scenarios in the planning process is a useful strategy for coping with the many uncertainties in today's globalizing environment.

Straight-line budget or business planning projections generally fail to account for chaotic events that upset the status quo.

The uncertainties in today's world stem from fast-changing technologies, new business processes, political shifts, terrorist attacks, and other sources, and business leaders need to anticipate them in order to cope with them successfully. One way to do that is through scenarios.

Futuristic scenarios—stories that paint a vivid picture of a future state—can help provide vision and leadership in a narrative format as well as communicate the organizational vision.

The scenario on page 28 illustrates a future vision for an organization and shows how an enterprise's architecture fits together as a coherent whole. This fictitious scenario in-



volves the National Transportation Safety Board (NTSB), an independent federal agency charged by the U.S. Congress with investigating civil aviation accidents in the United States and significant accidents in other modes of transportation.

The scenario paints a vivid word picture of a future state. It tells a story through the eyes of a protagonist. There is an element of crisis or time-sensitivity, creating a compelling sense of anticipation in the minds of readers to discover how the protagonist resolves the crisis. The scenario is short so as not to discourage readers pressed for time. Last, there is a connectedness with the audience—some aspects of the story (the relationship of the protagonist with her son, for instance) directly relate to the experiences and interests of the intended audience.

The scenario touches equally on human, process, and technology issues. The human element involves sharing tacit and explicit knowledge throughout the organization as common practice. This tacit and explicit knowledge (intellectual capital) can then be digitized as structural capital, becoming an organizational asset rather than an individual asset. For example, notice how Joanna Sanchez provides video clips of her recently completed Webcast to the NTSB Academy as part of normal business processes. Her knowledge and experience can now be shared throughout the enterprise. Implied changes in business processes are designed into the scenario.

Besides illustrating the future nature of business from a visioning perspective, the scenario shows how networks, computer applications, in-

formation, and business processes work together to meet strategic goals.

The salient points of the scenario have been indicated with links to explanatory text in the margin. The illustrations reinforce the scenario by providing visual cues to the narrative. Explicitly informing the reader of the key points of the scenario helps stakeholders analyze the underlying basis. It also fosters continued strategic conversation regard-

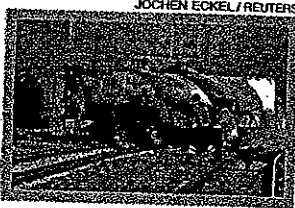
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Scenario: Futurizing the National Transportation Safety Board

This scenario illustrates the following.



At 8:30 a.m., June 22, 2007, Joanna Sanchez, a senior investigator with the NTSB, grabs her go-bag and starts driving to Dulles Airport. Her secure wireless PDA alerted her earlier that several tank cars containing hazardous gases on a Norfolk Southern freight train exploded during the night a half mile from the U.S. Naval Station in Norfolk, Virginia. Prevailing winds are blowing noxious gases over the Navy base and sections of the Tidewater area. Remote data-relay sensors identify the gas as chlorine.



On her way to the airport, Joanna's voice-activated PDA chirps, indicating she has several critical messages.

Her avatar, Charles, reports that a Boeing 737 crashed in Sudan. She remembers that engineering company Pratt & Whitney broadcasted a maintenance alert on fan blades on older airplane engines. She wonders if the Sudanese heeded the alert. Joanna asks Charles to find out who will be the lead NTSB investigator and who from Boeing and Pratt & Whitney will be involved.

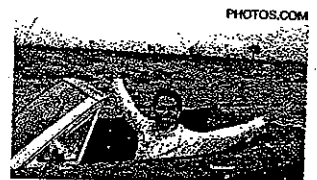


Charles also reports that a Liberian freighter has exploded dockside in Oakland, California. Survivors are floating in life jackets in the harbor, but there is no word on the freighter's cargo.

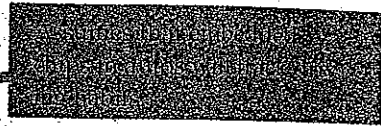
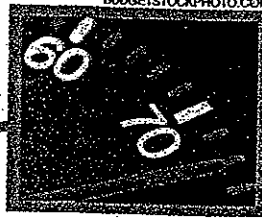


Meanwhile, someone in New York has hijacked a truck containing liquefied natural gas and is threatening to blow it up at the Manhattan end of the Lincoln Tunnel.

Joanna begins to wonder if these are a series of unrelated events or if something more sinister is going on. At the same time, her mind drifts to the driving habits of her 16-year-old son, Jason. She reads the digital display on her dashboard, indicat-



ing that, although Jason always wears his seatbelt, he has exceeded the speed limit 65% of his driving time. She needs to read the riot act to that boy to change his driving habits or the only thing he'll be driving is a **golf ball**.



Department of Home and
Education

After clearing security at Dulles, Joanna initiates a Webcast involving Norfolk hazardous materials officials and police, FBI, Norfolk Southern, and Department of Homeland Security (DHS) officials to find out if the Norfolk train explosion was an accident or a terrorist act. A DHS official reports that they have intelligence indicating that the Norfolk incident may be part of a series of terrorist attacks, with an unidentified gas pipeline as the next target.

Every one of NTSB and other
transportation community
have a role in incident
investigation

Joanna suddenly remembers that she agreed to provide her tacit and explicit knowledge to the NTSB Academy's multimodal Investigator Course regarding her basic investigative procedures. She accesses the NTSB Academy portal and provides clips of her just-completed Webcast to the designated site, accompanied by her reflections, as a live case study for the NTSB Academy to critically evaluate. She posts selected portions of the Webcast and her reflections to the Academy's collaboration zone. Under the guidance of the Academy faculty, students critically evaluate the preinvestigation phase of the upcoming investigation and share their insight with academy faculty, field investigators, and alumni. Simultaneously, State Department, FBI, CIA, National Security Agency, and DHS officials access the collaboration zone. They rapidly share their corroborated and uncorroborated views on the incident and determine an appropriate course of action.

NTSB portal as the window to
intellectual and business as
usual

Industry business knowledge
critical to safety investigations
and total capital value
improvement software
intends her reflections

It is now 9:45 a.m., and Joanna's plane has been weather-delayed. Some things you just can't control. It's better to be weather-delayed than risk another accident, this time close to home. Safety comes first. As she boards the plane to conduct another investigation, she reminds herself to call Jason and straighten him out.

collaboration across board
and standard operating
procedures

Resilient full time faculty



Expanded population (NTSB,
Justice, Border, Industry,
International, etc.)
FBI, DoD, DHS, Coast
Guard, Federal Home
Agency, Management
Agency, DHS, National
Highway Traffic Safety
Administration



DoD, FEMA, NSA, NTSB



Empower robust, resilient
learning community

— Robert E. Neilson

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ing the future direction of the organization.

Building Scenarios To Achieve Visions

How does a nation, city, or governmental agency lead transformations from industrial-age thinking and organization to knowledge-based societies and organizations? They do so by envisioning it; visions are the goals, whereas scenarios may show how we can achieve them. Someone once asked Wayne Gretzky, the superstar hockey player, what made him so great on the ice. He replied, "I skate to where the puck is going to be, not to where it has been." The same hockey maxim applies to governmental organizations at all levels.

In *Strategic Foresight* (Crown Content, 2002), co-authors Nick Marsh, Mike McAllum, and Dominique Purcell use Singapore among many examples to illustrate this point. Starting in the late 1980s, Singapore had an ambitious project called "IT 2000: Vision of an Intelligent Island" that involved all major sectors of the city-state. The project envisioned that Singapore would become a knowledge hub in southwestern Asia. Today, having harnessed computer powers, the country has developed one of the most-automated ports in the world.

Curitiba, Brazil, a city of 1.4 million people, used strategic forethought coupled with systems thinking to increase quality of life and efficiency in traffic congestion, pollution, and waste management, and in avoiding infrastructure development costs for storm and flooding drainage.

New Zealand recognized the need to sponsor a national foresight project to move the country from an agricultural and industrial economy to a future grounded in knowledge-era principles. The Ministry of Science and Technology sponsored interviews with 100 leaders from business, politics, the arts, and indigenous groups to establish a consensus on the major drivers in the new economy. Each sector was challenged to develop a 10-year vision, describe pathways to get there, describe competencies and investments required to achieve goals, and build

Scenarios and Your Organization

Scenarios can help an organization to:

- Anticipate future threats and opportunities.
- Project multiple futures based on optimistic and pessimistic projections from recent trends.
- Foster strategic thinking and learning.
- Facilitate the art of strategic conversation.
- Envision a future state.
- Challenge or dispel assumptions about the "official" future.
- Create a rallying point.

- Provide leadership for new initiatives or directions.
- Create options for decision making by standing in the future and looking backwards.
- Create frameworks for a shared vision of the future to influence organizational and individual behavior.
- Create internal or external communication channels that transcend organizational levels, boundaries, time, and space.

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cases for public versus private provision of the necessary investments. The project was endorsed by the New Zealand cabinet and, more importantly, was viewed as a tipping point for new governmental innovation policies and investments.

The U.S. Federal Railroad Administration (FRA) is now writing futuristic scenarios that challenge and amplify the agency's strategic goals. One of the remaining challenges is to determine how the scenarios will be used in official plans and how they will be used to communicate a future vision to stakeholders, employees, and the public at large from both a visioning and enterprise architecture perspective. The scenario-writing process has also energized FRA senior leadership to analyze underlying assumptions included in the scenarios generated to date. The process has fostered the art of strategic conversation across business units and enhanced the collaborative spirit within the executive suite.

Crafting and analyzing futuristic scenarios can help strategic leaders establish a clear sense of direction. They can also help to specify and describe an organization's future views of its architecture to evaluate potential business and technology operating environments.

Since people identify with stories, scenarios help communicate future visions in a concise manner. They challenge present thinking and foster the art of strategic conversation

among stakeholders to anticipate some of the unexpected eventualities of increasingly chaotic and asymmetric domestic and global environments. Scenarios are therefore stories with a purpose. □



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