J.P. Morgan Chase Investment Bank (jpmorgan.com) provides investment banking and commercial banking products and services. It also advises on corporate strategy and structure, risk management, and raising of capital. J.P. Morgan Chase, the largest financial institution in the United States, employs 11,000 IT professionals.

The company faced a problem of ever-increasing demand for computing resources. There were 2,000 PCs that run on 50 midsize servers. Some were overutilized, whereas others were underutilized, creating staffing inefficiencies and poor service to the company’s securities traders. The PCs were designed to help traders assess and manage financial exposures, such as interest rates, equities, foreign exchange, and credit derivatives.

In 2003, the company began use of grid computing, at a cost of $4.5 million. The system saved $1 million in computing costs in 2003 and $5 million in 2004. The savings come from lower costs for hardware, reduced development and operation costs, and a more effective system management. For example, when an isolated server fails, the system can still provide the real-time information required by the traders.

The system also provides scalability: New applications are now being built in 10 weeks instead of 20. Also, any increase in new business volume is handled quickly and efficiently. The system was considered the world’s largest-known grid computing commercial application in 2004.

The introduction of grid computing was an impressive project because of the huge mindshift away from the old system. It was necessary to make an organizational shift, overcoming skepticism from internal users who for years had run applications on their own dedicated servers. It was necessary to take away the perceived flexibility that the business units thought they had, and there was lots of resistance to the change (see Chapter 16). A major success factor was the emphasis on problem-solving rather than on pushing a new technology.


Questions for Minicase 2
1. List the business problems, and explain how they were solved by grid computing.
2. Which of the support systems described in this chapter may support the work of the internal securities traders?
3. Would you advise the company to use utility computing instead of grid computing? Why, or why not?
4. Classify the information systems for the professional traders according to the chapter’s classification.
5. In your opinion, is this system related to the Internet, to an extranet, to an intranet? (Tip: The system is for internal users only).

REFERENCES