In mid-1996, I called Sydney, Australia, to talk with a woman who had participated in a seminar I had facilitated the year before. During the session we used a multimedia simulation called The CIGNA Case Study which I had designed and developed, and I needed to get feedback from participants. After re-introducing myself, I asked for her help. I was hoping that, given some time to reflect, she would describe what she had learned from working through the simulation.

When I asked her to set up a phone appointment for the following week to discuss what she had learned, she replied, “Well, sure, I’d be happy to talk later. But wouldn’t it be more helpful if I just told you now?”

I was stunned. This wasn’t what I had expected. I had assumed that the managers who worked in the global consulting firm where we had conducted the seminar were somewhat indifferent to the business cases studied in a training environment. I hardly expected her to remember the name of the case, let alone what it involved. And yet, as we talked further, it was clear that she recalled quite clearly what she had learned during the seminar a year prior. Furthermore, it turned out she was still reflecting on some of the principles we had covered.

The CIGNA Case Study, which created such lasting impressions for this participant, has been used for the past three years to build operations management and consulting skills in a rapidly growing global management consulting firm; it has also been used in both full-time MBA and Executive MBA programs at several leading graduate business schools in the US. Developed with Professor Roy Shapiro at Harvard Business School, the case took about two years to produce and led me to fulfill diverse roles including researcher, video director, interface designer, programmer, and project manager. It was on the basis of this experience that I later founded Bridge Interactive, Inc., which markets the CIGNA Case Study and develops custom simulations on other subjects.

The CIGNA simulation is delivered on two CD-ROMs containing 2.5 hours of video clips, which the user accesses by selecting people to interview and questions to ask. In addition to extensive personal interviews, the case includes over 60 data exhibits, from operational measurements to internal memos and reports which the user can view and...
analyze. Depending on the user’s choices, new information, new interviewees, and hidden exhibits become available. For example, asking about the results of a task force’s study might lead to a referral to the group’s report. Or, certain people may be unavailable until the user interviews their colleagues.

While simulating the information-gathering process is a potent learning strategy, what makes the CIGNA Case Study most unusual is that it is told in the words of the managers, employees, executives, and customers who lived through the story. It is based on the idea that stories represent the way we make meaning of what happens to us; and that by tapping into those stories we can learn alongside real business people. The result of this “Business Storytelling” approach is access to extremely candid video in which people describe what happened, how their thinking has changed, and what they have learned. The realism of the case engages participants in a way that significantly improves the quality of discussion in the classroom. According to Bill Silver, who teaches with the CIGNA Case Study at the University of Denver, “The comprehensive nature of the information available on the CD-ROM resulted in more lively, informed, and interesting discussions than is typical with short paper cases.”

**Inception of an Idea**

The idea that led to the CIGNA Case Study emerged from several long conversations with Roy Shapiro, who was teaching Technology and Operations Management at Harvard Business School at the time.

For about six months, I had been telling Roy about the work of the team at one of the CIGNA Workers Compensation Claims Offices. This team was one of those dedicated, stubborn, and extremely focused local groups who took the Home Office seriously when it introduced Deming’s approach to quality management. Their challenge, of course, was to adapt Deming’s principles to a professional service environment. What they learned during that process is not only a lesson in moving beyond difficulties to achieve improvement, but also a lesson in how change occurs across multiple levels in an organization.

For many reasons, I thought this story would make a good case study for Roy’s course in Operations Management. So I tried to share with Roy some of the enthusiasm I sensed in the CIGNA team as they learned that continuous improvement doesn’t mean just trying harder every day.

After we talked, Roy agreed to sponsor the case, especially as it could convey to MBA students the challenges and risks involved in pursuing a dramatic change. My challenge was to find a way to involve the students in CIGNA’s story so they understood what it felt like to be there.

**Bringing the Story into the Classroom**

Interactive media was my solution to the challenge of bringing the business into the classroom. The first logical step in that direction was to use digital video to present the case “characters,” but I wanted to go beyond just a video presentation program to have the software control what the user sees based on his or her path thus far. The resulting design centers around a series of video “interviews” with industry experts, customers, managers, employees, and senior executives. In addition, the user can view office processes in action, and see data and charts. As the
user explores the case, new exhibits and people become available based on whom he or she interviews, which exhibits are seen, and how many times he or she tries to access an interviewee within the allotted time.

Additional features, such as periodic context-sensitive “notes” to the user, a notepad, and organization charts enhance the exploratory learning environment and parallel the way company-specific information might realistically unfold for a newcomer. Finally, we included some features that are less realistic, but aid the user in getting up to speed quickly, including a glossary, timelines, and transcripts of all video clips. The transcripts were critical as 15% of the Harvard MBA audience were international students and many of the case characters spoke with southern accents.

One of the tests during development was to balance the actual story, the archetypal story, and the instructional goals. The case was, after all, representing what actually happened at CIGNA; that meant that I needed to weave a coherent story using the actual charts and data, and the comments of the people involved. Sometimes I felt as though I were an anthropologist, eager to tell the story and aware that the very telling would influence the situation. In fact, during development, two executives who had had a serious misunderstanding reconnected when they learned the truth by reviewing case materials.

**Impact on Learning**

The CIGNA Case Study has been used to teach principles of quality management, service management, workforce management, and change implementation. Typically, it is run by having participants work in teams of four to six to explore the simulation in a computer lab, and then return to class for a discussion. The facilitator generally leads off the discussion with a question such as “How effective has the management team’s leadership been?” and “What should they do next?” The case’s impact on the classroom discussion is dramatic. Jim Sorensen, Professor of Accountancy, University of Denver, says, “They loved it! Because they liked the realism, they jumped right into the discussion. In fact, I noticed a significant improvement in the quality of the group discussion as a result of the interactive case study.”

It is largely because of its power to engage the participants that the CIGNA Case Study is so effective. It not only works on the level of the case study, but extends beyond the formal objectives. In fact, the learning opportunities created by the case operate at three levels: the story, the investigation, and the conversation.

**The Story.** Through the process of discussing the case, participants uncover its critical lessons on applying Quality Management principles to professional service operations. These lessons, embedded in the story, are enhanced by the immediacy and power of video clips and first-hand data. For example, by hearing a claims representative interview a client, participants identify the need to pay attention to how the interview is done, as well as when it is done.

**The Investigation.** In addition to learning through the story, participants also learn about the process of investigation, due to the way the simulation is structured. For example, participants often discuss the fact that the Senior Vice President in the case never becomes available, and what this implies for their exploration of business issues as managers or consultants.

**The Conversation.** Because the format of business storytelling simulations is so engaging to the participants, the facilitator can guide the group to practice techniques that support group learning. For example the facilitator will often ask participants to share the specific observations that led to their interpretations, because not everyone saw the same material. When new “facts” are introduced, it is surprising how the group’s interpretation shifts, and how participants become more aware of the assumptions and biases they are likely to bring to any situation.

While the first two levels of learning are what support the explicit learning objectives, it is the improved quality of the conversation which instructors find most surprising. According to Roy Shapiro, “We are able to engage students both intellectually and emotionally in the classroom — and that’s when the most meaningful learning takes place.”

**Potential Applications**

The CIGNA Case Study is just one example of the business storytelling
What makes these simulations different is that business storytelling simulations involve learning from people as well as documents or data, and so benefit from using actual business situations as their source. This type of realistic exploratory learning environment is critical for teaching advanced principles such as problem-solving, evaluation, synthesis, and diagnosis.

Refining the Technique

In 1995, I formed Bridge Interactive, Inc. to build on the CIGNA Case Study, using its underlying software to develop additional business storytelling simulations quickly and at a reasonable investment. Now, with the Business StorytellersSM Engine, simulations cost about one-third the price of the CIGNA Case Study and take only three to four months to develop.

As all of us who have developed software can affirm, software "engines" achieve their potential when sufficient time is invested to standardize and optimize the original program. With the Business StorytellersSM Engine, we have not only standardized and optimized the CIGNA Case Study software, we have also incorporated new features suggested by instructors and participants over the past three years. For example:

- a table-driven set of rules makes it simple to determine how the environment will respond to users’ actions
- users can launch outside applications for analysis of exhibit data included in the case
- user paths are tracked during the simulation and printed at the conclusion for review in class
- the application has been structured to be ready for web delivery as streaming video technologies improve.

In addition to standardizing the software engine, Bridge has also codified its methodology for developing future simulations, to ensure rapid delivery and smooth coordination with sponsors. Our methodology includes story development, simulation development, and media capture/assembly, as well as management of the approval process for the rights to use company video and data. Bridge also supports instructors in using the simulations once complete by providing Instructor’s Guides, as well as technical and instructional support services. It is important that these services are provided with the engine, so that curriculum designers and instructors can focus on their learning priorities. Otherwise, they can be caught up in the never-ending details of legal approvals, video editing, and software testing which tend to accompany the development process.

In this example, business storytelling presents a compelling business environment within which to apply and practice principles already taught, or to motivate principles to be taught — and in the process, surfaces the very learning styles of the participants. In the words of the participant from Sydney, Australia, “I not only learned about Quality, I learned about myself.”

Elizabeth Doty, president and creative director of Bridge Interactive, Inc., founded the company in 1995 to explore how technology might create engaging experiences to support learning, both in individuals and groups. You can contact Bridge Interactive at 415.512.7602 or via e-mail at info@bridgeinteractive.com.