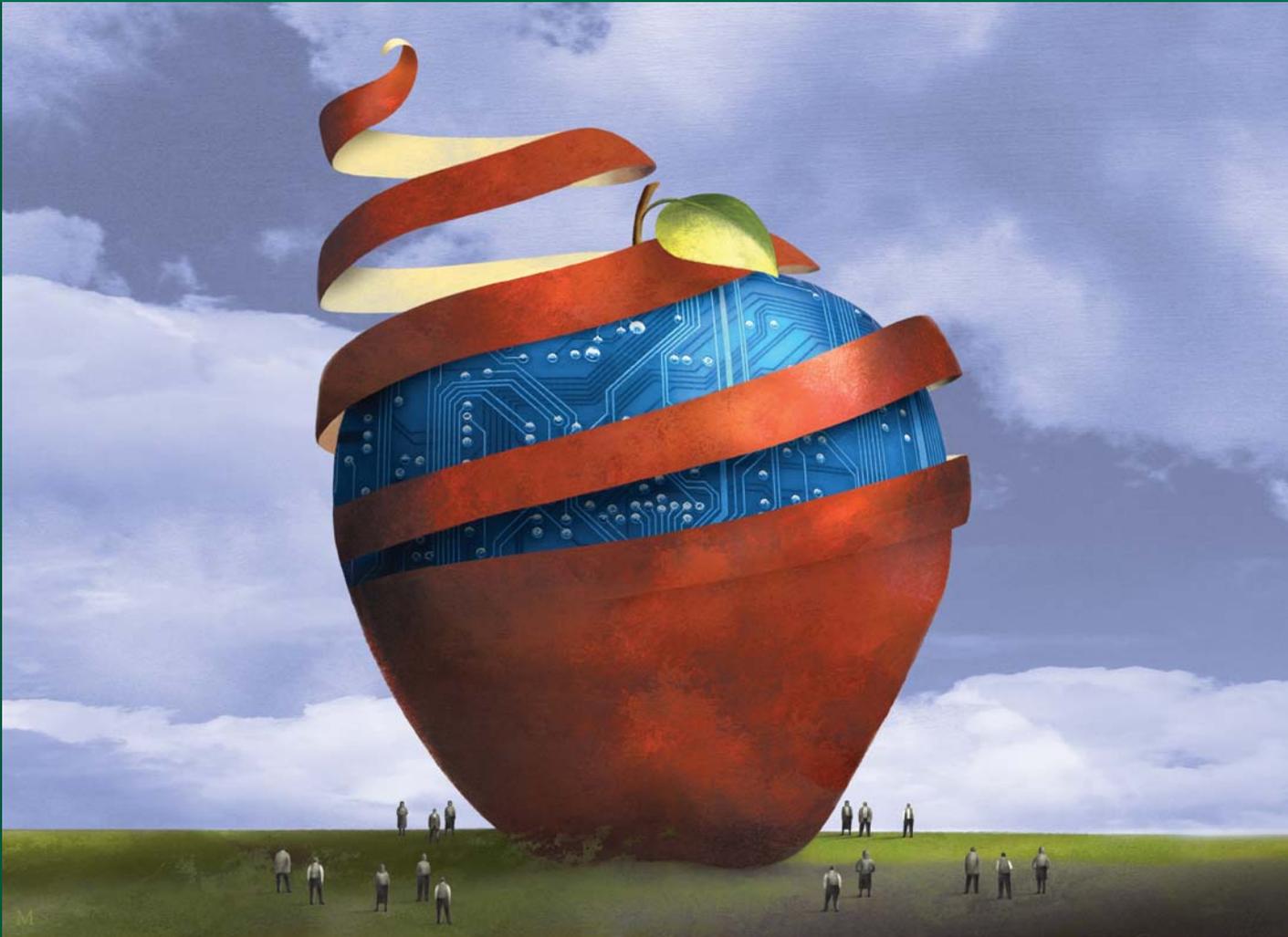


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THE BOSTON CONSULTING GROUP

HOT TOPIC:
IT in the Downturn



IT Advantage

Putting Information Technology at the Core of Business

The Boston Consulting Group (BCG) is a global management consulting firm and the world's leading advisor on business strategy. We partner with clients in all sectors and regions to identify their highest-value opportunities, address their most critical challenges, and transform their businesses. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with 66 offices in 38 countries. For more information, please visit www.bcg.com.

Preface



I often have the pleasure of working with a new breed of CIO. These are frequently people who ran a business before running an IT organization. They recognize IT's unique value and want to run the IT organization like any other business—and see it generate value like any other asset. If you are one of these new-style CIOs, then this publication is for you. And if you are a CEO, CFO, or other corporate leader who shares the vision of business-savvy IT and IT-savvy business, then it is for you, too.

IT Advantage: Putting Information Technology at the Core of Business offers a mix of news, conversations, ideas, and hard data about best practices, drawn from BCG's unique perspective on the IT world. It starts with the topic at the forefront of every executive's mind: the economic downturn. Needless to say, the economy will impact virtually every aspect of IT in 2009, and the pressure on budgets and discretionary spending will be substantial. Still, as we make clear in the piece, there will be significant opportunities for IT to help transform the business—and transform itself—in the year ahead.

There follows a two-part series on the future of the IT organization: the first presents a blueprint for transforming it from a support-service provider into a true business partner, and the second features an interview with the CIO of Procter & Gamble, who talks about how and why the consumer giant has made IT an integral part of its business.

Given the scale of the financial crisis, we then have two pieces on IT in the financial services industry: one applies our *lean advantage* approach to operations and IT in banking, and the other shows how our benchmarking framework has provided powerful new ways of measuring and managing IT's relationship with every part of the insurance business. The next article is an opinion piece on the emergence of so-called "green IT"—and how concern for the environment might actually lead to improved performance and reduced costs. We end with a portrait of the Innovation Value Institute, a unique consortium that is creating a new standard for assessing IT's contribution to business value.

We hope that you find these articles stimulating and that you'll send any reactions, suggestions, and ideas to ITAdvantage@bcg.com. We look forward to hearing from you.

Wolfgang Thiel
Senior Partner and Managing Director
Global Leader, Information Technology Practice

Contents

| | |
|---|----|
| HOT TOPIC Demonstrating Leadership: How the Chief Information Officer Can Help Beat the Downturn | 2 |
| FOCUS Reinventing the IT Organization: Five Strategies for CIOs | 7 |
| FOCUS: Q&A The IT Organization of the Future: An Interview with Filippo Passerini, CIO of Procter & Gamble | 14 |
| INDUSTRY SPOTLIGHT: BANKING Lean Advantage in Banking: Bringing Together IT and Operations to Deliver Customer Value | 18 |
| INDUSTRY SPOTLIGHT: INSURANCE What Gets Measured Gets Done: How the Collection and Benchmarking of IT Data Can Drive Gains for Insurers | 23 |
| VIEWPOINT Why Green Is More Than "the New Black" | 29 |
| OUTLOOK Coming Soon: A Global Gold Standard for IT Management | 31 |

Demonstrating Leadership

How the Chief Information Officer Can Help Beat the Downturn

by Ralf Dreischmeier and Wolfgang Thiel

The financial crisis is far worse than anyone expected. Initial estimates put the likely losses of financial institutions globally at around \$1.5 trillion, with a resulting decline in credit capacity of \$19 trillion. The International Monetary Fund subsequently estimated crisis-related losses of nearly \$1.5 trillion on the worldwide holdings of U.S. assets alone.

The parallel effect on the real economy—which BCG has described in a number of articles in its Collateral Damage series—is becoming pretty clear.¹ It is no longer a question of *if* there will be a recession; the question now is how bad it will get and how long it will last. Our current expectation is that the United States and Europe will suffer a deep and prolonged recession. Asia, although in better shape, will not be unaffected.

In this difficult climate—the worst for business since the Great Depression—we advise companies to act rapidly and systematically to define the size of their problem, understand where and how to address it, and take action.

Clearly, the IT organization—and the chief information officer (CIO) as its leader—will be affected in a significant way. In 2009, we expect that global growth in IT spending will be 1 percent at best—down from more than 5 percent in 2008. Many companies will cut their IT budgets, and available discretionary spending will shrink significantly.

However, for all the gloom, we think that the downturn presents a significant opportunity for CIOs and the IT function. Technology is at the heart of many industries and has become a key driver of business transformation. The CIO and the IT leadership team can—and should be encouraged to—play a pivotal role in navigating the busi-

ness through the downturn. IT can be a key driver of change and can even help the company emerge from the recession stronger than before.

But to ensure that their companies can survive the downturn and thrive when the upturn comes, CIOs need to consider a series of practical steps as part of a well-thought-out action plan.

Five Ways to Beat the Downturn

The challenge most companies are facing at the moment is the need to prepare for short-term pain while at the same time keeping an eye on longer-term opportunities. The CIO has a major part to play and is, in many respects, uniquely positioned to create value for the company.

In our view, there are five action areas that CIOs should focus on:

- ◇ Reducing IT costs in the short term
- ◇ Optimizing investments to create short- and medium-term business value
- ◇ Managing the human resources agenda
- ◇ Enabling business transformation
- ◇ Transforming the IT function itself

1. To read *Collateral Damage, Part 1: What the Crisis in the Credit Markets Means for Everyone Else*; *Collateral Damage, Part 2: Taking Robust Action in the Face of the Growing Crisis*; *Collateral Damage, Part 3: Asia, Advantage, and Action*; and *Collateral Damage 4: Preparing for a Tough Year Ahead: The Outlook, the Crisis in Perspective, and Lessons from the Early Movers*, see www.bcg.com.

Reducing IT Costs in the Short Term

Cost reduction has been on the CIO's agenda for a long time; arguably, it never disappeared. But the current crisis calls for an altogether different, smarter approach to cost reduction. This approach should include the following:

- ◇ *De-layering the IT Organization.* This has twin benefits because de-layering not only helps cut costs—and frees up resources for transformational business changes, such as postmerger integration—but also improves the speed with which the IT organization can respond to business demands and meet internal service needs.
- ◇ *Reviewing All IT Contracts and Sourcing Arrangements.* These should be reviewed not only from a procurement perspective but also from a trust-based-relationship perspective: work with vendors to find win-win solutions.
- ◇ *Tackling Business-Driven IT Costs.* There should be an assessment of the number of personal computers per employee, as well as the level of service offered to the business. In the current climate, there will be a greater readiness to accept a lower PC-to-employee ratio (which, by the way, in many organizations is greater than 1.3), slower response times, and silver or bronze—rather than gold—service standards.

Optimizing Investments to Create Short- and Medium-Term Business Value

Discretionary spending will be under extreme scrutiny in 2009. CIOs must find a way to minimize project spending. But they must simultaneously protect investments that deliver short-term impact (that is, improve the cash or liquidity position) or medium-term value (that is, capabilities or new business models for the upturn) for the company.

Key actions for the CIO include the following:

- ◇ *Protecting the Financial Fundamentals and the Existing Business*

IT Action Areas in a Downturn

- ◇ Reduce IT costs in the short term
- ◇ Optimize investments for business value
- ◇ Manage the human resources agenda
- ◇ Enable business transformation
- ◇ Transform the IT function itself

- *Review cash-management and credit-risk systems.* The business will need robust systems that provide reliable information and simulation capabilities for the management of cash and liquidity in the short term.

- *Improve overall risk-information architecture and institute early-warning systems.* For many businesses, in particular financial services companies, greater control mechanisms for managing

financial risks will be required. All companies will need an early-warning system to quickly detect issues regarding key value drivers such as working capital, customer attrition, and supply-chain performance. An effective risk-information architecture and early-warning system will be key building blocks for many companies going forward.

- *Enable customer retention initiatives.* Customer retention will become even more important for the business during the recession. IT support—in terms of providing accurate customer data and fast implementation of required systems changes—will be a key capability.

- ◇ *Reviewing All Large Projects.* There will not be many new large-scale projects in the portfolio for 2009. But the existing ones should be reviewed and challenged in terms of their potential creation of real (short-term) business value. Based on BCG's experience, about two-thirds of "monster" projects do not deliver on time or on budget; these types of projects should receive particular scrutiny.

- ◇ *Investing in "Clean the Mess" Application-Retirement Programs.* Demand for IT projects will decline significantly next year because of budget constraints on the business side. As a consequence, available IT resources can be used for simplification initiatives that were not undertaken in the past owing to supply constraints. This is a unique opportunity to tackle IT complexity and deliver a step change in IT cost and speed.

- ◇ *Identifying Capabilities That Will Make a Difference.* Investments made now will come on-stream once the

recession is over. The CIO should work with the company's other senior executives and play a lead role in identifying those capabilities that will make a real difference.

Managing the Human Resources Agenda

The coming months will be uncertain times for most IT employees. The real threat of redundancy will affect morale and, as a consequence, productivity. The CIO and the IT leadership team have to lead through this difficult time.

Recommended actions for the CIO include the following:

- ◇ *Reviewing the Fit of People and Roles.* The next year will be very different from the previous five. To ensure that the IT organization is firing on all cylinders and maximizing its contribution to the company, the CIO should make sure that the right people are in the right jobs. In particular, the CIO must ensure that the IT organization has in place experienced project and program managers—those who can make transformational change happen. Tracking and managing those skills and capabilities will be crucial in the coming months.
- ◇ *Taking Care of Top Talent.* It is essential for every CIO to take care of his or her staff—and, in particular, the top talent. A conscious effort to make these individuals feel wanted and valued will help keep them focused and motivated.
- ◇ *Communicating Regularly.* It is critical that the CIO and IT leaders maintain a regular dialogue with their teams—and dialogue means face-to-face interaction, including town-hall-style meetings. A well-structured downturn communication plan will help keep morale up and the troops focused.

Enabling Business Transformation

The downturn should be used as a catalyst for substantial business transformation. Other industries besides financial services will consolidate. Companies will have to reconfigure their business models and rethink their role in the value chain.

Potential actions for the CIO include the following:

The IT organization is in a prime position to create value across the enterprise.

- ◇ *Proactively Engaging in Business Transformation Activities.* The IT organization has to be involved in these activities right from the beginning in order to ensure that the company avoids implementation bottlenecks in later stages and enjoys the transformation's short-term benefits. But because the IT organization is arguably the only part of the company that has an end-to-end view of the business processes, it is also in a prime position to identify opportunities to reduce costs and create value across the enterprise. The CIO should take the lead and create value for the overall corporation.

- ◇ *Establishing an Acquisition or a Divestment IT SWAT Team.* Companies are reviewing their business portfolios and will divest non-core parts. At the same time, companies will consider transformational and opportunistic acquisitions. In many cases, IT will need to play a key role. A robust integration or divestment methodology that enables the business to disentangle parts of the portfolio and integrate new acquisitions quickly (thereby maximizing integration synergies) can create significant business value. Very often, this will also require a review and at least a partial redesign of the IT architecture.

- ◇ *Creating, Together with the Business, a New-Business-Model Team.* The economics of many industries will change because of increased competition, changing input costs, government intervention, and new trade policies. This will lead, at a minimum, to refinements of current business models and, in many cases, to emerging new business models. The CIO should be an active participant in these changes, because the vast majority of them will have an impact on the IT organization or even be enabled by it. In some cases, the CIO should be the key driver of these changes.

Transforming the IT Function Itself

The downturn will create many burning-platform issues. But it will also create a unique opportunity (and, in some instances, a necessity) for fundamental changes.

Potential actions for the CIO include the following:

- ◇ *Developing Bold Moves to Respond to the Crisis.* If the economic pressure continues, fundamental changes

in the IT operating model might become necessary. We would expect many IT organizations to push toward stronger corporate governance, aiming at a “one IT” approach for the whole company. For example, an IT shared-services agenda that was not supported by the business in the past could now become a reality.

- ◇ *Establishing New Ways of Working.* Just as consumers will be far more price sensitive, the IT organization will have to adjust its working model in response to the downturn. There will be no time for costly solution development. IT will have to become creative, fast, and very efficient in order to help steer the business through the downturn. This means considering multimode operating models—that is, Web 2.0 or rapid-development approaches—as well as traditional development methods. (For more on multimode operating models, see “Reinventing the IT Organization: Five Strategies for CIOs,” which follows this article.)
- ◇ *Introducing Product or Solution Managers.* Most IT organizations suffer from a lack of end-to-end ownership. The introduction of a product manager who owns an IT product or solution across all technical layers and organizational units will create this continuum. It will also allow proper total cost of ownership (TCO) management and improve alignment between business and IT.

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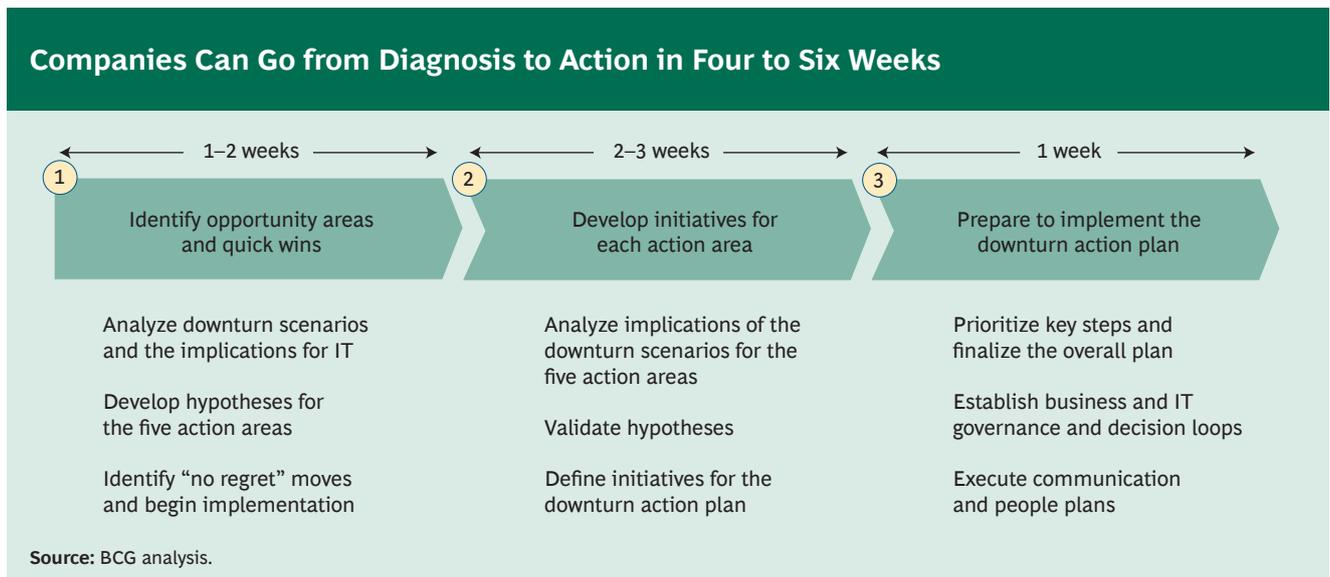
What Next?

We strongly believe that IT organizations have to act *now*. Clearly, nobody can predict what the future will bring. A believer in Keynesian economics might be confident that the International Monetary Fund’s proposed global fiscal-stimulus plan (to be delivered in a concerted fashion by the world’s governments and equivalent to at least 2 percent of world GDP) would be sufficient to overcome the recession. But that plan might never materialize. And even if it does materialize, it might not be sufficient to solve the problem. Companies and their IT organizations should be realistic and proactive.

A Downturn Action Plan for the CIO

Every CIO should put a systematic action plan in place. (See the exhibit “Companies Can Go from Diagnosis to Action in Four to Six Weeks.”) Development of such a plan should take no more than six weeks and should focus on the following three steps:

1. Identify opportunity areas and quick wins (approximately one to two weeks)
 - Adopt or develop downturn scenarios and analyze the implications for IT
 - Develop hypotheses for the five action areas



- Identify quick wins and “no regret” moves and start implementation
2. Develop action plans for all five action areas (approximately two to three weeks)
- Analyze implications of the downturn scenarios for all five areas
 - Validate hypotheses
 - Define initiatives for the downturn action plan
3. Prepare for the implementation of the overall downturn action plan (approximately one week)
- Prioritize the key steps across all of the action areas and finalize the overall plan
 - Establish business and IT governance and ensure rapid decision loops
 - Execute communication and broader people plans

Managing Human Resources

To ensure that the IT organization is firing on all cylinders and maximizing its contribution to the company, the CIO should make sure that the right people are in the right jobs. In particular, the CIO must ensure that the IT organization has in place experienced project and program managers—those who can make transformational change happen. Tracking and managing those skills and capabilities will be crucial in the coming months.

to address the crisis but also another opportunity for the CIO to demonstrate leadership.

The downturn will bring difficult times to most companies and IT organizations. The next 12 months, in particular, will be challenging and require true leadership. If the CIO and IT leadership team can execute these recommended steps, they can mitigate the worst effects of the downturn, create business value for the company, and enhance the role and perception of the IT organization.

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Plan B

We also suggest developing in parallel a plan B—a list of activities that can be implemented if things get really bad (for example, if sales volume falls by 30 percent and prices drop by 10 percent). Potential actions could be identified as part of the scenario analysis—and they would have to be radical and formulated in response to some fundamental questions, such as the following:

- What is our last line of defense?
- What is the absolute minimum level of IT service that we can provide before we have to shut down the company?
- How quickly can we get to that level?

Having a plan B will allow you to manage risks and react quickly. Developing such a plan is not only a prudent way

Reinventing the IT Organization

Five Strategies for CIOs

by Antoine Gourévitch, Stuart Scantlebury, and Wolfgang Thiel

What will your IT organization look like in ten years? Will it even exist? Will IT outsourcing eventually reduce today's IT organization to a thin layer of contract managers? Will business process outsourcers use their own applications and technologies to execute many of your company's business processes? Will workers in your company's business functions be able to develop new applications using a multitude of Web services, making traditional applications developers obsolete?

Or will your IT organization find a whole new range of services to offer the business? Will it become more like a consulting firm, offering assistance in business process design, product design, innovation, business transformation, and even business strategy development? Might it even become fully incorporated into the business in certain areas and help deliver integrated solutions?

The IT Organization: Moving Toward a New Model

If you are the chief information officer of a large, global company, you will probably agree that your IT organ-

ization has undergone significant change in the last few years. Most likely, it is more centralized, more outsourced, and more complex—yet at the same time more cost effective. Moreover, it probably offers a much wider range of products and services than it did a few years ago: although IT operations still offer plenty of tra-

As the IT organization's role has changed, so too has its structure.

ditional transaction-processing applications—such as order entry and financial accounting—they increasingly oversee the management of corporate telephone systems, mobile phones, wireless messaging devices, videoconferencing rooms, portals (for employees, project teams, customers, and suppliers), data warehouses, data marts, business intelligence tools, and many other services. Your organization might even be using Web 2.0 techniques for customer-provided content, social networking, and knowledge management.

No longer operating as a dedicated IT service provider for specific business

units, the IT organization typically serves a range of internal businesses—at least in most large, global companies. It operates more like a business in its own right than a mere support function. As such, it tries to find ways to use common solutions that meet, in a cost-effective manner, the needs of multiple internal business areas, just as companies offer products and services that meet the needs of multiple customers.

The IT organization of a major company now also acts more like a business in its dealings with suppliers. The typical IT team manages several large, multiyear outsourcing arrangements—deploying professional procurement and vendor-management techniques that have long been used by corporate procurement specialists.

As the IT organization's role has changed, so too has its structure. As it has gotten bigger—to handle a growing number of tasks—it has been reconstituted to look more like a factory, with specialized groups operating in the same way as a factory's specialized machine centers. These specialized groups go by any number of names, including competency centers, centers of excellence, and technology towers. But whatever they are called, they are managed so as to achieve

high levels of expertise and usage and the economies of scale necessary to create a win-win situation: low unit costs and high-quality services.

This new model offers the IT organization—and, ultimately, the company—a wide array of benefits, including improved performance and reliability, better access to specialized skills, better integration of information and functionality across the enterprise, and the ability to leverage the scale of shared service centers and outsourcers for lower costs.

Challenges to Implementation—and Pressure on the Model Itself

Implementation of the model has posed some challenges, however. The biggest of these include the following:

- ◇ *Making Outsourcing Arrangements Win-Win.* Companies often complain that outsourcers are not performing according to the agreed contract, while outsourcers say the original deal was flawed and that they are losing money.
- ◇ *Making Matrix Management Work.* Business managers complain that the IT management matrix is too complex—with business relationship managers, competency center managers, program management offices, project managers, and so on—and that it is difficult to hold someone in IT accountable for meeting promises.
- ◇ *Setting Investment Priorities.* Many companies struggle to establish the right governance model—one that will allow IT and the multiple business areas to agree on IT investment priorities.

◇ *Innovation.* The almost single-minded focus on IT cost-cutting in the first part of this decade has in many cases left IT operations unable to help the business use IT in innovative and revenue-generating ways.

Orchestrating the
services of providers
will become
more challenging.

CIOs might hope that they can spend the next ten years smoothing out these and other rough edges on the new model. And, of course, they should continue to work toward more successful execution. But they should also realize that *the model itself* is under pressure. This pressure is coming from three major sources:

- ◇ *Difficulty Attracting and Retaining the Right Talent.* As the day-to-day operations and software development activities have moved to outsourcers, many of the IT organization's employees have moved, too. Those left behind have often been given new roles, such as contract managers, vendor relationship managers, performance managers, architects, and strategists—all of which are critical to the IT organization. But not all of these employees have the skills and motivation to be successful in their new roles—forcing companies either to retrain them or to look to hire from outside.
- ◇ *The Rise in Technology Content in Products, Services, and Processes.* The evolution of technology over the next ten years will also put a tre-

mendous strain on the current IT business model. The percentage of IT content in business processes and in the products and services offered to customers will continue to grow. In information-intensive industries—such as banking, insurance, and telecommunications—the trend will be to attempt to completely automate as many business processes as possible.

- ◇ *The Evolution of an Outsourcing Ecosystem.* The capabilities of IT hardware and software vendors, systems integrators, outsourcers, telecommunications firms, business process outsourcers, and other service providers will develop rapidly over the next few years. What was once a question of simply choosing among EDS, IBM, and Accenture will become an increasingly difficult task as the number of credible providers—from such countries as India, China, Brazil, Poland, and Romania—expands materially. (And the choices will only grow more complex as a new breed of low-cost outsourcers emerges in places such as Vietnam, countries from the former Soviet Union, and perhaps Africa.) Vetting, choosing among, and orchestrating the services of these providers will become progressively more challenging and time consuming.

Unless CIOs take swift action, the IT organization will be at risk of being reduced to a thin layer between the business and the specialist outsourcing firms. If this were to happen, it could be a major loss both for the IT organization and for the company as a whole, which would be squandering a valuable opportunity to leverage IT's unique, cross-enterprise perspective on the business.

The “Cemex Way”: An Integrated Design

Consider Cemex, the Mexico-based global cement giant. José Luis Luna is not just the company’s CIO; he is also responsible for the design of its enterprise business processes and for leading a business transformation program—the so-called “Cemex Way.” Since 2000, the Cemex Way has helped turn the company from a collection of country-based business units, each with its own way of operating, into a global operation with common business processes—and standard technologies to support them. Cemex IT is clearly a business transformer, having taken a true leadership role in designing the business.

Meeting the Pressure Head-On

Most IT organizations are in a position to make sure that they are not marginalized. Typically, they are connected to all parts of the enterprise—business units, functions, and regions. The smart CIO can leverage this position to create substantial value for the business and, in the process, safeguard and even expand his or her role.

To do so, however, the CIO will need to lead a significant transformation of the IT organization. This will require focusing on five key strategies:

- ◇ Redefining the role and scope of IT
- ◇ Implementing formal product-management processes, much like those used by consumer and industrial-goods companies
- ◇ Using multiple operating modes—such as the factory, innovation center, and consulting-firm models—rather than just one
- ◇ Engaging the hearts and minds of the IT work force in new ways to attract, retain, and motivate

- ◇ Building trust-based relationships with both business partners and outsourcing providers

Let’s look at each of these strategies in more detail.

Redefining the Role and Scope of IT. The role of the CIO, and of the IT organization as a whole, is changing from that of *doer* to that of *orchestrator*. The IT organization is doing fewer of the traditional, “run the business” activities—such as developing applications, running data centers, managing networks, and operating help desks—and leaving them instead to external providers. Simultaneously, it is also tapping external providers for many “change the business” activities, especially software development.

The orchestration of the activities of these providers is no simple task. It entails creating a grand design of how IT will be used in the business and taking the many steps necessary to ensure that the design can be executed. A CIO, as orchestrator, must therefore be conversant with a wide range of activities:

- ◇ Understanding the needs of the business and helping managers

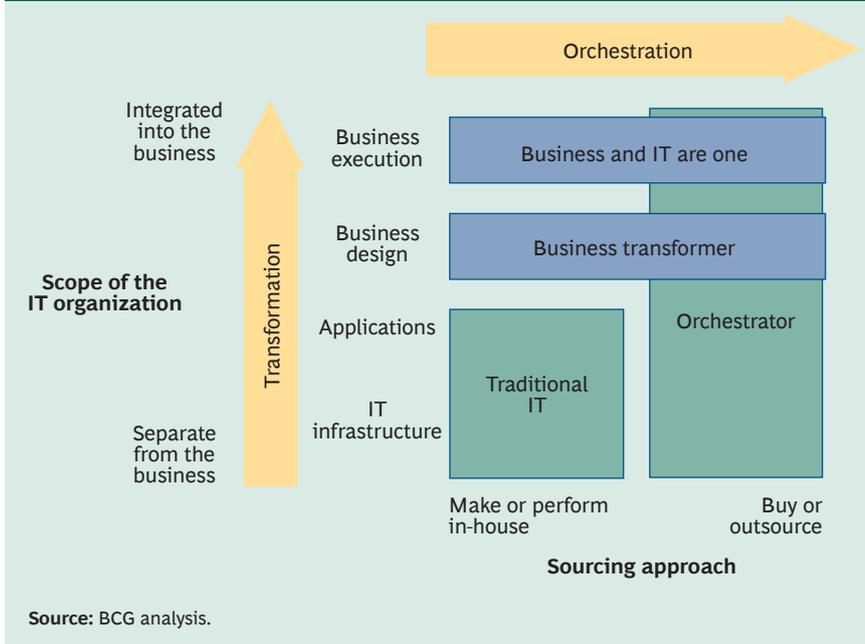
decide how to use IT for competitive advantage and operational efficiency

- ◇ Developing target architectures and strategies for information, applications, and technologies
- ◇ Determining how common solutions can be leveraged across as much of the organization as possible
- ◇ Designing common (and unique, where needed) solutions, at least at a high level
- ◇ Designing, building, and managing an organizational network of external providers and integrators that can bring these solutions to life
- ◇ Monitoring the performance of this network, with an eye toward constant improvement

The transformation from *doer* to *orchestrator* is not optional—all IT organizations must do it and do it well if they hope to survive and flourish. But this is not all the CIO should be doing in terms of reconceptualizing the role of IT in a business. As IT becomes more embedded in products, services, business processes, customer experiences, delivery channels, and other aspects of the business, the CIO must take more of a lead in “designing the business” and even in executing key business processes. Exhibit 1 shows the various options for how an IT organization can define and position itself within the company.

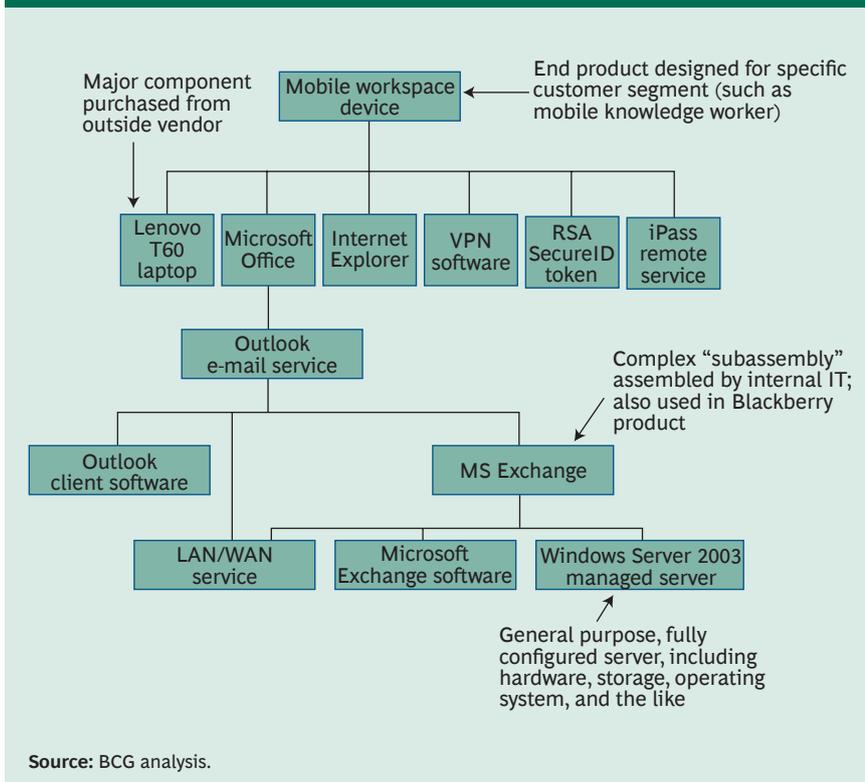
Implementing Formal Product-Management Processes. Procter & Gamble is well known for its brand-management capabilities. Each P&G

Exhibit 1. IT Can Expand Its Role and Scope Within a Company



brand, such as Tide laundry detergent or the Swiffer floor cleaner, has a brand manager who is responsible for the brand’s entire life cycle—including concept definition, market research, product design, pricing, manufacturing, distribution, return on investment, and the ongoing process of brand innovation and improvement. P&G’s Global Business Services (GBS) organization has embraced this same brand-management philosophy. GBS has brand managers who manage about 85 “products,” which include employee services and business-building solutions. By managing these services as brands, GBS helps P&G employees collaborate more effectively, get products to market faster, and make smarter real-time business decisions. (For more on P&G’s approach, see the interview with Filippo Passerini, CIO of P&G, which follows this article.)

Exhibit 2. Laptop Service Is an Example of an IT “Product”



At Germany’s second-largest insurance group, the IT organization offers its business colleagues end-to-end IT products, which are defined in business terms and include all the underlying support capabilities. One of the products is an “underwriter’s workbench,” which includes a fully loaded PC, LAN and WAN access, underwriting applications, access to client account records, and other functions underwriters require. The business pays for this on an “all-in” basis—which means that there is no need for business users to understand charges for mainframe CPU seconds, gigabytes of data storage, or data circuits.

Exhibit 2 shows a partial example of an IT product—in this case, laptop service. Note that the product has a structure just like a manufactured product, with assemblies, subassem-

blies, and purchased parts. The lower-level components have a high degree of reuse in other products.

When defining products, the IT organization should opt for as few products as possible while still meeting most of the business needs. This standardization allows the company to leverage economies of scale and learning curves to ensure highly functional, low-cost, reliable products. (See the sidebar “IT Product Management Has Many Benefits for Business Functions.”)

A product management approach will require a significant organizational change. Most important, a product manager will have to be assigned to each product and manage it through its entire life cycle, from concept to retirement.

Using Multiple Operating Modes. Many IT organizations are highly attuned to one mode of operation that is optimized for predictability, efficiency, and quality. In applications

development, for example, many are moving toward an “applications factory” approach, employing strict methodologies, Capability Maturity Model Integration best practices, and a high degree of documentation and specialization.

This is an excellent approach and is appropriate for many activities, especially those for which a high degree of standardization is required and the cost of a mistake is very high. But if an IT organization is trying to partner with another part of the business to develop IT-enabled innovations, it will probably not work very well. A different mode—one favored by the company’s R&D organization—is more likely to be successful. R&D managers are fond of saying “fail often, fail fast.” This philosophy is in stark contrast to, say, Six Sigma, which allows for one failure every 295,000 times.

So IT organizations should think about operating in at least two modes—the factory and R&D—si-

multaneously. At Disney theme parks and resorts, for example, the IT organization operates in at least two modes: software engineering and innovation partner. Most of the staff use the traditional software-engineering approach for business applications such as food and beverage services, hotel reservations, and labor management. But Disney’s New Technology Group (NTG), a small unit of about 15 people, operates more like a venture capital firm. It focuses on creating ways for emerging technologies to help transform the guest experience.

Working closely with its partners in the business, NTG helped create PhotoPass, a revenue-generating picture-taking, storing, and selling service offered to customers at Disney theme parks. PhotoPass allows all of the photos taken of customers by Disney photographers throughout the park to be stored on a server and accessed later on the Web site by the guest.

Engaging the IT Work Force. Among the toughest challenges facing CIOs going forward is to figure out how to attract and retain superior talent—a challenge that will grow increasingly difficult as baby boomers age. The best approach is to work actively to increase the engagement of current workers. Engaged employees not only are less likely to leave but also have higher productivity, provide better customer service, and contribute more to the company’s bottom line. And an engaged, satisfied work force is one of the strongest recruiting tools a company can find.

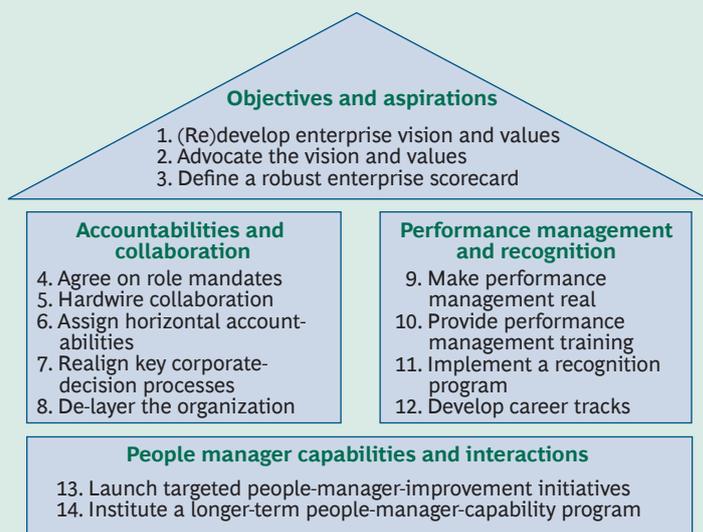
But how does a company successfully engage employees? The answer is twofold: clear performance disciplines and the right motivators.

IT Product Management Has Many Benefits for Business Functions

What IT can offer:

- ◇ A clear description of what the IT organization provides, typically through a product catalog that describes product attributes, service-level promises, and pricing
- ◇ Lower costs for IT services owing to extensive sharing of product features and underlying components across many parts of the organization (for example, business units, functional areas, and geographic regions) and the associated economies of scale
- ◇ A pay-for-what-you-use philosophy, with easily understood bills for services and full transparency of the IT cost structure
- ◇ A clearer link between business value and IT investments as business managers and IT product managers work together on product road maps
- ◇ A single point of accountability—the product manager—for all aspects of the product, from current performance to future product plans

Exhibit 3. Performance Disciplines and Motivators Can Maximize Work Force Engagement



Source: BCG analysis.

Performance disciplines include goals, performance metrics, accountabilities, evaluations, and promotion criteria. Motivators represent those elements that make individuals eager to work toward the company’s goals. Examples include a sense of passion about the organization’s mission, collaborative relationships with others in the organization, a desire to make supervisors proud, and annual recognition awards. Exhibit 3 shows 14 “interventions” that can help IT organizations set the right performance disciplines and motivators.

Another way to engage the work force is to de-layer the IT organization. Many organizations have six or seven layers between the CIO and the lowest-level employee, with the average manager having only three or four direct reports. To succeed, IT organizations will need to thin out those structures considerably. Not long ago, the IT organization of a European high-

tech company had between seven and nine layers from the CIO down to the lowest-level worker. The median span of control for managers was six direct reports. The CIO streamlined that structure aggressively, with an end result of five to six layers of management and a median span of control of eight. In so doing, the company lowered costs by eliminating layers of middle management and, more important, accelerated decision-making by removing people from the loop.

Another benefit of the de-layering process is that it helps redefine important roles. Managers can shift from supervisory roles as experts to coaches and developers of people—in essence, they become not just managers but talent managers. The result: more challenge, a greater variety of work, and more opportunities for people development throughout the IT organization.

Building Trust-Based Relationships. IT organizations need to manage two critical types of organizational interfaces: those with the business colleagues they serve and those with external suppliers of services. Too often, the default management method is to build “transaction-based relationships,” relying on mechanisms such as service-level agreements, contracts, performance reports, and sometimes courts of law. Transaction-based relationships are fine for commodity services but are completely inadequate for sophisticated services that cannot be precisely defined in advance. To manage sophisticated services successfully, the IT organization must build trust-based relationships both with business colleagues and with suppliers.

There are systematic ways to build such relationships. The following levers can all be used to increase cooperation (these levers apply whether the relationship is with business colleagues or suppliers):

- ◇ *Increase mutual knowledge.* The more each party knows about the other, the more likely they are to cooperate.
- ◇ *Reinforce integrators.* Integration mechanisms, such as committees, project or account managers, governance processes, and joint work plans, can help resolve issues between parties. For example, one company established an Enterprise Investment Committee (EIC) composed of business and IT leaders. The EIC was charged with looking for cross-business-unit synergies, capturing maximum business value from IT projects, and ensuring that IT investments

were aligned with the company's strategic priorities.

- ◇ *Increase the amount of power.* If together the parties do not have enough power to meet the joint objectives, look for ways to add power—money, authority, or people—to the system. A Canadian services company defined an enterprise strategy process that gave the business groups more influence over the IT vision and also gave the IT organization more influence over the business strategy.
- ◇ *Expand the “shadow of the future.”* Decisions that are made primarily in order to optimize short-term performance can often have negative longer-term consequences, and it is important to establish accountability. Ensure that decision makers are in place long enough to enjoy the fruits of success—or to suffer the consequences of failure. A North American bank, for example, developed an integrated three-year view of the strategy for business groups, business units, functions, back-office operations, and IT. It also instituted post-implementation benefit-realization tracking and tied the results to business-unit and individual incentives and performance management.
- ◇ *Enlarge the domain of reciprocity.* Look for ways to encourage people on one side to help those on the other. Build a virtuous circle where each side does favors for the other, knowing that the favor will be returned. For example, a large company with multiple business units instituted joint ac-

countability for IT costs: the IT organization was responsible for hitting target unit costs for IT services, and the business areas were responsible for managing their respective consumption of the services.

IT investments
should be aligned
with the company's
strategic priorities.

- ◇ *Modify the payoff matrices.* Make sure that the performance measures and incentives on each side do not pit one side against the other in a zero-sum game. Consider incentives that are aligned with joint performance measures. In one company, IT leaders were measured and rewarded not only on IT unit costs but also on business and end-customer results, total IT costs, quality of service, and the quality of the partnerships with their business colleagues.

The IT organizations of major companies are at a crossroads. One road leads toward a much smaller IT organization that essentially acts as a coordinator of multiple external providers. The other leads toward IT becoming the overall designer of a company's business architecture—and perhaps even taking on some responsibility for business process execution.

Not all IT organizations are in a position to take the second path, and it

is not imperative at all companies for their IT organizations to do so. But for CIOs who believe that there is both the opportunity and the imperative, the five strategies described here offer a way to realize that vision and transform the IT organization from a support-service provider to a true business player—one that is core to the future of the company.

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The IT Organization of the Future

Filippo Passerini, Chief Information Officer of Procter & Gamble, Talks to Craig Lawton, a Senior Partner at The Boston Consulting Group

Filippo Passerini is the chief information officer of Procter & Gamble, the \$83.5 billion consumer-products company. He is also president of the firm's Global Business Services (GBS) division, which provides both shared-business and information-technology services for P&G's 138,000 employees and 300 brands in 160 countries around the world. Since its inception in 1999, GBS has saved the company more than \$600 million. Passerini spoke with The Boston Consulting Group about why the integration of shared services and IT makes sense.

How does IT fit in with GBS's other shared services?

Basically, the whole back office of our company operates as a series of shared services as part of Global Business Services. We have accounting, most of procurement, human resources, facilities management, and also IT operations. Before 2004, IT was a separate organization—but then we started to bring IT under the GBS umbrella. At that point, we changed the name from IT to Information Decision Solutions (IDS) in order to shift the thinking within the firm

from IT as a provider of commodity technologies to IDS as a provider of information-based solutions to the business. We believe that this model is unique in the world.

How did the IT organization change when it was integrated into GBS?

The merger offered us an opportunity to integrate things completely—to blend the two models. Blending IT service and business services makes two plus two equal seven, not just the usual five. We get really fantastic synergies.

We work, operate, and measure ourselves not as a support service but as a business. We have metrics and measures that are very compatible with the ones P&G uses for our line business units. It is a philosophical difference. IT had always been in an enabling role; now we are more proactive. We are in the driver's seat and are held accountable for creating value. Transforming ourselves from enablers to being held accountable made all the difference.

From an organization model standpoint, we have central service

lines. We have categories of solutions that are set either by a platform or product or by a family of products. For example, one service line is supply chain systems. Another is decision support systems. A third is consumer solutions. And so forth. These service lines are completely global in nature. The IT people within GBS need to have deep skills in these business areas and understand how this works on a global basis. The delivery of this work is through what we call client

Filippo Passerini



Born: 1957 in Rome, Italy

Education: PhD in statistics and operating research, University of Rome

Career:

1981: Joined P&G as a systems analyst

1986–2002: Held a series of IT management roles in Italy, Turkey, Greece, the United Kingdom, Latin America, and the United States

2002–03: Vice President and Leader of business process sourcing study

2003: Global Business Services officer

2004: Chief Information and Global Services officer

2008: President, Global Business Services and Chief Information Officer

management. We have a relatively thin layer of people embedded in the operating business units who help detect what is needed for the business. These client managers bring our solutions to the business. We also have the functional areas you would typically find in a business. For example, we have more than 100 finance people and 85 human-resources people in GBS.

With the new structure, we also saw an opportunity to transform how we work. We borrow from P&G's management practices, customizing them to meet our own unique needs. For example, we use brand management tools to better market our services to internal customers, and business planning tools to align our priorities and action plans with the business. Our approach to innovation follows that of the business. It's all about focusing on the consumer—in our case, our internal P&G users—and matching their needs with what is technologically possible.

People in the business units no longer see us as an "IT organization." Our GBS logo, which you see reflected everywhere within the company, is a major equity-builder.

It feels like you're creating brands within P&G.

Yes. All of our service offerings are brands. And not only do we create brands within P&G but we also commercialize them. Whether it's a wireless capability or video collaboration studios, we do a marketing campaign to articulate the value proposition.

How do you make sure your services stay relevant?

We use change as a strategy within the organization. Basically, GBS keeps evolving every three to four years in a major way. We also give it a "face-lift" every 12 to 18 months. Our organization needs to be dynamic because the pace of change on the business side is increasing. We need to be able to anticipate these changes, focus on our top priorities, and respond incredibly fast. We call that concept "flow to the work." We are less and less limited by our organization chart and design. The portfolio of our priorities determines the dynamic reallocation or redesign of our organization. So it's more of an amoeba-like network than a single, static organization.

Do you make a distinction between "run-the-business" and "change-the-business" activities and spending in GBS?

Yes, we make that distinction. But even more important, "run as a business" is our overall GBS mindset. It's about operating day in and day out as if we were operating in the open market. "Change the business" is something we do for the business—the solutions and business-building capabilities that we bring. It's all about business transformation. Our vision is to build a virtuous circle where, by running as a business, we continue to enhance our ability to change the business. Also, by running as a business, we have separated out what we call operations, or basic services, which we run as a commodity operation as much as we can.

And much of that is outsourced?

About half of it—maybe even 60 percent of it—is outsourced. In fact, we were able to outsource \$4.2 billion of services in 11 months at one point. But we do something different than classic outsourcing. We have created alliances with third parties that have allowed us not only to deliver lower costs and better service levels to the company but also to create an incredible amount of flexibility. That's why, when P&G acquired Gillette, we were able to integrate the acquisition in 15 months.

How do you price your services?

For GBS services that are core to making our business run effectively—such as meetings, facilities, employee services, and so forth—we price those services to ensure transparency and we charge the business for them. The remainder of our services are focused on value creation and are aimed at making the company more productive and effective. In that way, GBS is really a resource to drive scale and innovate business processes so that P&G as a whole works better, faster, smarter, and cheaper.

We have a pricing system whereby we charge for our work based on the volume of services consumed—we don't allocate IT costs based on business unit revenues or some other high-level measure. When we build a new capability, we run it end-to-end, which includes the people who are executing the process and the IT to support it. We price out the whole package.

For me, the beauty of the free-market way of running a business is that we don't mandate all of the services. Just as P&G cannot force consumers to buy its products, we don't say to our line or operating business units, "You need to use this, that, and the other." We offer it up as a solution. We say to them, "This is the benefit, and this is the cost. If you want to use it, you buy it for a certain amount of money. If you think that the money is not right, you pass."

So you have to articulate and communicate the benefits of these services?

Exactly. We're running as a business. To maintain alignment, we need tools, governance, and a lot of communication. Most people would not think of a shared-services organization as having a full-time expert in external relations and communications, but we do. In fact, we have six people doing communications full time. We spend a lot of time communicating internally.

Are there any disadvantages to this model?

While the model is very productive and efficient, it is not always an easy one to run. The partnership approach we have chosen requires strong collaboration and good governance. Our focus on "flowing people to priorities" also requires us to stay very agile, putting the focus on capabilities rather than roles. And, on top of it all, we need to be very clear and consistent about how we articulate the benefits we bring to the business.

IT Business Planning

We use business planning to align our efforts in three key IT-innovation focus areas: personalization, real-time decision making, and virtualization... In the area of real-time decision making, we have created "decision cockpits" that give our business leaders the data they need at their fingertips. On the virtualization front, we have developed a sophisticated virtual-reality capability that allows P&G to build product mockups, show them to consumers, and get feedback.

Where did you find IT professionals who are capable of and comfortable with brand management, marketing, and communications?

We declared the vision and explained to our people why it was important for our organization to move in a different direction. We found that most of the IT people were more than ready and willing to make the leap. They wanted to work more strategically and be more relevant to the business.

If you're working for P&G or any commercial marketing company as a brand manager, it's a pretty cool place to be because you are the king of the jungle. You go from the R&D of new ideas into commercialization, market influence, pricing, and consumer understanding. We do the same thing at GBS. We call our brand management people *service managers*. A service manager, like a brand manager, is responsible for the innovation, pricing, and commercialization of the service.

This concept has been very energizing for our people, who have been able to go from a kind of second-class citizenship to being in charge of their own businesses. Yes, this took some education and training. But our people were mentally there and had the aptitude, and the effort has thoroughly paid off. Adopting this approach has completely changed the IT mindset, and morale in the organization has gone up dramatically.

What types of competencies did you need to build?

My ultimate vision for the GBS organization is that it will become the business transformation agent for Procter & Gamble. And IT people, as it turns out, are very well equipped to be change agents. But creating change in this arena calls on a wide range of talents and competencies, many of which are pretty untraditional. It's not solely about systems, or architecture, or the end design of systems or functionalities.

How and for what do you reward people in this environment?

We reward people with compensation, of course, and in other ways as well, including public recognition. As far as *what* we recognize people for, it's typically individual mastery and excellence, which is not unusual for an IT organization. But what is unusual is what it takes to qualify for these rewards. In the past, we tended to reward people who tried to master many topics in IT. Now, we reward people who can live with ambiguity, who can master business topics, and who can flow to the work that needs to

be done rather than being driven by a highly structured work plan.

People can certainly focus their careers on being an SAP expert or on networks or any number of disciplines. But traditional IT is just 30 percent of what we do. If traditional IT is all a person masters, he or she will never be a leader here. The rest is about business knowledge. Those who embrace that approach will certainly increase their value to P&G. We also reward people by investing in them. Our model is to promote from within the company. We try to make sure we put the right person in the right role at the right time.

P&G has a strong commitment to innovation, and IT plays a major role in innovation. How do you balance running critical business processes efficiently with driving business innovation?

We now run IT as a business, and the model we wanted was an “and” model. We wanted lower costs *and* better services *and* innovation, too. To deliver that, we set out to transform our structure and reinvent how we worked. Our model was based on three strategic choices: going global to drive scale, thinking holistically, and partnering for success. Partnership has been particularly important as a driver of innovation. By tapping into the strengths of outside experts, we have grown stronger faster. Together we drive innovation against business priorities.

P&G is an innovation-driven company. For us, innovation is the lifeblood. We are very innovative

from a consumer-benefit standpoint with our products. But we are also very innovative in our business models, work processes, and organization design. So innovation is in our mindset all the time. We tend to innovate 360 degrees in everything we do. We have 140 people in GBS who act as our research and development function, exploring new technologies and building prototypes.

Can you give an example of innovation that GBS has brought to the company?

We use business planning to align our efforts in three key IT-innovation focus areas: personalization, real-time decision making, and virtualization. For example, we have met the demand for personalization with the development of sites such as Pampers.com, which allows P&G to connect with more than 26 million mothers and fathers each year. In the area of real-time decision making, we have created “decision cockpits” that give our business leaders the data they need at their fingertips. On the virtualization front, we have developed a sophisticated virtual-reality capability that allows P&G to build product mockups, show them to consumers, and get feedback.

Looking at all the changes you have made, do you think that they are unique to P&G or can other companies follow suit?

I believe we are very fast. I don’t know if many companies would be able to achieve this kind of skill and synergy in less time than we did. For example, the Gillette

integration was phenomenal. At the time of that announcement, we declared to Wall Street that we expected synergy savings from that integration of \$1.2 billion a year. In February 2008, we announced that our initial projection had actually been exceeded. By delivering the systems integration in just 15 months, we were able to make a significant contribution. If you think about it, \$1.2 billion a year equates to \$100 million a month, or \$4 million a day. So every single day counts. If you are two weeks late, you will lose \$50 million. If you are two weeks faster, you will gain \$50 million. My point is that we tend to be pretty quick on our feet.

A major factor is that, in our culture, there is a permanent healthy dissatisfaction with the status quo. If you heard us talk, you would hear a lot of self-criticism. If you attended my leadership-team meetings, you would think that we are the worst in the world because we tend constantly to criticize. But it’s this healthy dissatisfaction that drives our innovation forward.

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Lean Advantage in Banking

Bringing Together IT and Operations to Deliver Customer Value

by Rozinder Bhatia, Christophe Duthoit, and Thomas Reichert

Given the current turbulent times, it has become imperative for many firms in the financial sector to undertake drastic transformations. Now, more than ever, technology has become an important means of helping banks to “reinvent” themselves with regard to both cost efficiency and revenue generation. Of course, sustainable transformation requires a close alignment among strategy, operations, and IT. But technology can be the linchpin of meaningful strategic and operational change.

Technology is enabling aggressive cost efficiencies through integrated IT support of comprehensive products on a global scope—incorporating process automation that brings lower transaction costs and greater price transparency, as well as boosting scale and reducing complexity across the value chain. Revenue generation can be significantly enhanced when technology is designed to support the multichannel and cross-enterprise strategies that are so critical to product origination and servicing. Technology also plays a key role in developing superior tools and analytics to reinforce comprehensive risk-management techniques, which are essential to a successful bank strategy.

So how can banks deploy technology in a way that enables a long-term, sustainable transformation? The Boston Consulting Group’s *lean advantage* approach can help in developing a technology plan that is tightly aligned with an overall transformational strategy. Our approach takes an end-to-end perspective of bank operations and applies “lean” principles to enable the optimization of processes that enhance the customer experience through seamless interaction and servicing across the bank. It focuses on activities that create

customer value and that simultaneously achieve “intelligent” cost optimization. Because operating costs at typical U.S. banks represent as much as 60 percent of noninterest expense, the redesign of operations is fundamental to remaking the business. Our approach has helped banks around the world realize impressive efficiency improvements (15 to 20 percent cost savings) along with solid gains in customer satisfaction and loyalty as well as enhanced risk-management metrics, leading to strong revenue increases.

What Is “Lean Advantage” in Banking?

Lean advantage is a unique approach that incorporates a set of broad-based tools to transform banking operations. It looks at operations holistically and seeks opportunities to improve end-to-end processes and build strategic advantage by instilling organizational and cultural change—following the example set in the 1970s by Toyota, which first embraced the “lean” concept that operations are a strategic asset to be leveraged rather than merely a cost to be managed. As applied by BCG, the approach draws on the best ideas of top-down operations transformation—as well as the more inclusive, bottom-up lean and Six Sigma techniques—and adapts them to a banking context.

Any transformation is done at a cell level (that is, a business unit, function, or service channel, depending on the objective) to ensure that change occurs systematically and in manageable terms. Lean advantage takes the best tools from lean strategies—such as value-stream mapping—and supplements them with the innovative use of IT to improve operations. As a result, it explores opportunities, such as outsourcing, that conventional programs often overlook and

goes beyond just back-office costs to ensure that the full benefits of transformation are identified and implemented.¹

What we call *customer centricity* is the overarching driver of a lean transformation in banking. (See Exhibit 1.) A robust customer strategy requires a complete understanding of the customer relationship in order to develop the integrated information elements that enable differentiated customer experiences while also eliminating unnecessary complexity from customer interactions. Defining the optimal customer experience and understanding the sources of customer value can help to determine the guiding philosophy of the lean transformation program on both the cost side and the revenue side. The operational strategy that best addresses customer expectations is then enabled by technology.

The strong implication is that operations and technology are core components of a bank's overall business strategy. Viewing operations strategically will translate into measurable results—lower costs, higher revenues, and improved customer satisfaction. More often than not, the

factors that drive customer value also drive these priorities. With a clear understanding of customer expectations, lean advantage reviews the existing operating model as a whole, rather than in disconnected parts. By seeking ways to improve end-to-end processes that create strategic advantage, lean advantage generates outcomes that are much deeper and longer lasting than the results of conventional operations-improvement programs. Success is gauged not by the sum of one-off cost improvements but by the overall profitability generated through fundamental transformation.

With lean advantage, we carefully evaluate and refine the operating model on two key dimensions. (See Exhibit 2.) The *business architecture* defines how operations are configured and addresses questions such as the extent and nature of consolidation and specialization, the location and flow of processes, the degree of outsourcing, and the application of technology. The *organization model*, which describes how the business

Customer centricity is the overarching driver of lean transformation in banking.

1. For a more complete discussion, see "Banking on Lean Advantage," BCG Opportunities for Action in Financial Services, January 2008.

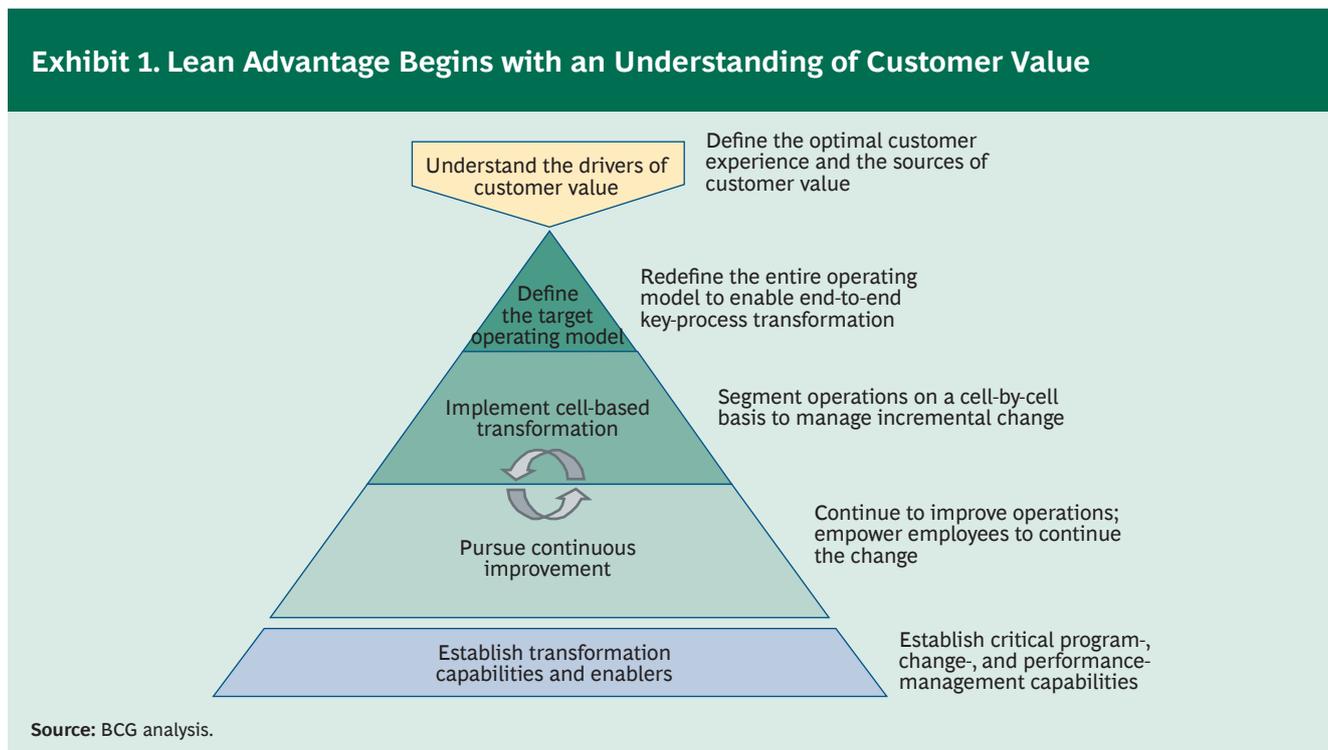
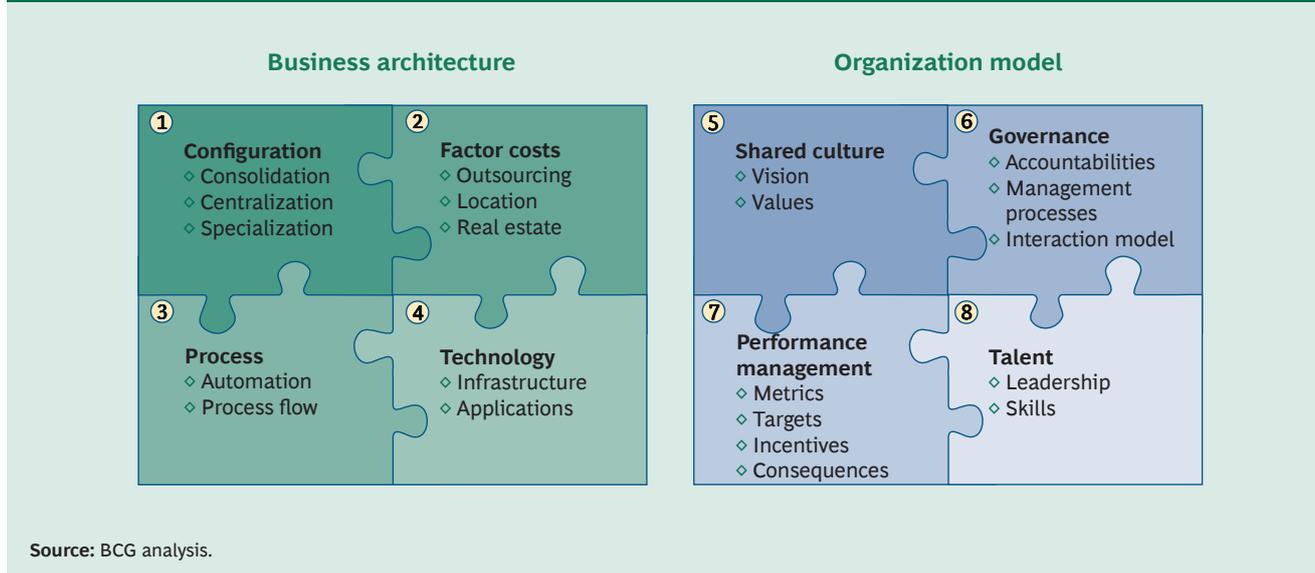


Exhibit 2. Lean Advantage Examines Operations on Two Major Dimensions



is actually run, focuses on core issues such as culture, governance, performance management, and talent—thus cutting across business cycles. Regardless of whether a bank is seeking cost reduction or growth, it must not underestimate the importance of the organizational side of transformation, which is often ignored in operations improvement programs. This underscores the unique nature of a lean-advantage transformation—it is fundamental and holistic, rather than opportunistic and compartmentalized.

Lean advantage places a premium on building capabilities to ensure continuous improvement. It “trains the trainer” and establishes replicable tools and processes that will help the organization sustain a culture in which operations are always seen as a source of strategic advantage. Only by embedding a culture of continuous improvement—which includes training a cadre of lean experts and providing the governance and performance management systems to track change—can banks realize the full benefits of a lean-advantage strategy. In particular, the bank must use technology to put metrics in place that allow its executives to track the delivery and longevity of operations improvement. This focus on continuous improvement enabled one of our clients to achieve additional savings of 3 to 4 percent annually over the four years following the initial transformation of its operations.

The Linkages Between Operations and IT Within Lean Advantage in Banking

What translates customer expectations into reality? First and foremost, it is a tight alignment between bank operations and IT. While the target operating model redefines the processes, it is technology that turns that vision into reality. Customers rarely think about operations. Yet operations, more than any other factor, will influence how a customer feels about a bank. Customers define their banking experiences by personal experience: How fast did the bank respond to my request, approve my loan, or execute my transaction? Banks rate themselves by measuring customer advocacy and “churn,” both of which reflect a customer’s feelings about the bank in very clear positive or negative terms.

Any operational model driven by customer expectations requires solutions that are geared toward value-adding services. For retail banks, the branch as a service channel is making a comeback as a significant means of revenue generation. Origination and servicing driven by a stronger focus on customer satisfaction and retention—often through multichannel strategies—are critical to revenue growth. Customers want to be supported by channels accessible from multiple phone and computing devices, making it important for banks to ensure service functionality and process consistency across channels.

By the same token, providing full customer access across all products (including credit cards, loans, and mortgages) through a single access point is equally important. This is leading to stronger pricing personalization, a push for product bundling, and a stronger focus on product innovation. Branch and operations integration and automation are becoming a core investment area. To reduce the operational costs of both sales and service, banks are looking to standardize and automate processes across channels to provide consistency to customers, as well as to drive operational best practices across the enterprise and to consolidate support functions where applicable. This requires a lean *technology* strategy—less complex but also very robust.

It is important to note that lean advantage does not downplay cost savings: indeed, cost reduction is a priority of most operations programs, and especially so given the current market environment and its challenges to the top line. But it provides a means of balancing cost savings against potential revenue gains. Other banks have used lean advantage to boost customer satisfaction and loyalty by as much as ten percentage points and increase revenues by 5 to 10 percent.

Talking to a bank’s customers and executives and studying its data—for example, its inventory of customer complaints or surveys—can help pinpoint where better operations will have a multiplier effect on profitability. This is accomplished in a lean-advantage program by using technology to tap into information that already exists in an organization’s marketing databases, operational information, transaction records, and complaint resolution files. For example, in a large North American retail bank that pursued a program to improve its customer experience, we identified six “customer value” themes that could significantly enhance the bank’s ability to radically transform the customer experience:

- ◇ Improved customer-account opening and on-boarding
- ◇ Enhanced customer retention
- ◇ Broader cross-sell processes to bring the full suite of bank products to every customer
- ◇ A seamless transaction experience across businesses and channels

- ◇ Ongoing efforts to revamp lending processes
- ◇ Streamlined new-product and deal-approval processes

Needless to say, these themes were primarily addressed through technology that enabled a common view of the customer, effective enterprisewide coordination (such as referrals and cross-selling), and straight-through processing for all transactions. (See the sidebar “Lean Advantage in Action.”)

Lean Advantage in Action

The customer experience is dependent on how closely the technology supports key processes. Recently, customers of a large North American bank were becoming increasingly frustrated with service quality. On the retail side, prospective customers were lured into the bank’s branches by an advertising campaign that promised to make banking easy and friendly. Instead, they encountered a daunting and complex process: antiquated paper-based forms to fill in, high error rates in processing new accounts, difficulty in transferring funds from their old bank to the new bank, and confusion about the different products and services. On the corporate side, things weren’t much better. Commercial loan applications were also paper based, turnaround times were lengthy, and there was an 80 percent error rate in processing. Many customers decided to go elsewhere, and the bank’s financial performance and market share suffered as a result.

The bank brought in BCG to help reconfigure its operations in order to regain customer confidence and market share. Using its lean-advantage approach, BCG launched a series of programs to dramatically improve the customer experience. A combination of radically optimized operations and upgraded technology that enabled electronic data capture, automated decisioning, and channel-agnostic processing leading to point-of-sale fulfillment has, in just 12 months, put the bank on a path toward volume increases that will add between \$300 million and \$400 million in top-line dollars in just its first phase over three years. Understanding the connection between operations and the customer experience is essential to transforming operations into a strategic asset—and technology is the key to a successful transformation.

For another large North American bank, one that has more than 2,000 branches and 10 million customers, we found that decreasing the turnaround time for a mortgage application would produce revenue gains five times greater than the savings that could be squeezed out of mortgage operations. The key to achieving this was to align all of the functional elements of the value chain around a common vision—the 15-minute mortgage. Each “member” of the value chain agreed to contribute some significant change in order to deliver a truly transformed experience for the customer. Product development, for example, designed a dramatically simplified contract; the various sales channels began to collaborate in qualifying leads, booking appointments, and steering customers to the channel that best suited their needs; and the fulfillment team worked with the channels to enable a streamlined central-fulfillment capability.

All this was supported by IT, which delivered enhancements to existing risk-management and other capabilities as well as new imaging and workflow functionality, allowing the bank to orchestrate the value chain and provide transparency. The end result was a dramatically simplified customer experience, with most customers able to get an answer from the bank in their first interaction, regardless of channel, and to completely fulfill all of the requirements in only one or two branch visits.

The Role of IT as a Catalyst for Lean Advantage

Because a lean transformation is a cross-enterprise effort, IT plays a pivotal role in ensuring that logical linkages are established and that technology efforts are not reinvented for every business unit. From its cross-enterprise vantage point, IT has the ability to shine a spotlight on places where significant improvement can be made. Whether for access to vital and timely information or for automating processes, IT is the catalyst for the makeover of banking operations. For its part, IT has successfully begun to remake its image within the bank by offering technology-based options that simplify and elevate the customer experience.

It is important to ensure that the operating model—at a high level—aligns with the drivers of customer value. Reviewing the model against these drivers will

highlight major changes required in end-to-end processes. IT is critical in areas of customer service delivery. IT also plays a key role in providing simple dashboard tools for tracking performance. This helps ensure that the bank’s focus is on sustained delivery while undergoing continuous transformation.

Lean techniques can transform and leverage operations as a competitive differentiator.

In the end, financial institutions, especially banks, can learn valuable lessons from the experiences of industrial companies that have successfully transformed themselves by treating operations as a strategic asset.

Lean techniques can transform and leverage operations as a competitive differentiator. There is little doubt that embracing a lean-based technology strategy can help banks be “cost smart” and at the same time increase revenue by focusing on what matters most to the customer. Be it front-end, middle-office, or back-office processing, leveraging technology and adapting the underlying organizational and governance processes to ensure continuous improvement are the key elements of a smooth, seamless, and efficient operational strategy—which drives a bank’s bottom line.

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What Gets Measured Gets Done

How the Collection and Benchmarking of IT Data Can Drive Gains for Insurers

by Stephan Heydorn, Hauke Rejdak, and Martin Seibold

How you gather, manage, and use information will determine whether you win or lose. — Bill Gates

What is information technology's place in a twenty-first-century business? The information-intensive industries—such as insurance, banking, and telecommunications—were the first to learn that the answer is simple: in any company, IT's place is *everywhere*. As an organization's nervous system, interacting with every part of the business, IT is well placed to drive change, build the basis for strategic decisions, and shape the ways in which everyone in an organization works.

For IT to reach its full potential, though, all of its functions—strategy and planning, application development, and operations—must be managed to the highest professional standards. IT has to be run like a business in itself.

To do that, CIOs need appropriate, relevant, and meaningful data about costs and performance from all parts of a company. Those are the metrics that yield the “big picture” yet also provide enough detail to capture the essential forces and relationships that drive IT costs—whether they come from the “IT side” or from elsewhere in the company. Only with such information—and a truly data-driven management style—can IT leaders hope to maximize IT's performance and expand the organization's impact and influence throughout the company.

Many CIOs, though, lack these data. The means to collect them are simply not in place, leaving IT executives to essentially “fly without instruments.” Other CIOs have access to some of the data but fail to leverage it fully, often

because they lack peer-comparison data and hence do not know where to focus their efforts. Either way, the toll on IT leaders' decision-making ability—and ultimately on the company's competitive position—can be considerable.

Data Collection and Analysis: A Framework for Transparency

Over the past decade, we have been working on this challenge with companies from information-intensive industries, developing data-gathering techniques that will let CIOs see better and farther. In 1998, we began conducting annual IT benchmarking surveys involving more than 80 leading insurance companies in eight major markets. More recently, we've extended this research into the banking and pharmaceutical industries, and in the future we will expand into other industries.

By working closely with our clients, we have designed a benchmarking framework that provides a fine-grained description of IT cost structures and drivers, as well as their relationship to the rest of the business. This framework ensures that all relevant issues regarding a company's IT cost position can be analyzed and compared with those of relevant competitors in the industry.

Following a set of key principles, the framework makes no compromises about management's need for a complete picture. It captures *all* IT costs in both IT and non-IT departments and provides a comprehensive view of IT cost structures from several perspectives—by business line, service type, and segment of the value chain. Complementary analyses of business metrics allow for specific apples-to-apples comparisons (for example, by considering business volume, product mix, and sales-channel

mix). These analyses also yield a clear view of the balance between IT spending and business efficiency, in particular with regard to productivity in back-office operations.

Benchmarking in Practice

To accomplish all of this, BCG’s benchmarking framework synthesizes separate measurements and breaks down generalized data into meaningful subdivisions. In insurance, there are two key performance indicators with which to begin an analysis of IT performance. One is the ratio of IT costs to gross premiums (which relates the IT budget to a company’s revenues). The second is the IT cost per insured risk (which reveals the efficiency of the company’s IT usage). For a particular insurer, a clear picture of its IT can only emerge after these two metrics are applied, in a savvy way, to appropriate subcategories of data. (For more detail on BCG’s approach, see the side-

bar “The Insurer’s Guide to IT Benchmarking: Methodology.”)

For example, consideration must be given to the context in which an insurer operates. Analyzed in the right way, the data reveal that different levels of premiums per policy, different business models, different product structures, and different regulatory environments—factors not usually associated with IT—have a big effect on the IT cost ratio. Complying with governmental regulations, for instance, requires IT spending, especially in application development. We have found that up to 15 percent of insurers’ “change the company” IT budgets (the discretionary IT spending outside of maintenance and operations that yields innovation for the business) is, in fact, driven by regulatory requirements.

The ratio of costs to premiums also varies a great deal from one insurance line to another and from country to

The Insurer’s Guide to IT Benchmarking: Methodology

The Boston Consulting Group began benchmarking German and Swiss insurance companies in 1998. Our efforts have gradually expanded over the past few years to include France, Belgium, the Netherlands, southern Europe, Australia, the United Kingdom, and the United States. Altogether, more than 80 companies around the world have participated in regional BCG IT Benchmarking in Insurance studies.

We have enhanced our questionnaire continually over the past ten years, striving to improve the reliability and comparability of the data it generates. But we have left its basic structure unchanged to ensure data continuity and permit investigation of long-term trends. We aim consistently for the “sweet spot” between data overflow (for instance, more than 1,000 data points) and underflow (fewer than 100 data points).

The core of the questionnaire is a clear definition of IT costs. We take a full-cost approach, including all of the secondary, indirect costs allocated to IT. These include spending for management, staff functions, human resources, organization, accounting, and office space. (Costs for voice communication are not included.)

The information we collect concerns not only IT data but also high-level, general business data involving premiums,

the total number of insured policies and risks, and the number of back-office full-time employees.

Insurers can’t be compared without considering differences in their respective business mixes, since the average premium per policy differs according to product. This ratio is different for general insurance than for life insurance businesses, as each product line has individual IT and back-office requirements. Therefore, we break business data, as well as IT costs, into six categories: life, health, and four general-insurance lines—motor vehicle, private and commercial property and casualty, industrial property and casualty, and legal. In life and health, we make an additional distinction between individual and group insurance to account for different product and process complexities.

Since data consistency and quality checks are the essence of benchmarking—they ensure data comparability among competitors—every BCG IT benchmarking study begins with our team explaining our questionnaire to participants and discussing it with them. During the following data-collection period (typically three months), we conduct multiple status checks to ensure data delivery and consistency. Finally, we perform reality checks on the data and work to reconcile open issues with IT controllers.

country. Among the insurers we survey, for instance, the most recent ratio of IT costs to gross premiums in non-life insurance was 2.8 percent in the United Kingdom but 4.3 percent in Switzerland. The ratio is lower and more uniform in life insurance, but again there are differences among the individual markets. The most recent U.S. figure is 1.7 percent, for example, compared with Britain's 1.3 percent. (See the sidebar "Outsourcing" for details on the significant variability we also found in that cost category.)

Any meaningful analysis needs to take into account the company's scale of operation. For instance, according to our empirical data, doubling the number of insured risks in motor vehicle insurance yields a 10 to 15 percent reduction in per-unit cost. In the data center, these scale effects are even larger: when mainframe computing power and data volumes are doubled, costs for processing and storage drop by 20 percent.

Of course, our framework doesn't neglect the "classic" methods of breaking down IT costs. Indeed, these time-tested approaches—for example, grouping expenses by service types in each line of business—provide the core data that the framework analyzes and extends.

The first level of a classic breakdown divides IT costs by data center, PC/LAN, application development, and IT management. With that as a starting point, our framework permits, for instance, a deeper "drill-down" into data center costs (which typically represent between 35 and 40 percent of an insurer's entire IT spending) to examine key parts such as mainframe, server, storage, and WAN. The closer look also enables an analyst to relate costs to the corresponding service levels in these areas (system availability, response times, disaster recovery policies, and so on). This assessment often leads a company to improve its system capacity-management measures or renegotiate IT supplier contracts.

Another of the framework's useful breakdowns of IT costs is a value-chain analysis. (See Exhibit 1.) From this breakdown, some companies have been surprised to learn that they already spend 14 percent of their IT budget on their "base systems"—scanning, document management, workflow, printing, and databases—and that this percentage has recently been rising. For nonlife insurers, administering policies accounts for 33 percent of IT costs, on average; however, value-chain analysis shows

Outsourcing

Consistent and targeted surveying often shows how particular industries diverge from general business expectations. For instance, one much-discussed means of cost control—outsourcing—turns out not to play much of a role for the companies we study. In 2007, our German insurer survey found, only 9 percent of IT costs on average were incurred through outsourcing, and 9 of the 13 CIOs we polled said they had no plans to change their outsourcing practices over the next two years. In contrast, for companies in the United Kingdom and the United States, outsourcing typically accounts for as much as 30 percent of total IT costs.

which companies have a substantially higher ratio and reveals that the driver is most often the high complexity of applications and underlying platforms. That insight could help otherwise reluctant CEOs see the value of spending to improve infrastructure and harmonize systems.

The Value of Competitor Data

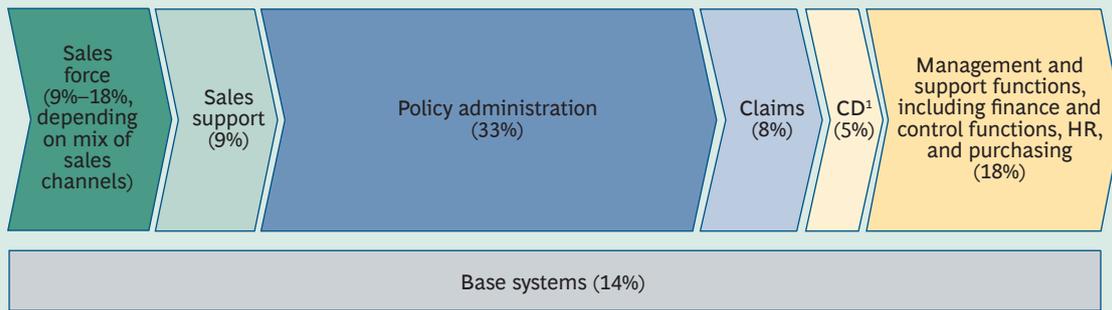
Recently, a company used results from our benchmarking framework to develop a finer-grained, more precise approach to its competitive IT position. (See Exhibit 2.) The insurer audited its IT costs and used benchmarking data both to understand its cost drivers (which were higher than those of comparable competitors) and to plan realistic reductions. Using data about its peers' expenses as benchmarks, the company set a goal of shaving roughly 20 percent off its annual IT expenses within two years.

Benchmarking had revealed cost drivers that were the direct responsibility of the CIO—for instance, PC unit costs that were above the market average owing to sub-optimal contracts with vendors of hardware, software, and desktop services. This IT-driven cost disadvantage was worsened by a misallocation of resources in the sales force and back office: too many employees were equipped with PCs that were too costly for their function.

But benchmarking also identified cost drivers that arose from the interaction of business and IT processes, in relationships that only the benchmarking framework could reveal. For instance, the company was led to examine its

Exhibit 1. Value-Chain Analysis Can Shed Valuable Light on a Company's IT Costs

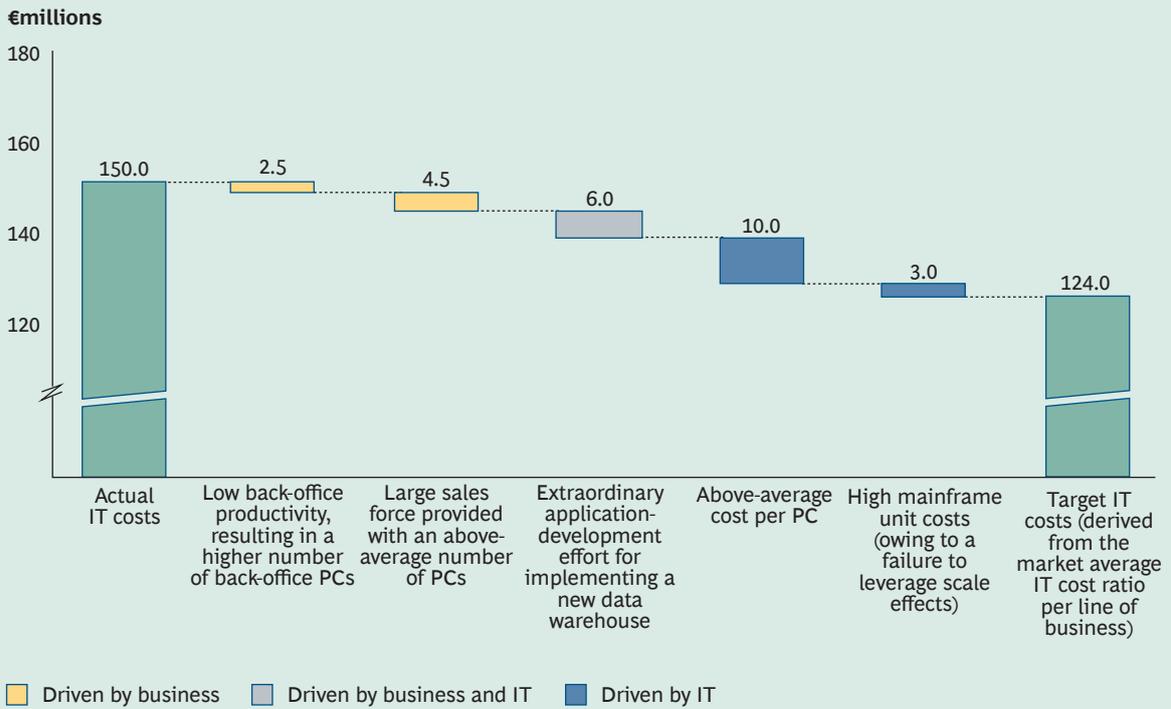
A typical breakdown of an insurer's IT costs



Source: BCG analysis.
¹Collections and disbursements.

Exhibit 2. Benchmarking Can Deconstruct Cost Gaps and Help Identify Cost Drivers Caused by Business and IT

A sample breakdown of an insurer's IT cost drivers



Source: BCG analysis.

service levels—subsecond response times for noncore applications, 24-hour replacement time for broken-down desktop PCs, and 90-percent-plus call-center availability ratios. These levels had evolved over time without being related to their effect on IT costs. Challenging these legacies led to intense discussions between business departments and IT, which produced a money-saving differentiation of service levels into three tiers (gold, silver, and bronze), with different IT costs and pricing structures.

Another insurer—a cost leader in motor vehicle insurance—had decided to invest heavily in its IT architecture in order to maintain its advantage in back-office productivity, which had been shrinking. Viewed strictly from within the IT budget, this spending turned an IT cost advantage into a cost disadvantage. But the whole-company perspective afforded by benchmarking, backed up by hard data on competitive costs, showed that the investment was worthwhile.

In fact, our research confirms that most companies have set out to lower their IT costs over the past few years. Typical measures have been to consolidate infrastructure and optimize IT assets—and these measures have succeeded. For example, from 2003 to 2008, leading German insurers saw their revenues rise even as their IT spending

dropped. Using 2003 gross premiums as an index, we found that premiums rose on average by 2.4 percent annually over the period while IT costs fell on average 1.5 percent per year. (See Exhibit 3.)

Our surveys also show, however, that many companies recognize that simply chopping their IT budgets would be counterproductive. In 2003, 75 percent of IT spending went to current operations—the “run the company” costs that are inescapable in the short term. That left only a quarter of IT expenses free for new, discretionary projects. In 2007 and 2008, however, this “change the company” share of spending was more than one-third of the surveyed insurers’ IT costs. When operational IT becomes more efficient, money is freed to help IT realize its true potential.

The CIO as a Change Agent

Often, we have found, benchmarking begins as a quest to save money in the IT department, but then—because it clarifies IT’s role in every distinct activity and identifies cost drivers both within and beyond the IT department—it leads to changes throughout the company. More detailed knowledge leads to a more disciplined approach to sales, processing, planning, and long-term strategy, with

Exhibit 3. Most Insurers Have Reduced Their IT Operations Costs, Freeing Resources for “Change the Company” Spending



benefits far beyond a more efficient IT component. Better still, the CIO is no longer held accountable for rising IT costs whose sources lie elsewhere in the business. Instead, the CIO serves as a change agent, establishing a new, rigorous way of thinking that grounds decisions in transparency and a numbers-based analysis of cost drivers. (See Exhibit 4.)

With benchmarking, CIOs and their colleagues elsewhere in the company can reduce IT costs in the short term, get more out of IT assets while reducing their complexity, and, most important, free up resources for potentially game-changing new projects. That’s why benchmarking is catching on—not only in insurance but also in banking, telecommunications, pharmaceutical research, and automotive R&D. Our approach provides the right combination of meaningful data, big-picture analysis, fine-grained detail, and clear paths for action that managers need to get the most efficient and successfully managed IT possible.

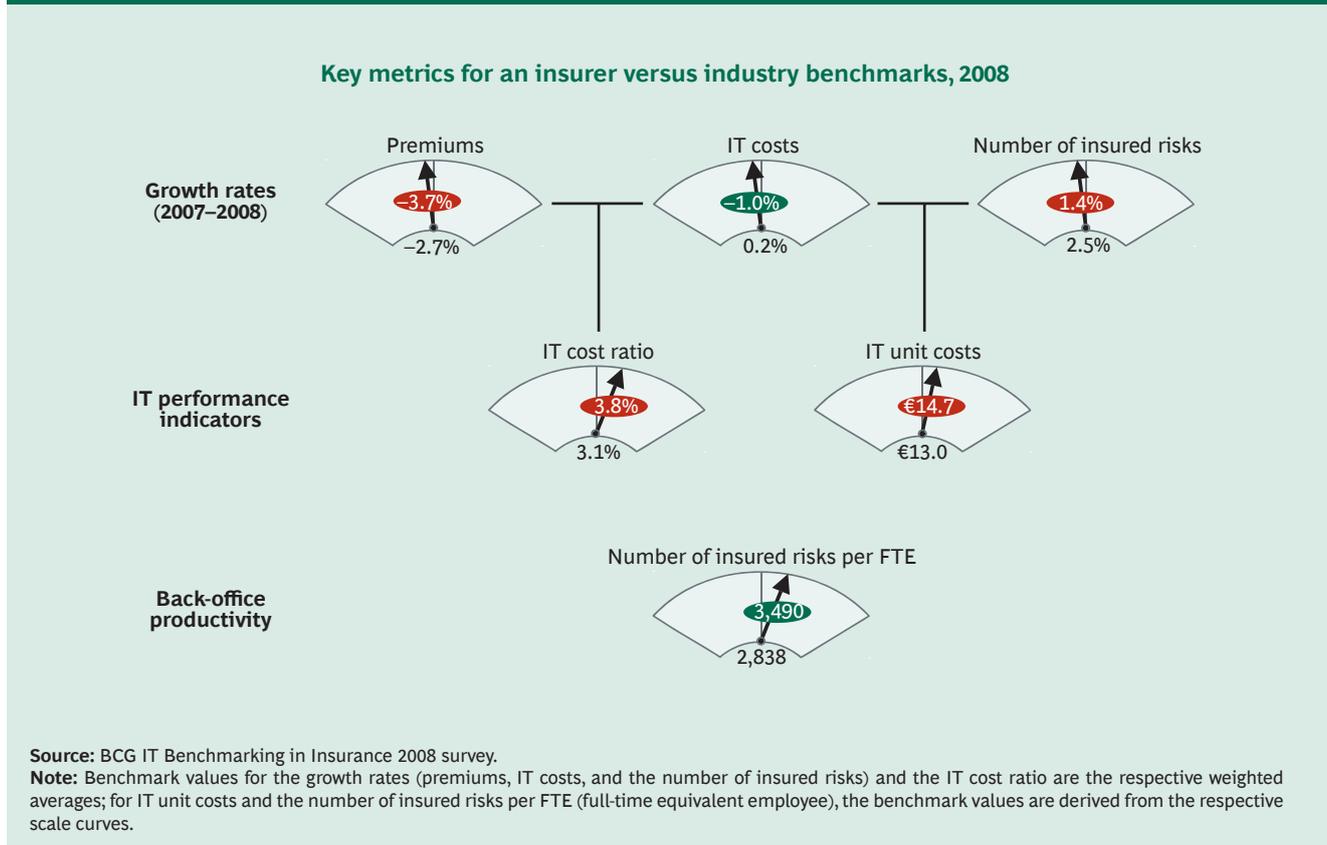
Benchmarking affords CIOs a valuable window on IT costs and cost drivers, both those specific to the IT organization and those driven by the business. The insights delivered can help CIOs transform the cost profile and performance of the IT function and, simultaneously, strengthen the business performance of the entire company. In the process, CIOs can redefine their role within the organization and become true agents of change.

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Exhibit 4. Benchmarking Provides Transparency and a “Cockpit View” of Relative Performance



Why Green Is More Than “the New Black”

by Ralf Dreischmeier

The sales pitch of the moment is *ecofriendly*. In Japan, you can buy a Fujitsu laptop made partly out of a biodegradable corn-based plastic. In the United Kingdom, you can check the carbon footprint of your lamb chops, thanks to Tesco’s ecological labeling system. And in the United States, The Home Depot offers its Eco Options line of low-impact supplies and Target carries “eco-apparel.” Green, as one ecologist put it, is “the new black.”

Once, IT businesses were unaffected by the green movement. It is only recently, after all, that electricity costs have been broken out in data-center budgets. But things are changing. And environmental considerations are now high on the agenda of chief information officers—for two important reasons.

The first is the sheer size and scope of social change. Today, many consumers in both developed and developing nations say they are willing to pay more for environmentally friendly products. For instance, 53 percent of U.S. consumers said they would consider paying more for eco-

friendly products (though only 26 percent admit to actively seeking those products when shopping), according to a recent 17-nation survey by TNS, a research and analysis firm.

Throughout the world, such attitudes are buttressed by

More than 60 percent of energy use by data servers is wasted by their cooling systems.

educational systems and government policies. For instance, the Japanese government wants all of its citizens to be green shoppers by 2050 (the figure is currently around 30 percent). And more environmental regulation is certain: mandatory restrictions on industry emissions of carbon dioxide (cited as the leading driver of global warming) are starting to come into force. Moreover, the rising importance of corporate social responsibility has elevated all things “green.”

The second reason why green issues are a significant consideration for

CIOs is the realization that IT is both a problem and a solution. It is a prime source of carbon dioxide but it is also a means of reining in pollution and global warming (through better monitoring, planning, and teleconferencing).

Electricity use, of course, is one key concern. Worldwide electricity use by servers doubled between 2000 and 2005. Power demand from servers will be 76 percent greater in 2010 than it was in 2005. There is plenty of room for improvements in efficiency here: many servers work at a fraction of their capacity, and more than 60 percent of energy used by data centers is wasted by their cooling systems.

Most CIOs know, then, that they are going to have to address the green issue. What they might not realize is that there is nothing to fear.

You do not have to wait for green IT policies to happen to you. Instead, you can take advantage of environmental imperatives to make your IT leaner, greener, and less costly today. And there are products to help you do this. Server and storage virtualization, for example, is a green initiative that pays other dividends: lower energy

costs; reduced expenses for hardware, maintenance, and management; and a more agile IT infrastructure. You should also consider PCs that use less power—because PCs account for some 40 percent of IT’s contribution to atmospheric carbon.

Then there is teleconferencing and telecommuting. If every U.S. worker who could telecommute did so, that would remove 33 million commuters from roads and transit systems and save 67 million metric tons of carbon dioxide emissions each year. Yes, the technology for this has been around for years—but today, the quality of the tele-

conference experience makes it a real alternative for senior executives.

Rather than waiting to be dragged along by new regulations or company policies, IT departments can get ahead of the curve, making themselves ecofriendly before they have to. They can go for cleaner, more efficient PCs, promote fuel-saving use of IT communications assets, and make their data centers far more efficient.

This strategy creates brand and business value, lowers costs, attracts talent, and positions the IT division as a leader on an important strategic issue. Does “green”

sound like a silver bullet in a turbulent time of cost cutting? No. But it might come close.

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Coming Soon

A Global Gold Standard for IT Management

by Karalee Close and Ralf Dreischmeier

Imagine what life would be like if you could show your business customers and colleagues—be they CEOs, COOs, or CFOs—the precise value in dollars, euros, pounds, or yen that IT has created over the past 12 months. And why stop there? Imagine being able to predict exactly how much future value you could create for your business by improving the way you do certain things in IT. Too good to be true?

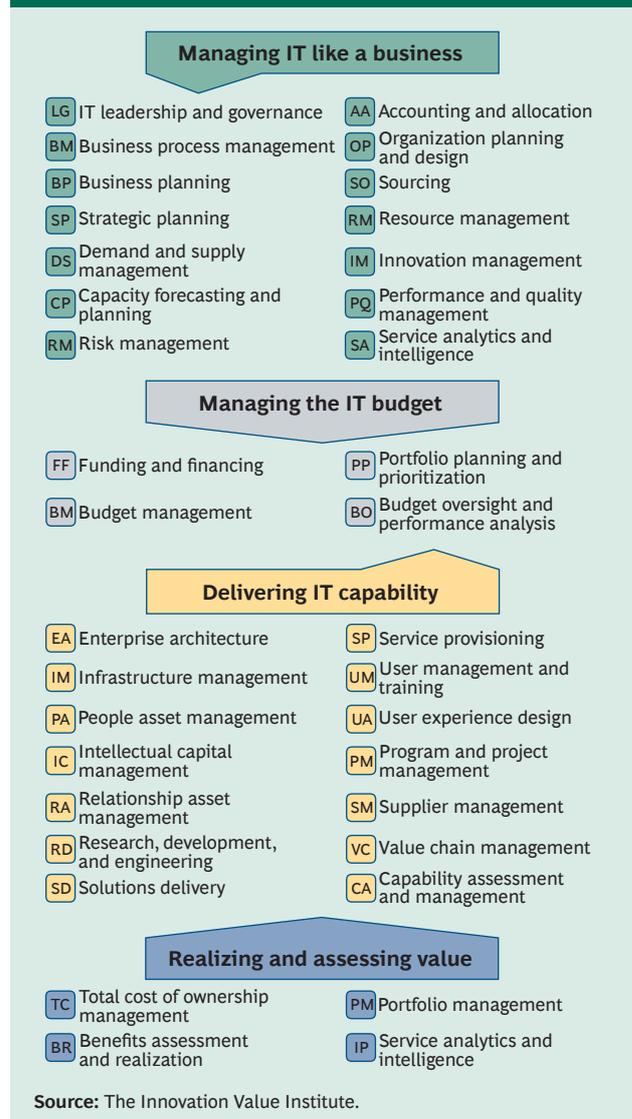
It might sound that way to CIOs and IT managers who find it a challenge to answer this simple question: What is IT’s contribution to the bottom line?

Though research has shown that the maturity—by which we mean robustness and sophistication—of IT practices and processes is the key contributor to the creation of business value, there is still no overarching model or framework for assessing an IT organization’s maturity or for showing how an increase in IT maturity pays off in incremental value for business. This makes it hard to identify where innovation is needed and which new practices are effective. IT management needs a new model.

The Innovation Value Institute (IVI)—a consortium of more than 40 leading organizations from industry, academia, and the nonprofit sector—is developing such a model: the IT Capability Maturity Framework (IT-CMF). (See Exhibit 1.) The model covers four key dimensions:

- ◇ Managing IT like a business
- ◇ Managing the IT budget
- ◇ Delivering IT capability
- ◇ Realizing and assessing business value

Exhibit 1. The Model Spans the Full Spectrum of IT Activities



In total, the model identifies 36 processes and categorizes them under these four dimensions to cover *all* activities in an IT department. An assessment of an IT organization’s maturity across these 36 processes, together with comparisons to industry benchmarks and best practices, will highlight the company’s key maturity gaps and value-creation opportunities. (See Exhibit 2.)

In this unique venture, some major competitors have agreed to collaborate under the principle of open innovation. These include Intel, Microsoft, BP, and Chevron. The Boston Consulting Group is a steering patron and a member of the consortium’s board of directors.

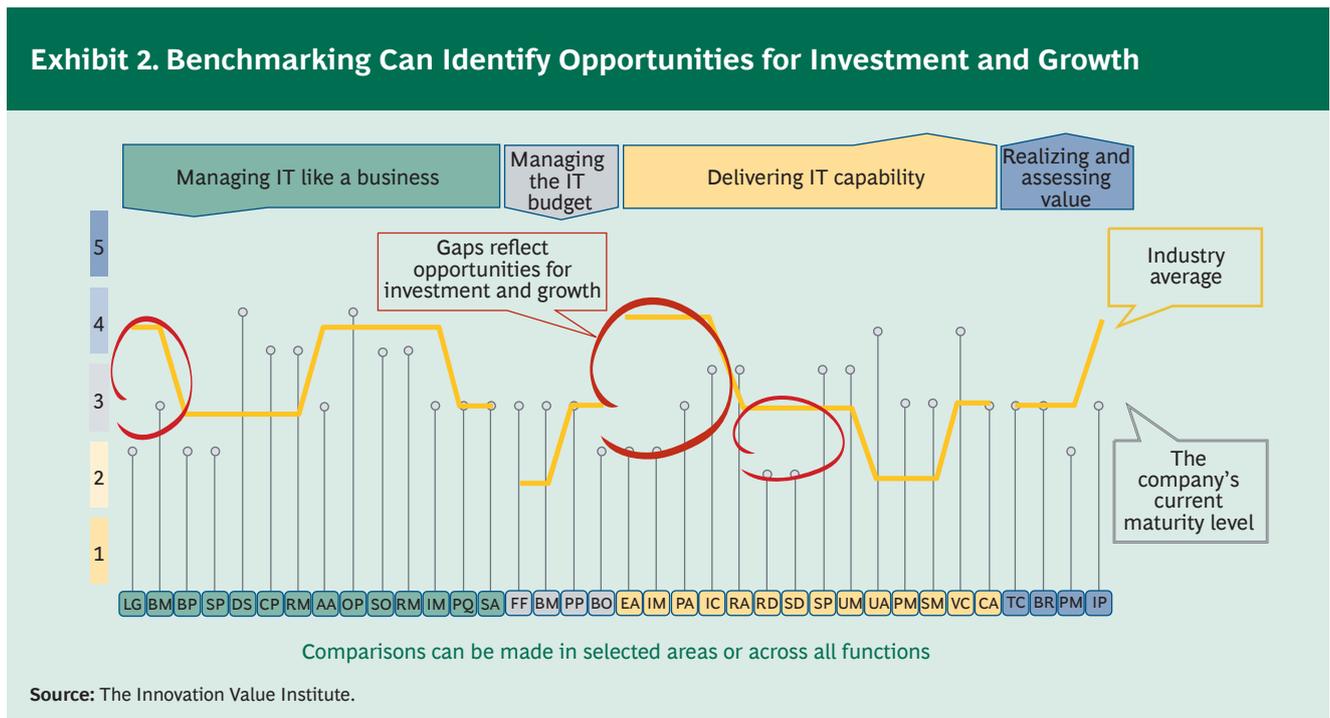
Things have moved fast since the IVI was founded in 2006. Already, pilot projects for processes such as enterprise ar-

chitecture, innovation management, and benefits assessment and realization are under way. The consortium’s aim is to release these first components of the IT-CMF in February 2009 as part of the official IVI launch.

If you would like to learn more about the IVI’s activities, please feel free to contact either of the authors.

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Note to the Reader

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