Aetna is IT savvy. The company consistently uses IT to inform management decisions and to enhance its products and services—and being IT savvy pays off. Our research found that firms with above-average IT savvy and spending have margins 20 percent higher than the industry average. In contrast, firms with less-than-average IT spending and savvy have margins 32 percent lower than the industry average. Just as important, being IT savvy puts a firm in the position to take advantage of future business opportunities.\(^3\)

**IT Savvy:**

*Making IT a strategic asset to outperform competitors*

When Ron Williams became president of U.S. health-care services giant, Aetna, Inc., in 2002, the company had just reported an annual loss of $280 million and was on the brink of failure.\(^1\) Just five years later in 2007, Aetna posted net income of $1.8 billion and was named by *Fortune* magazine as the country’s most admired company in health care. When Williams, now Aetna CEO and chairman, discusses the firm’s success, he notes that the development and use of a dynamic information technology (IT) base was essential.\(^2\)

**Jeanne W. Ross**

Jeanne W. Ross is director and principal research scientist at the MIT Sloan Center for Information Systems Research where she lectures, conducts research, and directs Executive Education courses on IT management practices. Her research examines organizational and performance implications of enterprise initiatives related to enterprise architecture, IT governance, outsourcing, and business agility. Her work has appeared in major practitioner and academic journals, including *Sloan Management Review*, *Harvard Business Review*, the *Wall Street Journal*, *MISQ Executive*, *MIS Quarterly*, the *Journal of Management Information Systems*, *IBM Systems Journal*, and *CIO Magazine*. 
How IT savvy is your firm?

IT savvy is reflected in a firm’s ability to use IT to consistently drive performance. Like savoir-faire, IT savvy looks effortless from the outside. A quick test will reveal how IT savvy your firm is.

Can you:
• Respond to new customer demands in a timely manner?
• Present a single face to global customers?
• Reproduce business successes in a new market?
• Quickly integrate new acquisitions?
• Ensure that local decision makers simultaneously do what’s best for customers and the firm?

Because IT-savvy firms have the systems to support strategic business priorities, they more often answer “yes” to these questions.

In contrast, firms that are not IT savvy often have systems that were built to support isolated business needs. To address firm-wide needs, these businesses spend much of their IT resources attempting to tie their systems together. Over time, management finds that it takes longer to test new systems and integrate them with existing ones. Besides becoming increasingly vulnerable to systems outages, this patchwork of systems makes it difficult to respond to changing business conditions. As a result, the average firm spends 68 percent of its IT budget operating and maintaining these systems—funds that are then not available for introducing new products or services.4

To improve its systems and processes, Aetna first had to rethink how to deliver goods and services to customers. In doing so, the company reorganized the business around its major customer segments, redefined its business processes in terms of customer requirements, and reengineered the IT project funding process to focus on enterprise initiatives rather than product silos. These were critical steps in preparing to build a digitized platform.

Three rules of IT-savvy firms

At savvy firms, IT is a strategic asset. In today’s digital economy, if IT isn’t an asset, it’s a liability. To transform IT from a liability to an asset, management must continually pursue three activities:

1 Fixing what’s broken

In most firms, IT fails to meet business needs because of a broken accountability and decision-making model. Without a clear, enterprise-wide approach to how IT will support your strategy, you will continue to focus resources on tactical systems instead of using IT as a basis for doing business in today’s digital economy. IT-savvy firms have addressed their legacy problems by providing both a clear vision for how IT will support business operations and a well-understood funding model focused on delivering that vision.

Over many years, for example, Aetna had built each new system to support a different insurance product. As a result, Aetna entered the 21st century with multiple, redundant processes and systems as well as fragmented customer data. The company had multiple approaches for core activities like opening an account, underwriting a policy, and paying a claim. Aetna’s management structures and decision-making processes reinforced its piecemeal business processes. The result: Aetna had no good way to provide a single view of a customer’s account.

2 Building a digitized platform

Once you’ve changed your approach to IT, you’re ready to build a digitized platform. A digitized platform is a coherent set of standardized, IT-enabled business processes along with supporting infrastructure, applications, and data. To build a digitized platform, management must start by identifying what business processes are not changing. A digitized platform standardizes and automates these processes, thereby increasing reliability, decreasing operational cost, and ensuring quality. By automating what’s not changing, a digitized platform allows management to focus attention on what is changing in the marketplace.

Aetna’s platform development initially focused on the data that would allow integration of business processes to meet customer needs. Management defined five categories of shared operational data: Claims, Enrollment (or Member), Product, Plan, and Provider. After several years of developing data repositories and reengineering business processes to better use that data, Aetna’s platform remains a work-in-progress. However, the platform is continuously

Peter Weill

Peter’s work centers on the role, value, and governance of IT in enterprises. Peter joined the MIT Sloan faculty in 2000 to become director of MIT Sloan’s Center for Information Systems Research (CISR). MIT CISR is funded by more than 70 corporate sponsors and patrons, and undertakes practical research on how firms generate business value from IT. Peter is now Chairman of MIT CISR and focuses on globalizing MIT CISR research and delivery. In 2008 Ziff-Davis recognized Peter as #24 of their “Top 100 Most Influential People in IT.” Peter has written award-winning books, journal articles, and case studies. His work has appeared in Harvard Business Review, Sloan Management Review, and the Wall Street Journal.
Becoming IT savvy requires a **clear vision**, **strong leadership**, and a **significant change management effort**.

Improving the decision-making processes and operations that rely on this data.

At Aetna, the digitized process platform encompasses the daily servicing of customer needs, ranging from opening an account to settling a claim. Aetna has built a solid technology base and layered it with reliable, predictable business processes for daily transactions—but the reliability and predictability of daily transactions are only the beginning. Like all IT-savvy firms, Aetna uses the data generated from its core transactions to inform and empower decision-makers.

**Exploiting the platform for profit and growth**

Fixing what’s broken and building a platform are both demanding undertakings, but the bigger challenge is leading organizational change and driving value from the digitized platform. To cash in on your platform, you will be changing individual roles, organizational structures, and the organizational culture. This is a fundamental business change and, thus, a major leadership challenge.

At Aetna, Ron Williams emphasized the need for data-driven decision making and spearheaded the effort to put consistent, reliable data in the hands of managers. He and John Rowe, his predecessor as CEO, also encouraged employees to leverage the firm’s data to develop new products and services for customers. One such service, the Aetna Navigator—which provides online medical advice for individuals—won accolades for being the best of its kind.³

**Leading an IT-savvy firm**

Becoming IT savvy requires a clear vision, strong leadership, and a significant change management effort. It can be difficult to distinguish IT-savvy firms’ use of IT from their outstanding business management. Indeed, a characteristic of IT-savvy firms is that IT is at the heart of highly effective management. IT is the platform and scaffolding for delivering world-class operations and strategically focused management decision making. Fewer than one-third of the firms we’ve studied are IT savvy, but our research suggests that IT savvy will become a prerequisite for doing business in the digital economy. It’s time to get started. ● ● ●

³ The material on Aetna in this chapter is primarily drawn from Cyrus F. Gibson, “Turnaround at Aetna: The IT Factor,” working paper 362, MIT Sloan CISR 2006.
² From “Leading Change: A Conversation with Ron Williams,” MIT Sloan School of Management’s Dean’s Innovative Leader Series on October 9, 2008.
¹ MIT Sloan CISR Survey of 1,508 firms in 60 countries in late 2007.
* How good is your online nurse? BusinessWeek Online, February 20, 2006.