REAL WORLD CASE 1

Chicago Board of Trade: From Failure to Success in Managing Information Technology

Picture 3,000 traders in "the pit" waving their hands and screaming orders for stocks, bonds, and commodities. Millions of dollars in investments are changing hands every minute. Suddenly, screens freeze; orders won't execute. Mayhem reigns, as millions of dollars are lost with every tick of the clock. "That's the worst thing that can happen," says Carol Burke, executive vice president and chief of staff at the Chicago Board of Trade (CBOT) (www.cbot.com). But two years ago, trading-floor systems were crashing almost weekly because of a deteriorating IT infrastructure, costing the exchange and its members millions of dollars.

In July 2001, after two years of operating in the red, the board of directors brought in a new management team for CBOT, including Executive Vice President and CIO Bill Farrow. A total IT revamp got the exchange back to in-house profitability. By 2002, its profit had risen to $25 million, trading-system crashes were virtually unheard of, and CBOT was once again bullish on technology.

Farrow walked into an IT situation that was grim. "The chairman said, 'Bill, you have very small shoes to fill,'" he recalls. "That tells you a lot." "IT was in disarray," agrees Burke, a 20-year CBOT veteran. "There were a lot of good people in IT, but there was a real lack of leadership," says Chip Bennett, senior vice president of technology solutions and Farrow's first hire at CBOT. "The infrastructure was ancient, unreliable, and undocumented." For example, desktop PCs ran a version of Windows no longer supported by Microsoft. Nearly every key process was routed through a group of old, midrange Tandem computers in an environment so complex that developing a new process took more than 90 steps. Project and budget controls were lacking, and quality control was substandard. IT was full of silos and fiefdoms, so there were no economies of scale.

Morale was low. There was a place called "the wall," where nearly 100 yellow sticky notes commemorated people who had gotten fed up and left. Yet many were complacent. "Tech jobs were called 'the golden hammock,'" Farrow says. "Once you got in, you could have a very easy, very, very long career in technology here." That attitude made no friends on the business side. "We would go to IT and say, 'Help us,'" recalls Kevin Lennon, vice president of real estate operations. "The feeling we got was that we were taking them away from something more important."

Other than Y2K, IT hadn't completed a single project in four years. As a result, people had no experience in project management disciplines, and return on investment was a foreign concept. "No ROIs were done—ever," Farrow says. "Technology did not have to provide a return for investing the money in it." There was such a lack of credibility between the business and IT sides that the business people had totally given up, Farrow says.

Farrow began by taking inventory of what he had. He documented systems and technical architecture, nailed down vendor relationships and service-level agreements, and evaluated security systems. Simultaneously, he faced the bigger challenge of building new relationships with skeptical business managers. He assigned IT managers to counterparts on the business side to brainstorm regularly about how technology could support business goals. Denise Schaller, director of technology and data products for floor support applications, who has 21 years experience at CBOT, says her weekly meeting with the two vice presidents of exchange operations has changed everything. "If I have any business questions, issues, priorities—they help sort it out," she says.

Replacing the ancient Tandems with Sun Unix servers and Oracle databases, a process that Schaller thought would take two years, got done in half the time because her new partners in business helped with the analysis, legwork, and scope. Farrow boosted quality assurance with additional software testing and backed it up by putting IT troubleshooters on the trading floor every day when the market opened. "I'm on the spot, so I can see any problems and react immediately," says Schaller.

Farrow established a project management office to centralize the project portfolio and the IT skills pool. He also brought ROI to project agendas. Farrow used news of the turnaround to attract technology professionals with new skills, particularly in the areas of security and business analysis. But there were painful decisions as well, including letting 15 IT managers go. The permanent IT workforce shrank from 250 to fewer than 200, supplemented by temporary contract help as required by the project load.

In 2002, IT completed 66 projects. In February 2003, CBOT handled 33 million contracts—33 percent more than in the previous February, without a single system stutter. "We have a much more stable and robust environment with fail-over abilities," says Burke. "If there were a problem in a primary system, it would fail over to a backup and be seamless to the marketplace." Throughout the turnaround, IT has maintained a flat budget. "If you are wasting 35 percent of your money, that's a lot of money to put back into information technology to make it robust," Farrow says.

Case Study Questions

1. What were several major reasons the IT organization had failed at the Chicago Board of Trade? Explain the impact of each on CBOT.

2. What were several key management changes and initiatives that Bill Farrow implemented to make IT successful at CBOT? Explain the impact of each on CBOT.

3. Does the experience of CBOT prove that "IT is a business function that needs to be managed like any other business function?" Why or why not?