A.T KEARNEY

The 7 Habits of Highly Effective IT Governance

Powerful lessons in transforming business and information technology

You can't pick up a newspaper or turn on the television today without reading or hearing about a serious technology mishap. An IT security breach at discount retailer TJX, owner of T.J. Maxx and Marshalls in the United States, exposed millions of customer credit card accounts to potential fraud. Overwhelming online demand for tickets to the World Series in Boston last year and the Olympics in Beijing this year triggered system-wide failures. And what about the JetBlue fiasco? The discount airliner canceled hundreds of flights, causing thousands of passengers to be stranded when its flight-operations system could not handle changes in its crew schedules and flight conditions.

Is this the wave of the future? Will companies lose customers and market capitalization due to IT failures? It's hard to predict what might happen, but there is the potential for companies of all sizes to experience similar IT disasters. Some companies will survive (T.J. Maxx and Marshalls did), but many others may fail due to inefficient IT systems and platforms, bringing sales and operations to a halt, and leaving scant time for a successful recovery. The executives and board members responsible for future IT failures may become as infamous as Enron's Andrew Fastow, Jeff Skilling and Ken Lay, with millions of dissatisfied customers and shareholders left in the dust.

While these disasters make headlines, there are hundreds of other businesses harnessing IT and the data within IT systems to sustain industry-leading positions. Harrah's Entertainment, for example, has redefined the gaming industry using customer relationship management (CRM) applications to capture customer data at each touch point. When a customer enters a resort and casino, Harrah's can immediately identify his experiences and preferences—keeping customers and profits coming in. Moreover, Harrah's IT team rigorously analyzes the costs and benefits of IT and CRM-related projects, including the business value they create.

Today, senior executives, boards of directors and shareholders are demanding more effective governance of their IT organizations—striving to be a Harrah's rather than a JetBlue. They know serious IT failures create chaos not only with business operations but also with customer relationships. Restoring customer confidence and brand loyalty can take years and cost millions of dollars. At a time when profits are down and some companies are struggling just to survive, an IT disaster can threaten a company's existence.

Building Effective IT Governance

During sustained periods of change, old systems can fail. Many companies formed IT governance councils to prevent IT disasters and improve the management of day-to-day operations.[1] Primarily

[1] *IT governance is defined as the controls, processes, and operating organizations that ensure technology enables the business strategy at an effective cost.*

Figure 1
The 7 habits of highly effective IT governance

1. **IT is viewed as a strategic business asset and managed as a portfolio.** IT assets and investments are evaluated in a portfolio management approach, recognizing the value and risks of different IT assets.
2. **Technology ignorance is not accepted. IT participates in technology investment decisions.** IT executives are held to the same high standards as other business functions—they manage technology innovation and adoption to optimize business value.
3. **IT has board of director-level oversight and clear executive leadership.** Members of the board and executive committee direct and understand major IT investments, IT's operational role and impact on business continuity, and IT performance compared to peers.
4. **There is no "one-size-fits-all" IT governance model.** The IT governance model is tailored to align with the company's unique strategy and organization structures; this is critical to overall IT effectiveness.
5. **IT is an essential part of corporate planning and strategy.** IT has a seat at the corporate planning table, demonstrating a keen understanding of a broad range of business issues and providing creative and cost-effective solutions.
6. **IT plays an active leadership role in transformation and innovation.** Given its involvement in all aspects of a business, IT has a unique vantage point to steer innovation within business operations, and shares this role with other business functions.
7. **IT's impact on the business is measured and monitored.** IT's vital role in the business necessitates monitoring and measuring IT performance on multiple levels—including benchmarking competitors—to detect industry and market trends.

Source: A.T. Kearney

focused on process-based functions and tactical needs, these councils draw up guidelines for effective compliance and risk management. While these guidelines are a good start, they do not take IT governance far enough. We believe businesses need a new equation—one that makes IT governance a strategic component of the overall corporate strategy.

Based on our research and experience working with a wide variety of clients—from multinational conglomerates and old-line businesses to rapidly growing start-up companies—we have observed seven habits for gaining maximum value from IT governance *(see figure 1)*. The most successful companies are those that have matured beyond simply linking IT strategy and the business, and instead have established a fully integrated operating environment. The following offers an in-depth discussion of the seven habits of effective IT governance.

[2] *IT Key Metrics Data 2008, Gartner, Inc.*

1. IT is viewed as a strategic business asset and managed as a portfolio. Top companies view IT holistically, as a strategic business asset. IT costs consume about 4 percent of the average company's corporate revenues, and up to a quarter of operating expenses, which in some cases is larger than all other corporate functions and investments.[2] Thus, as with other major business areas, top companies treat IT assets as a portfolio rather than an independent series of projects. Doing so allows for a better understanding of where particular strategies can be applied, and what value can be brought to the business.

Ideally, the portfolio focus is in three areas—operations, business enablement and innovation—where IT can have a significant impact on shareholder value and the bottom line.

Operations. Managing mature and data-center technologies to improve information systems

and support services, establishing higher levels of effectiveness and cost efficiency.

Business enablement. Managing IT tools that can transform or improve the company's core business processes to take business operations to world-class levels. The measure of success is not merely cost reduction, but also enhanced processes and profitability.

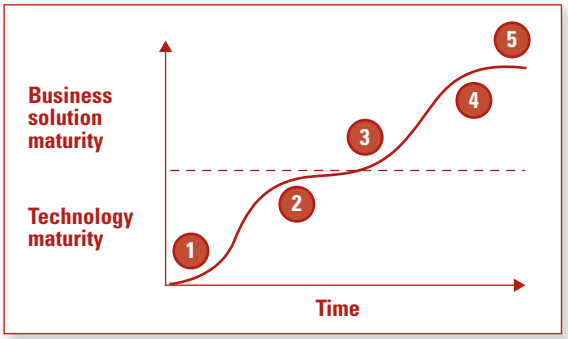
Innovation. Managing technologies that can help achieve breakthrough innovation to create competitive strategies and transform market dynamics. Such technologies can reposition the company against its competitors or allow it to enter markets in which it did not previously compete.

By viewing IT as a portfolio, senior management focuses on how each technology contributes to business success, attaining a clearer sense of the level of human and monetary resources to devote to each type of technology. (Interestingly, most companies dedicate the fewest resources to innovation, which represents the biggest opportunity to increase shareholder value.)

The portfolio approach helps IT executives communicate value to others in the organization. One banking client used this approach to communicate the measurable value its IT architecture program brought to the entire organization. The bank had three major objectives: increase efficiency, improve effectiveness of its operations, and deliver innovative products and solutions to its customers. To demonstrate how IT supported these goals, IT executives classified their IT architecture projects in terms of how the project would be used to improve operational excellence, business enablement, and innovation. By explaining and measuring how something as invisible as IT architecture could improve the bank's financial standing and contribute to its strategic initiatives, the IT executives were able to secure continued commitment to the program from business leaders.

Figure 2

IT governance must determine when to adopt new technology



1. Technology emerges: begin to track potential business solutions and educate the organization
2. Technology begins to mature: address innovative business solutions as they emerge (for example, launch pilots of relevant technologies)
3. Early business adoption begins: decide whether this technology can differentiate the business
4. Business solutions begin to mature: balance tolerance for risk, cost, timing and value of mainstream predictable technologies
5. Business solutions mature: adopt standard implementations to keep pace with competitors

Source: A.T. Kearney

2. Technology ignorance is not accepted. IT participates in technology investment decisions.

A big challenge for a company is deciding at what point to invest in new technology. The decision requires that executives stay informed and have the necessary skills and tools to know when to adopt emerging technologies. Our research reveals the best time for adoption is generally in the early adopter stage—after technology has matured into a business solution and when value derived from the technology has become more tangible *(see figure 2)*. Companies that adopt technology in this stage typically outperform their competitors.

We can illustrate this by looking at the evolution of the electric motor. In the early 1900s, manufacturers built their products in multi-story buildings where each floor contained a machine that manufactured a component of the product. The different machines were powered by large engines located in the basement of the building, joined together in a tangle of interconnected belts; if one belt failed, the entire process stopped. The advent of the electric motor changed the manufacturing process forever. Companies invested in machines that operated via their own electric motors, thus putting an end to the need for the big engines in the basement or the tangle of belts and bottlenecks. Businesses reorganized and moved into single-story facilities—the assembly line was born.

Businesses need a new equation—one that makes IT governance a strategic component of the overall corporate strategy.

What can we learn from this example?

- Deriving value from a technology investment depends on where in the lifecycle the investment is made—typically the point at which the technology has matured and delivers tangible results.
- Adopting transformational technologies (such as the electric motor) requires a change in the way the business operates.
- Investing in new technologies can be a catalyst for future returns.

We are often asked how a company can determine if a new technology is worth the investment. Our answer is to evaluate the investment from both a technical and a business context—determining its affect on competitive positioning and the bottom line. The following are central to the evaluation:

Costs. The cost of implementing technology declines as the technology matures, so when evaluating a technology investment, all costs are considered, including direct IT costs of development, maintenance and portfolio management.

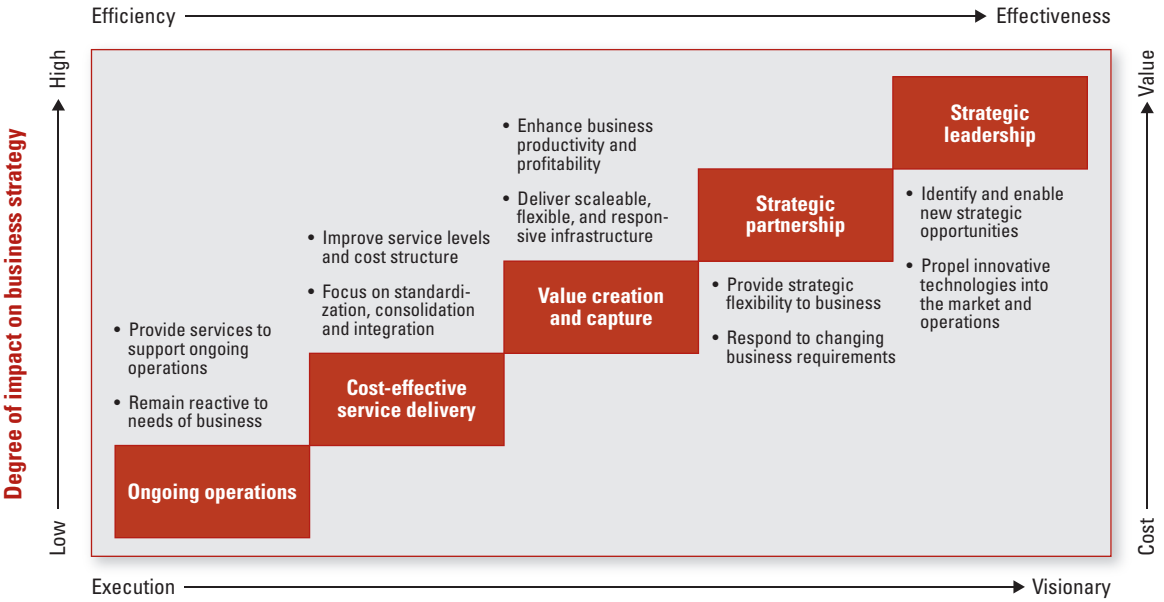
Value. The real value is not in the technology, but in the realization of a new business solution or process. A business solution can lag behind technology by months or years.

Strategic alternatives. An early investment in technology may or may not pave the way for future technologies or profitable and strategic business options. Those that provide the most downstream options should receive serious investment consideration.

Although companies can't guarantee stellar returns on emerging technologies, they can take steps to minimize their risk and maximize their potential. By understanding the solutions, how to evaluate them against desired value and when it is appropriate to adopt new technologies, companies can reap more from their investments.

3. IT has board of director-level oversight and clear executive leadership. Tyco International, Ltd., FedEx and JPMorgan Chase & Co. are just three of the many Fortune 1000 companies with established corporate-level IT governance councils.

Figure 3
IT governance ensures business-technology alingment



Source: A.T. Kearney

These councils, with responsibilities and business impact comparable to those of the compliance, audit and compensation committees, report regularly to the board of directors. The IT council and board have two primary responsibilities: to ensure IT is aligned with the business strategy and to assess the performance of IT across several key areas. Let's take a closer look at what each means.

Ensure alignment with the business strategy. The IT council and board evaluate the role of IT and determine whether it supports the organization's business strategies and objectives *(see figure 3)*. For example, Sabre's passenger reservation system runs daily scheduling and revenue management for its many clients, including American Airlines. Such a system must have fail-safes to protect against a failure that could cause irreparable damage to the company. The objectives—quality, security, reliability and maintenance of existing investments—are closely aligned with those of the audit committee and incorporated into its charter.

One mistake that councils make is failing to get the basics right and eventually losing all credibility. To avoid such missteps, leading companies first make sure IT is effectively managed and does not fail the business—employing tactics such as risk mitigation, service-level agreements, and codified backup and recovery. Over time, as the council's capabilities mature and evolve, it will be better positioned to work with the business and the board as a strategic partner.

Assess IT performance. The next step is setting the right agenda and topics for the IT council and

Board of Directors to manage. Their responsibilities are mainly in three areas:

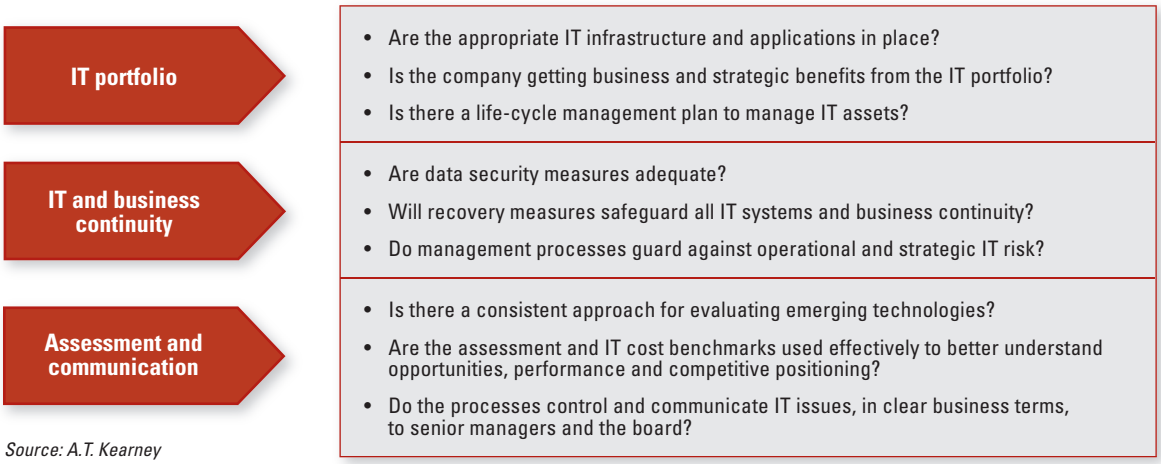
- *IT portfolio.* Ensure the IT portfolio supports business goals and delivers innovative business solutions, primarily generating appropriate returns on the cost of capital, and ensuring assets continue to deliver value and are upgraded over time.
- *IT and business continuity.* Analyze and manage the major risks associated with IT, including data protection, backup and recovery mechanisms and business continuity plans. Board input is necessary to ensure appropriate risk levels, contingency plans and manual processes are in place in the event they are needed.
- *Assessment and communication.* Assess the performance of IT continually to ensure effective delivery. This includes overall evaluation of technology, benchmarking against competitors and best practices, and measuring IT against its stated goals.

Several key questions will help the board and IC council members assess IT governance competencies *(see figure 4)*. The answers will help identify initial opportunities and priorities.

4. There is no "one-size-fits-all" IT governance model. A one-size-fits-all approach to technology almost never works, especially for business units with different markets, products, channels and customer needs. IT governance at its best reaches a balance—broad enough to function across all business units but specific enough to address the unique needs of each. From an organization design perspective, the critical question is how centralized the governance model should be. The answer can be summarized in three points across a scale of governance behavior—enterprise-wide, federation and business unit autonomy.

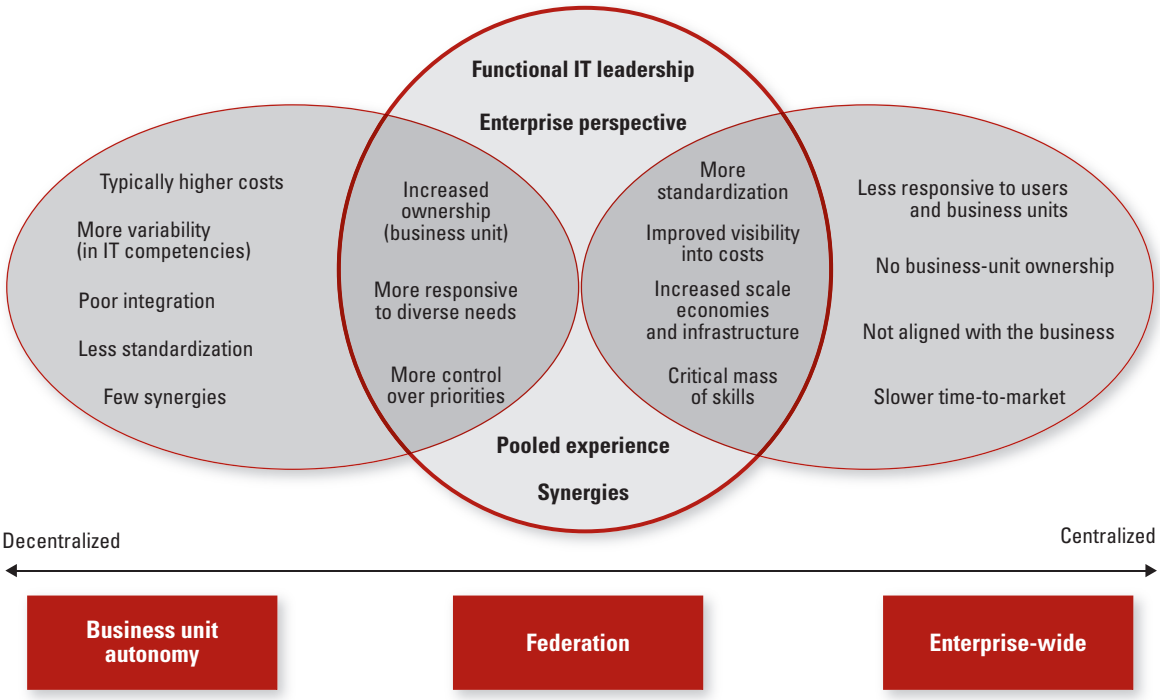
Larger organizations, with similar IT needs across business units, often lean toward the enterprise-wide approach, using their size and economies of scale to cut costs and fulfill common needs.

Figure 4
Key questions to identify initial areas of focus for IT governance



Source: A.T. Kearney

Figure 5
IT governance alternatives (advantages and disadvantages)



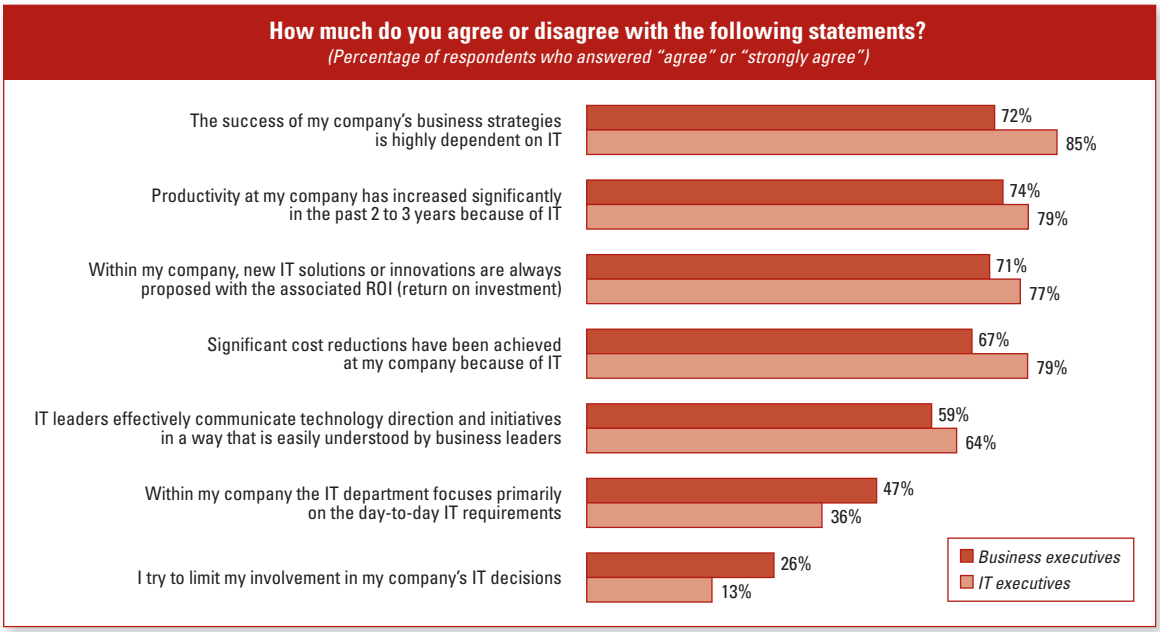
Source: A.T. Kearney

At the other extreme is business unit autonomy, which allows individual business units to control their own IT resources and strategic direction—an approach that enables IT delivery for discrete business units with unrelated business needs and capabilities. There are pros and cons to both approaches. With the enterprise-wide model, companies can cut costs, improve operability and maintenance; but they may sacrifice responsiveness to end-users and business units. The autonomy model allows business units to be independent, which facilitates responsiveness and speed to market, but can result in higher costs and less standardization.

The third governance model, federation, attempts to incorporate the most positive characteristics of the two extremes *(see figure 5)*. It establishes alliances and formal governance processes not only to realize enterprise-wide opportunities but also allow business units to control their own IT needs. We introduced this approach at a $40 billion U.S. conglomerate where previously the IT group and management team communicated only when systems went down. The IT group was forced to solve issues in an unwieldy systems environment that stretched across dozens of business units.

This company had previously tried both the enterprise-wide model headed by a CIO and the business unit autonomy model, but neither approach delivered benefits or facilitated effective

Figure 6
Business and IT executives' perception of IT



Source: A.T. Kearney

coordination. Using the federation model, the company established an IT leadership council that included representatives from both IT and business units across the firm. Council members developed a long-term strategy and wrote a mission statement to better leverage IT opportunities throughout the company and to support long-term business unit strategies. The council, now part of the larger overall business-governance process, continues to meet regularly and has defined areas where it can build IT synergies across all business units.

5. IT is an essential part of corporate planning and strategy. Almost 85 percent of companies, according to a recent survey, have a formal IT governance structure, or are actively developing one. Roughly 72 percent of business executives believe the success of their business strategies depends heavily on IT, and 71 percent say that investment in IT is proposed with the associated return on investment *(see figure 6)*. But thinking that IT should be aligned with the business and actually aligning it are entirely different matters. In a separate A.T. Kearney research effort, only one-third of the companies researched categorize their IT planning as "aligned" with business strategy. These findings highlight the need for two-way communications in which IT shapes the direction of the business and the business shapes the strategic course for IT. Such direction-setting occurs in two scenarios: shaping daily demand for IT and establishing regular corporate strategy and planning processes.

For instance, the IT group ensures that new demand for IT is in line with technology

capability roadmaps and new projects or requests for IT services are directed toward existing IT capabilities. Requests for non-standard IT services go through a senior-level strategic-planning process to ensure such investments are worth the additional cost and attention. The idea is to balance technology that supports business processes with technology that enables them, while directing funding toward higher-value initiatives.

One of our large retail clients used both scenarios. The company established the position of business relationship manager (BRM), charging this person with understanding both the needs of the businesses being served by IT and the technical capabilities necessary to do so. In this case, the BRM guided IT planning and investments toward standard technologies; at other companies, the BRM is accountable for the return on investment of the entire technology portfolio.

FedEx is another good example. FedEx's pioneering package-tracking system, a key competitive advantage for decades, would not have been possible without a strong link to IT. Rob Carter, chief information officer for FedEx, calls the IT organization "the competitive glue that holds all of our business units together." Carter serves on the five-person executive committee that plans and executes the company's strategic business activities.

6. IT plays an active leadership role in transformation and innovation. Given its involvement in all aspects of a business, IT has a unique vantage point to steer innovation within business operations. The IT group not only sees all processes across the company but also the opportunities to improve them. When IT and the business units jointly own innovation initiatives, they ensure that only the highest-value projects are selected, with IT governance overseeing the projects so they are managed appropriately from beginning to end.

There are numerous ways in which IT can encourage innovation. In most businesses, for example, IT manages the technology that supports enterprise resource planning (ERP) systems. From this vantage point, IT can recommend folding more processes under the ERP umbrella. This can reduce costs and improve productivity without a large investment of time and capital for new systems and infrastructure. When Detroit Diesel, a subsidiary of Daimler AG, moved to a common-asset-management system, it integrated the new system with its existing ERP systems. The move reduced purchase-order processing time by 70 percent and increased available inventory by 25 percent. The company implemented this new business process for less than $1 million.

Once a reputation for innovation is established, IT can take on more transformative endeavors. Another client, a retail gas provider, used IT to shift from a decentralized business model to a centralized one, building a partnership between the business and IT that transformed both the company and the industry *(see sidebar: Repairing a Commodity Business on page 10).*

Encouraging innovation is almost always worth the effort. According to our research, growth rates for innovative companies are 68 percent higher than their less innovative competitors, while 63 percent of early adopters of technology quickly outgrow their competition. Top companies establish innovation, research and development (R&D), or advanced-technology groups to continually probe the market for the next leading-edge technology—turning technology innovation into positive business results. For example, Apple's ability to constantly drive innovation into their product lines has led to superior performance in PCs, music accessories, and mobile devices. As an added bonus, Apple has done this by spending a little more than 3 percent of its revenue on R&D.[3]

[3] *Apple 2007 annual report.*

Repairing a Commodity Business

In the retail gas industry, profits rely on weather conditions and operational efficiency. Not able to rein in Mother Nature, companies direct their attention to improving operations. But the industry structure discourages dramatic operational shifts. It's a slow-growth, fragmented commodity business—with margins of about 5 to 10 percent. Indeed, the top 50 companies own less than half of the combined market share. In this environment, effective IT governance can transform a business—improving operations and bottom-line profits.

The gas company we worked with faced multiple challenges. Its organizational structure was decentralized, with hundreds of retail operations providing full service to relatively small territories. Delivery drivers largely guided operations, determining which customers required gas and when it should be delivered. Thus, management had little perception of, or control over, daily operations.

The biggest obstacle, however, was the company's IT systems. Outdated applications, which spread across hundreds of service areas, ran on unconnected platforms that were incapable of sharing data. Core business functions—customer management, collections, pricing and distribution—were supported by customized legacy applications.

Boxed in on various fronts, executives decided to focus on improving customer service and delivery operations—two areas rapidly becoming differentiating factors in this market. Working with both business and IT stakeholders, we launched a balanced mix of centralized and decentralized initiatives that put the customer at the center of operations. It was an organizational and business restructuring that integrated technologies across multiple locations and sites. The result was a revamped IT infrastructure that improved the economics of each delivery and reduced overall fixed costs. The company is now able to deliver gas and meet customer demand with 30 percent less trucks in the fleet. This company's success in delivering a new business and IT architecture fundamentally altered the landscape and competitive levers in the retail gas industry.

7. IT's impact on the business is measured and monitored. The final habit of effective IT governance is measuring the quality and cost-competitiveness of the IT capability, treating it as any other vital aspect of the business. In the past, measuring IT performance mostly involved tracking technical performance (uptime and number of severe events) and costs (IT spending as a percentage of revenues or per user). This data was not only limited but also typically viewed only by IT professionals.

Today, measuring IT performance has improved, but is still not ideal. According to Gartner, only 40 percent of companies measure IT's impact after implementation. Without tracking, most companies miss the opportunity to quantify what works and fix, replace or discontinue those IT systems that do not support profitability.

Sound IT governance requires answering two questions: How effectively is IT delivering the required services to the business? How do the company's IT processes and performance compare to peers and best practice companies?

To answer the first question, perform a total cost of ownership (TCO) analysis. A proper TCO calculation will document a true 360-degree view of the IT function, including costs, improvement

opportunities, and areas that demand a higher proportion of total IT costs. Armed with this information, senior managers can govern IT more effectively by investing in technologies that provide suitable functionality while still increasing business value.

Answering the second question requires periodically benchmarking against best practices and successful peers, which can be done after the TCO analysis. Key areas to benchmark include not only overall IT spending and spending-per-user, but also areas that are tied directly to the business. Companies that benchmark their IT costs to provide customer-facing products or services have a better understanding of how IT is delivered today, and how it should be delivered to ensure future competitive positioning. Such benchmarking is part of an overall effort to emphasize strategic improvements rather than mere numbers.

We can illustrate this using an example of a large bank that wanted to compare technology costs for its treasury-service products against similar banks. We benchmarked IT costs for its top products such as wire transfers, automated clearing house, online access, and integrated payables and receivables. Four areas were identified as significant opportunities: creating clear product strategies and roadmaps, establishing business justification for products and enhancements, defragmenting the IT architecture base, and reducing overhead IT expenses. The effort, coupled with a TCO analysis for the entire treasury-services IT department, gave senior bank officers the information needed to launch targeted efforts to address cost and competitive issues. The initial results have been promising, and there is now more cooperation between IT and the business.

IT governance and oversight councils can ensure that boards and senior managers regularly measure and monitor IT performance. With the fast pace of business, such efforts may diminish over time, but they are vital to an IT department that positions the business for success.

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Developing the Right Habits

While it may take a year or more to implement an IT governance program, the first three months are the most noticeably productive. This is the time to identify members of the council (with representatives across functions), make the business case for the most deserving projects and programs, and track performance and results. The following are essential to a successful IT governance implementation:

- Identify the optimal IT governance model based

on the needs of the business units and current IT capabilities.

- Determine the major structures needed to manage IT governance. The structures include risk management, a cross-functional oversight committee and a sub-committee of the Board of Directors. Accountability is assigned to top-level executives who understand how their performance will be evaluated and communicated to the board.
- Clarify the current standing of the IT asset portfolio, including assessing IT systems to determine operational levels now and what will be needed in the future.
- Instill the seven habits for IT governance in the overall structure and manage the related committees and councils.

Companies with highly effective IT governance prioritize and communicate the structures, topics and essential changes across the organization, involving both IT and business leaders. Bringing together upper management is vital for ensuring a detailed look at how closely IT is tied to business performance. Effective IT governance is a long journey, but success can be realized by those who understand the path—and the seven habits that keep them on course.

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