

# GMA INFORMATION-TECHNOLOGY BENCH-MARKING 2013

THE NEW MISSION FOR IT IN CONSUMER PACKAGED GOODS

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Founded in 1908, GMA is an active, vocal advocate for its member companies and a trusted source of information about the industry and the products consumers rely on and enjoy every day. The association and its member companies are committed to meeting the needs of consumers through product innovation, responsible business practices and effective public policy solutions developed through a genuine partnership with policymakers and other stakeholders.

In keeping with its founding principles, GMA helps its members produce safe products through a strong and ongoing commitment to scientific research, testing and evaluation and to providing consumers with the products, tools and information they need to achieve a healthy diet and an active lifestyle. The food, beverage and consumer packaged goods industry in the United States generates sales of \$2.1 trillion annually, employs 14 million workers and contributes \$1 trillion in added value to the economy every year.

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# **EXECUTIVE SUMMARY**

OR YEARS, THE MISSION of chief information officers (CIOs) at consumer-packaged-goods (CPG) companies was clear: to deliver efficient and reliable systems at the lowest cost possible. Information technology was typically seen as a cost center, not a key lever of strategy.

That view, however, is becoming more and more outdated. With the emergence of innovative new technologies—from social media to mobile devices to big data—CPG companies have a rapidly expanding number of options for reaching out to and interacting with consumers to better understand consumer behavior. This is triggering a fundamental rethinking of the role that IT should play in capitalizing on these opportunities. And with the painful impact of the recession finally receding, companies are increasingly focused on growth—and technologies to power that growth. Accordingly, the debate about IT's mission will only intensify.

To understand how CPG companies are responding to this new world, the Grocery Manufacturers Association (GMA) and The Boston Consulting Group conducted an in-depth IT-benchmarking survey. GMA last undertook such a survey in 2010. The current report, drawing on data from 27 leading CPG companies, reveals how new technologies are remaking CPG IT and transforming the role of IT leaders throughout the industry.

The focus of CIOs at CPG companies is changing: from IT governance, process optimization, and return on IT investments to IT management that will drive growth.

- Nearly 75 percent of CPG CIOs surveyed cited supporting business growth as a top IT objective, up from fewer than 20 percent in 2010.
- To help drive growth, CPG companies are looking to harness two new types of technologies: consumer-oriented tools, such as digital media and smartphones, and big data and analytics to generate insights into business performance improvement.
- CPG IT departments, however, are moving cautiously—and therefore face the risk that functions such as marketing will increasingly step up to deploy these new technologies.

Rather than being clustered around an industry average, CPG IT spending tends to fall into two distinct camps.

• While selling, general, and administrative spending as a percentage of revenues falls into a neat range—with most companies

spending 15 to 25 percent—IT spending as a percentage of revenues varies from a low of 0.4 percent to a high of 2.8 percent, with no clustering around an average.

• "Frugal" companies spend 0.4 to 1.5 percent of revenues on IT, and "full scope" companies spend in the range of 1.4 to 2.8 percent of revenues on IT.

In terms of new-technology-adoption strategy, companies also tend to fall into two groups.

- Companies with a "leading technology" strategy, about 33 percent of the total group surveyed, are willing to adopt new technologies more quickly than their peers and often use nonfinancial measures to justify their investments. These leading adopters are also more likely to outsource basic services such as help desk operations, thus freeing up management capacity to focus on new-technology adoption.
- Companies with a "mature technology" adoption approach typically wait until a new technology has been proved effective before deploying it within the business.

We define a company's "IT operating position" on the basis of the company's spending level and its technology-adoption approach. Our survey found that many companies have the opportunity to improve their current IT operating positions.

- Among the respondents, 42 percent follow a mature-technologyadoption approach despite being full-scope IT spenders, which suggests that there is room for these companies either to get more for their money or to spend less.
- At the same time, 8 percent of companies pursue a leading-technology-adoption strategy despite being frugal spenders, an approach that could be difficult to sustain over time or that may in fact indicate "shadow" IT spending (spending on IT outside of the IT budget in other parts of the business, such as marketing).

Outsourcing can help free up management bandwidth to focus on new technologies—but can also result in higher costs if not managed carefully.

- Outsourcing is not especially common in CPG, with the median survey participant outsourcing only 32 percent of its IT functions.
- Median IT operating expenses as a percentage of revenues are higher for "substantial" outsourcers than for "minimal" outsourcers, suggesting that careful management of outsourcing contracts is crucial to avoiding escalating IT costs.

One of the most important steps in moving to a better operating position is effective cost management, especially for companies with a full-scope spending model.

- Infrastructure is often an undermanaged area—mature-technology adopters in our survey spent proportionally more on infrastructure than leading-technology adopters.
- Controlling the costs resulting from application proliferation is another opportunity—new and innovative application deployments must therefore be counterbalanced by efforts to consolidate and rationalize existing applications.
- Improving project "velocity" represents the final opportunity—
  leading-technology adopters appear to be ahead of mature-technology adopters in executing efficiency improvement initiatives.
   As a result, leading-technology adopters have freed up IT management capacity for the time-consuming deployment of new technologies.

# A NEW CALLING FOR IT

## DRIVING BUSINESS GROWTH

THE FOCUS ON TOP-LINE growth among consumer-packaged-goods (CPG) companies is changing the mission for chief information officers (CIOs). According to a 2013 IT-investment benchmarking survey jointly undertaken by the Grocery Manufacturers Association (GMA) and The Boston Consulting Group, nearly 75 percent of CPG CIOs cited supporting business growth as a top IT objective. In 2010, when GMA last undertook a benchmarking survey in this industry, however, fewer than 20 percent of survey participants identified growth as a primary objective.

This growth mindset is shifting the dialogue about IT. So although issues such as IT governance, process optimization, and the financial return on IT investments have traditionally been at the center of IT strategy, there is now an increasing focus on how the use of new technologies can boost revenue growth.

Today's CPG companies are looking to exploit two broad types of new technologies:

 The first includes digital media, social media, smartphones, and tablets, all of which have proliferated among consumers today. Marketing departments want to take advantage of these technologies to engage directly with consumers—an activity until recently gated by retailers or feasible only through firsthand market research.

Given the growth mindset, there is now an increasing focus on how the use of new technologies can boost revenue growth.

Second, big data and analytics are a major focus for sales executives, who are looking for ways to obtain new insights that can help them increase revenues and improve profitability. Many companies are experimenting with new tools for analyzing large quantities of internal sales information, trade-promotion-spending data, and Internet "sentiment" trends. (See "How to Get Started with Big Data," BCG article, May 2013.) These tools and techniques are also being used to improve operations and supply chain performance. One survey participant, for instance, is able to track warehouse performance in real time thanks to its recent big-data implementation.

The key question for CIOs is what role IT should play in stewarding these two new types of technologies.

# New Technologies: The Keys to Unlocking Revenues

New technologies, be they mobile apps or big data, have the potential to turbocharge growth.

In the case of consumer-oriented new technologies, the primary goal is to boost brand engagement—the degree to which consumers feel connected to a brand—by increasing the frequency and intensity of interactions with consumers. Enhanced brand engagement, in turn, fosters revenue growth as shoppers turn toward their preferred brands, either online or in stores.

Two years ago, for example, a leading maker of chewing gum created an online video game to help accelerate sales of one of its newer brands. Playing the game was free, but unlocking new game levels required alphanumeric codes that were printed on the inside of gum wrappers, so players needed to purchase the product to proceed in the game. The initiative was highly successful, enabling the new brand to hit \$500 million in annual sales five years after launch, making it the fastest-growing brand in the company's history. Another leading packaged-foods company operates a website offering more than 2,000 recipes to families looking for meal ideas. For the first six months of 2013, this website averaged 4.3 million unique visitors per month.

Harnessing big data can be equally powerful. Consider the case of a major CPG company that wanted to understand how to improve the mix of its products in stores. The company was adjusting its product mix in different locations on the basis of sales representatives' knowledge of local dynamics, but the effort was not heavily data driven. Management decided that should change.

Drawing on the company's internal data as well as point-of-sale (POS) scanner information from a syndicated-data provider, the company compiled a detailed sales history for its products. The sales data were broken down by store, with precise information on sales in every outlet that carried the company's products on its shelves. At the same time, profiles were created for each store, factoring in information such as the demographics and

income levels of the store's neighborhood. Using advanced analytics, a model was created that helped determine the best mix of products for each store. Testing of the model in a few pilots showed the value of the approach: sales growth for those stores was more than 250 basis points higher than sales growth in comparable stores. The company is now in the process of rolling out the approach more broadly.

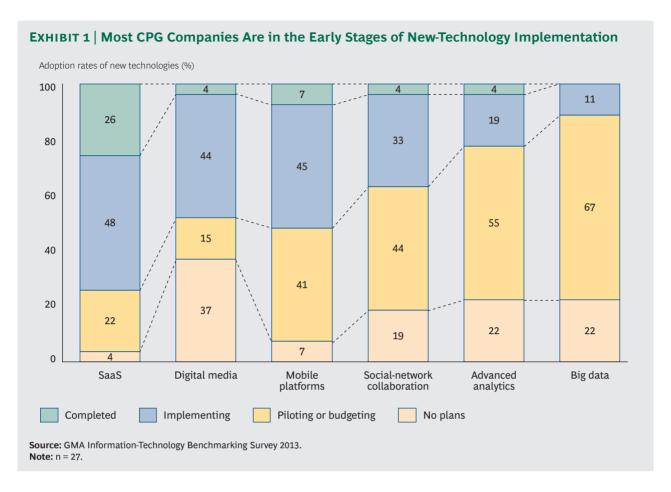
IT departments in CPG companies are only beginning to embrace new technologies.

# Slow Adoption: Limiting the Payoff from New Technologies

Despite this sort of success, IT departments in CPG companies are only beginning to embrace new technologies. The vast majority of CPG IT departments surveyed are in the process of implementing or piloting consumer engagement initiatives and advanced analytics capabilities. However, the survey showed that very few have fully implemented these new tools. (See Exhibit 1.) For example, none of the survey participants has fully deployed a big-data solution.

CIOs today face both a threat and an opportunity: the risk of IT being disintermediated by functions such as marketing and the potential to deliver new technology-enabled capabilities to the business.

In many CPG companies, chief marketing officers (CMOs) are already charging ahead to develop mobile apps for consumers and to build websites. They often turn to digital-media agencies that combine creative talent with technical skills to build and deploy new systems for engaging with consumers. CMOs can also work directly with Software-as-a-Service (SaaS) providers to, for example, track consumer sentiment in real time by monitoring Twitter, Facebook, blogs, and other Internet forums. And SaaS vendors, in turn, continue to make their products easier to use by



(among other things) offering Excel add-ins that enable marketing analysts to prepare presentations and reports quickly.

CIOs have opportunities to make the IT function an even more valuable competitive weapon.

But CIOs have opportunities to make the IT function an even more valuable competitive weapon. For one thing, they can bring discipline and economies of scale to newtechnology investments. One of the companies that participated in the IT benchmarking survey has established within its IT organization an Internet team that is responsible for all of the company's consumer-facing website development. This team coordinates design, implementation, support, and enhancements—including collaborating with external agencies where

necessary—for a portfolio comprising more than 100 websites.

IT is also the custodian of operational data on sales volumes, promotions, logistics, pricing, and numerous other aspects of the business. Most companies tend to use such data to generate standard sales, operations, and financial reports. IT has the opportunity to integrate these existing operational data with other information sources such as POS scanner data, primary market research, and ecommerce data. New analytical tools also allow much more fine-grained analysis—all the way down to individual stores instead of Zip Codes or counties. By enabling such simultaneously broad and deep analytics, IT can potentially unlock valuable market insights for the business.

# Fiscal Discipline: Still Important as IT Budgets Expand

As CIOs consider how to take advantage of such opportunities, they should take care to do so while continuing to maintain tight control over spending. The survey found that although IT capital expenditures are expected to increase significantly, by 5.5 percent, in 2013, IT operating expenses will rise by only 3.4 percent in 2013. This increase is well below the 4.9 percent projected revenue-growth rate forecast by survey participants. (See Exhibit 2.) The bottom line: although IT budgets are indeed expanding, fiscal discipline remains a critical focus.



# A CLOSER LOOK

## THE DRIVERS OF IT SPENDING

Our survey showed that companies have established a distinct IT operating position, defined by the combination of spending levels and the extent to which new technology is adopted. Yet for many companies, that model stems more from happenstance than deliberation. The most successful IT organizations tend to define the operating position they want to adopt and take steps to mold their organization to fit it. However, taking this approach requires management focus and drive.

# Two Distinct IT-Investment Approaches

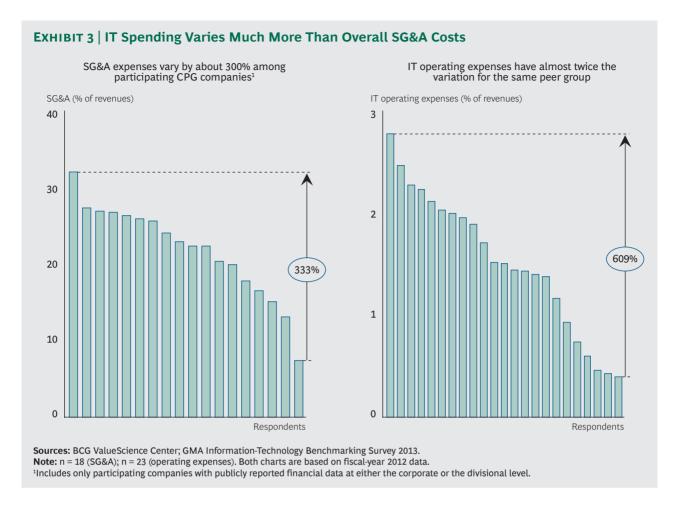
Managers often ask how their IT spending stacks up against the industry average. This is not, however, the key question to ask. Although one might expect that IT spending among CPG companies would cluster around an average, in reality there is tremendous variability in those spending levels.

A close look at the variation in selling, general, and administrative (SG&A) expenses versus the variation in IT spending underscores this point. Because SG&A costs include IT spending, it might be natural to assume the two follow a similar pattern. However, the data reveal that this is not the case. SG&A spending as a percentage of revenues falls into a neat range, with most companies spending from 15 to 25 percent.

IT spending as a percentage of revenues, however, varies from a low of 0.4 percent to a high of 2.8 percent, with no clustering around an average. So, although the gap between the top and bottom spenders in terms of SG&A was 333 percent in our survey, for IT that gap exceeded 600 percent. (See Exhibit 3.)

Successful IT organizations define the operating position they want and mold their organization to fit it.

The higher variation in IT spending is driven by a number of factors. Accounting differences explain some of it. Some companies depreciate IT capital investments over three years; others use a seven-year depreciation cycle. Also, some companies may expense software purchases in the year the purchases are made; others consider those as capital investments, and consequently spread the depreciation expense of those investments over several years. Meanwhile, some companies in our survey are in the midst of implementing new enterpriseresource-planning (ERP) systems, thus creating higher-than-normal costs for a period of time.



Still, even taking these factors into account, the degree of variation is significant. A closer look at the spending levels reveals that there are two distinct groups in IT spending. (See Exhibit 4.)

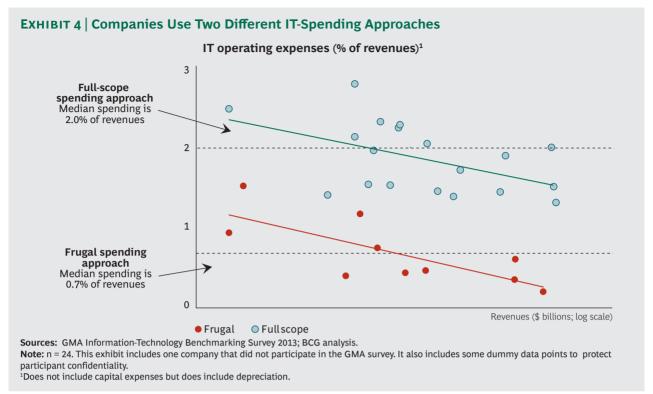
One group, which we call "frugal," spends 0.4 to 1.5 percent of revenues on IT. These companies—one-third of the respondents in our survey—focus their spending on core technologies that are critical to company operations. IT investments are typically limited to mature technologies with proven metrics such as ROI. When it comes to investing in innovative technologies to drive revenue growth, however, these companies often make those investments through functions other than IT, such as marketing.

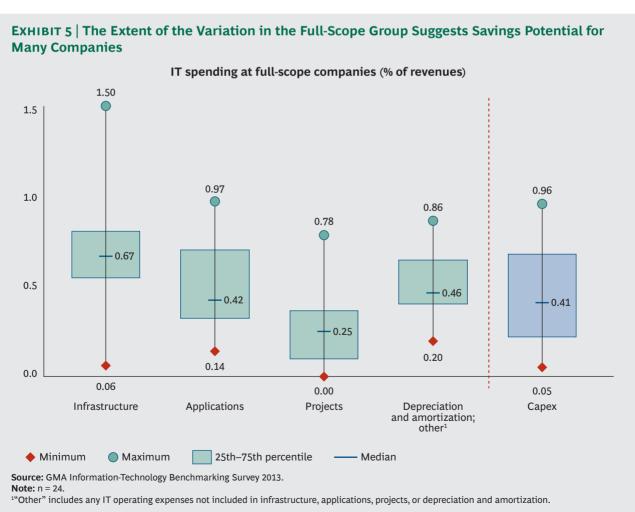
We call the second class of spenders "full scope" companies. These companies, which accounted for two-thirds of respondents, spend in the range of 1.4 to 2.8 percent of their revenues on IT. The median spending level for these companies is 2.0 percent of

revenues, more than double the 0.7 percent median level of frugal companies.

Our survey found a high degree of variation in spending by full-scope companies, underscoring the fact that many companies in this group likely have significant opportunities to drive down their IT costs. (See Exhibit 5.) Some of the full-scope spending supports innovative technologies, but many full-scope companies suffer from high IT-spending levels as a consequence of inefficiencies, application proliferation, or other challenges. Outsourcing can also be a source of higher-thannecessary spending. For instance, companies may enter into long-term arrangements—seven-year contracts are not unheard of-that do not allow for adjustments as overall industry costs decline.

Top performers take a variety of approaches to reducing spending. For example, one of the companies in our survey that demonstrated low infrastructure costs as a percentage of revenues relies on a single IT vendor for its





data-center hardware and on only four vendors for nearly all of its IT support. Drawing from this limited vendor pool, it offers a small, highly standardized set of hardware patterns. This arrangement leads to partnerships between the company and its suppliers and thus allows, for example, advance previews of upcoming technologies and early notice of release dates.

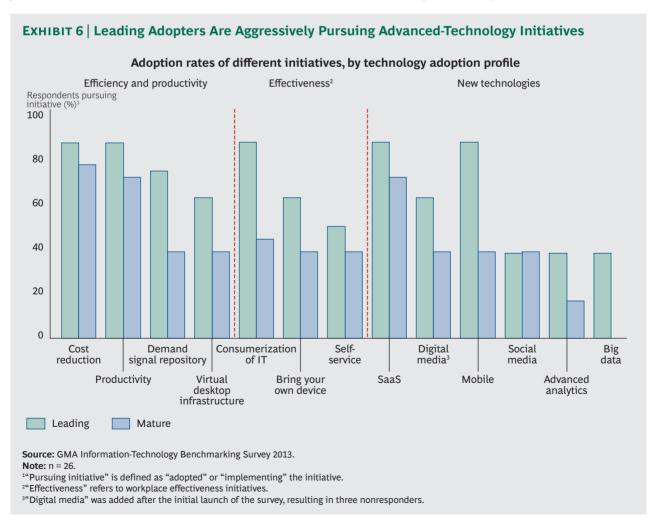
In another case, a major consumer Internet company shifted in 2011 to a "lights out" data center, in which all support is performed remotely, saving on both energy and staffing costs. This company has continued aggressive consolidation of equipment to further save energy, vielding a net annual savings of \$1.4 million in electricity costs alone.

## Adopting New Technologies: To Lead or to Follow?

Just as critical as the decision on how much

to spend are the decisions about how new technologies should fit into the company's overall IT strategy. CPG companies with a "leading technology" strategy tend to be willing to adopt new technologies quicker than their peers. At these companies, which constitute approximately 33 percent of the respondents in our survey, the IT function tends to have more leeway when it comes to spending on new technologies. It is not surprising that companies with a leadingtechnology-adoption strategy are pursuing technologies such as mobile platforms, advanced analytics, and big data much more aggressively than competitors with a mature-technology-adoption strategy. (See Exhibit 6.)

One way that leading-technology adopters are able to focus on new-technology adoption is by freeing up management capacity, and they can accomplish this through the judicious use of outsourcing. The survey indicates



that leading-technology adopters are much more likely to outsource basic services such as infrastructure operations management, help desk operations, and data centers. (See Exhibit 7.)

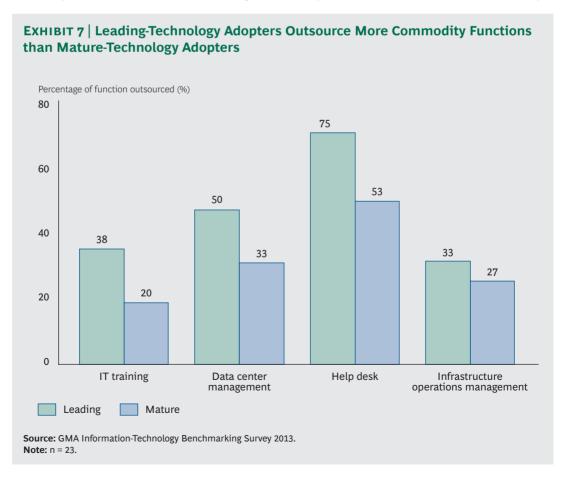
New technologies drive much more than cost reduction and enhanced productivity.

And although IT managers are often understandably concerned about the potential for outsourcing to disrupt operations, careful vendor management can mitigate many common issues. Our analysis suggests that such unlocking of management capacity can be significant. Take the case of help desk operations. A company with \$10 billion in sales typically requires a help desk of 50 to 100 full-time employees. If IT delivers this service internally, it also needs to allocate manage-

ment capacity to it—a valuable resource that might otherwise have been deployed to support new initiatives.

At the same time, there are significant differences in how leading- and mature-technology adopters measure the value of technology investments. Typically, IT investments are based on business cases consisting of an analysis of the financial ROI. New technologies, however, help drive much more than cost reduction and enhanced productivity. A mobile app, for example, can be a powerful marketing tool whose success is defined by the number of consumers using the app rather than a reduction in a specific cost. Therefore, measuring the success of these technologies requires a broader portfolio of metrics than traditional financial measures.

As a result, companies with a leadingtechnology-adoption strategy at times use other, nonfinancial measures to assess the benefit of a new technology. This does not mean, however, that these companies lack discipline in these evaluations. Instead, they



broaden the lens through which they evaluate these technologies to include strategic metrics, such as customer service ratings, the time to respond to customer inquiries, or the extent to which the initiative can drive revenue growth.

**Defining an IT Operating Position** 

A company's decisions regarding both technology spending and technology adoption create a distinct IT "operating position." (See Exhibit 8.)

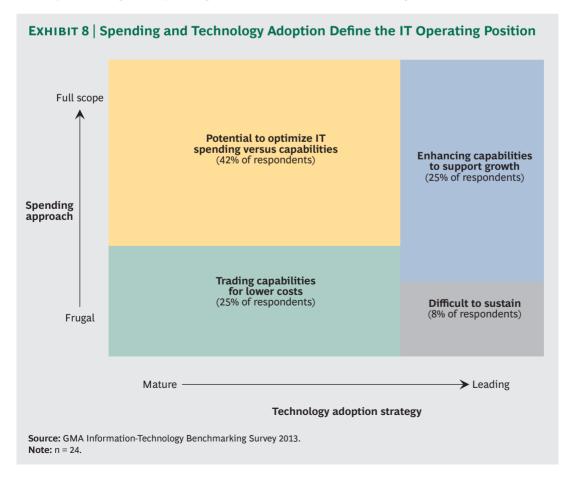
Our survey found that most frugal companies have a mature-technology-adoption approach. (See the sidebar "A Frugal IT Strategy Centers on Cost Discipline.") It is difficult to access new technologies within very tight IT-budget constraints. Some frugal IT spenders, for example, are investing in new capabilities but are still in the pilot or test phases. As these pilots become successful, such companies will likely find it challenging to scale up the initiatives without commensurately increasing their spending. In other

cases, companies are making "shadow" investments in newer technologies such as social media and mobile apps, but outside the IT budget.

It is difficult to access new technologies within very tight IT-budget constraints.

Full-scope spending in many cases allows companies to deploy leading technologies. (See the sidebar "Building an IT Innovation Portfolio.") Yet our survey found that it is actually more common for full-scope companies to be focused on mature technologies, with 42 percent of all respondents falling into the full-scope and mature camp.

Many full-scope companies that are working actively to launch innovative-technology initiatives are doing so from within their IT



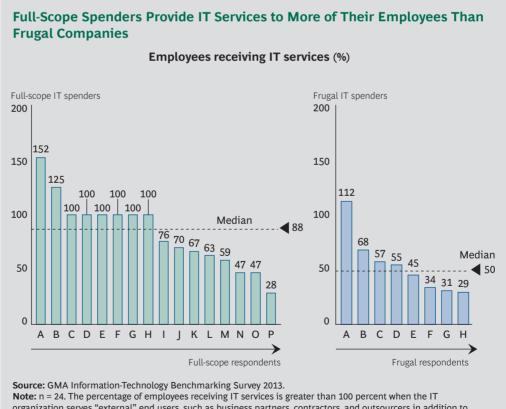
## A FRUGAL IT STRATEGY CENTERS ON COST DISCIPLINE

Over the long term, frugal companies will find that a mature-technology-adoption approach is a more sustainable model than trying to implement innovative new technologies on a lean budget. This frugal and mature operating position typically requires centralized control of technology investments and a relentless focus on cost control. Frugal companies bring that mindset to all aspects of IT, including decisions regarding whether certain employees need IT support at all. According to our survey, the median full-scope company provides IT services to 88 percent of its full-time employees, and the median frugal IT spender serves only 50 percent of its employees—reflecting a rationing of IT support. (See the exhibit below.)

Consider the case of a large food-manufacturing company in which IT has a clear mission to control costs while supporting the critical functions of the business. The

cost of developing applications in-house versus buying them from an outside party, for example, is continually reevaluated. The company is careful to avoid being locked into products from dominant applications vendors that could raise prices aggressively. And customization of purchased applications is kept to the barest minimum, a move that makes maintenance and upgrades less costly.

That discipline extends throughout the organization, with all divisions within the company operating on the same set of core applications. And when other functions or business units do need to use applications outside that core, they are expected to consult with IT to ensure that the lowest-cost solution is purchased. Technology support is also centralized to maximize efficiency and is run to meet a targeted level of service adequate for business needs—but not beyond.



Note: n = 24. The percentage of employees receiving IT services is greater than 100 percent when the IT organization serves "external" end users, such as business partners, contractors, and outsourcers in addition to company employees.

## BUILDING AN IT INNOVATION PORTFOLIO

A leading food company in our survey has taken steps to systematically invest in new technologies and then to scale up those that succeed. This full-scope and leading operating position grew out of a clear mandate from the CEO to make the company a digital-IT leader. Like many others in the CPG industry, however, this company finds that the bulk of its IT budget is directed toward core activities to run the business; only limited discretionary funds are available for experimentation and innovation. The challenge, then, was to get the maximum payoff from those limited discretionary dollars.

To meet that challenge, IT leaders at the company dedicate 80 percent of the

discretionary funds to a portfolio of pilot programs and innovative projects. Funds are set aside for investing in new technologies, with vice presidents within the company given the latitude to green-light projects of \$500,000 or less without a formal investment review. As a result, the company has been able to pilot numerous new cloud services and SaaS applications.

At the same time, the company created a process for tracking the payoff from these projects to identify the winners. This approach brings a venture capital mindset to IT innovation; while many of the projects will not pan out, those that do can be scaled up aggressively.

departments rather than from other departments, such as marketing, often creating new roles to make this happen. Some representative nontraditional IT roles that our research identified include the following:

- Digital-business-process managers, who bring IT and marketing teams together in order to drive digital branding and marketing initiatives
- Marketing technology managers, who drive the technical execution of in-house digital-marketing efforts
- Decision solutions analysts, who use new analytical tools and harness data analysis techniques to deliver business insights

# **OUTSOURCING**

## A DOUBLE-EDGED SWORD

TODAY, OUTSOURCING IS AN established tool for the modern CIO, with CPG companies worldwide projected to spend \$9.3 billion on IT outsourcing in 2013, according to Gartner. Despite that substantial dollar figure, however, our survey found that most CPG companies outsource a relatively small share of their IT services. In fact, the median survey participant outsources only 32 percent of its IT functions. One interesting finding was that full-scope spenders are more likely to outsource than frugal companies; only two frugal companies reported a higher-than-median level of outsourcing.

## No Surefire Path to Savings

Our research revealed that the common belief that outsourcing lowers IT costs is often incorrect. Median IT operating expenses as a percentage of revenues are higher for companies that are substantial outsourcers than for companies that run most IT services in-house. (See Exhibit 9.) There are many reasons for these higher costs, including the overhead needed to manage outsourcing arrangements, the higher head count often required by providers of outsourced services, contractual failings, and poor coordination between different outsourced-service providers.

As Exhibit 10 shows, for every 10 percent increase in IT outsourcing, companies can reduce their IT head count by three full-time

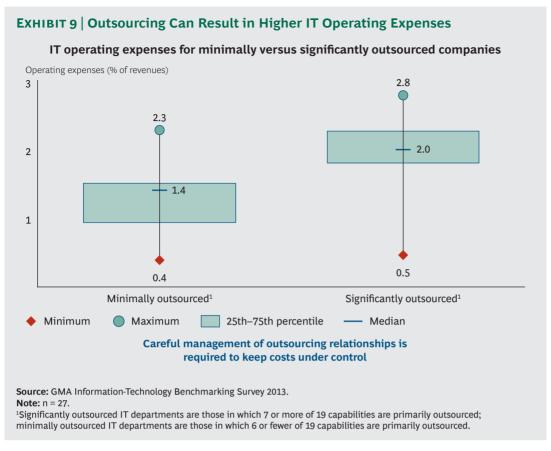
employees per billion dollars of revenues. For example, applying this benchmark to a \$10 billion CPG company suggests that by outsourcing 50 percent of its IT services, this company could reduce internal IT head count by 150 positions.

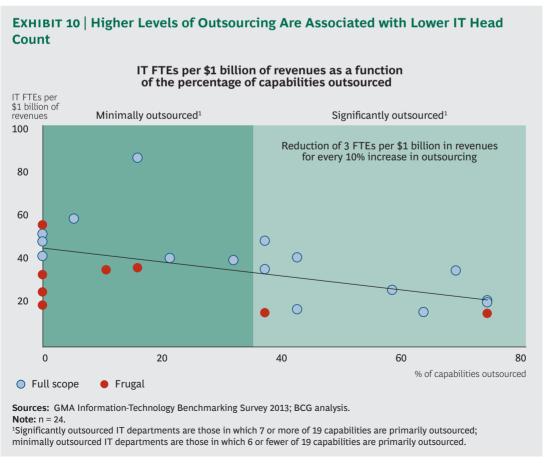
Outsourcing allows companies to exploit economies of scale as well as the benefits of process industrialization, lower labor costs, and specialization. As a result, it can be cost-effective, provided that companies use it as a way to deliver large-scale, usually transactional services. The survey supports this view, finding that costs for both minimal and significant outsourcers are comparable at the lower end of the spending scale.

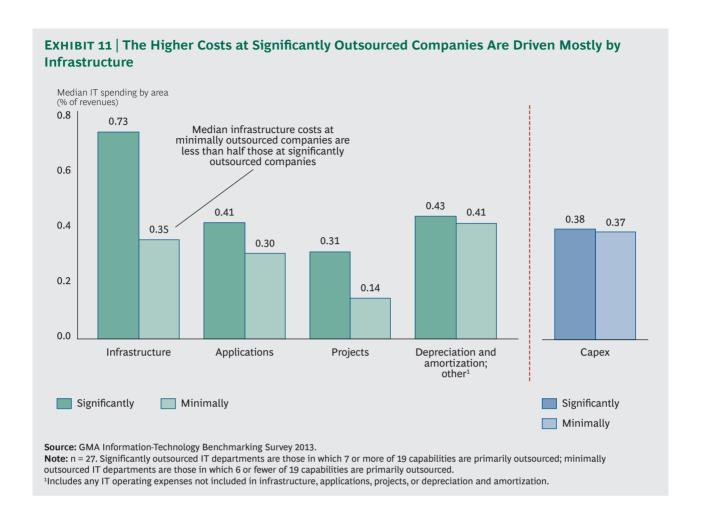
## The Infrastructure Contract Trap

When high outsourcing costs manifest, the primary driver is generally infrastructure spending. Indeed, significantly outsourced companies spend nearly twice as much on infrastructure as minimally outsourced companies, without the benefit of lower capital costs that one might reasonably expect. (See Exhibit 11.)

The nature of outsourcing contracts accounts for some of the infrastructure cost challenges. Companies typically enter into contracts that fail to anticipate future technology advances and that are not flexible enough to be adjust-







ed to reflect those changes. For example, although storage costs have fallen precipitously in recent years, some companies are locked into paying higher rates determined by contracts signed years ago.

Contracts for outsourcing can also restrict a company's ability to respond to shifting business priorities. One company, for example, initially committed to an expensive, complex outsourcing contract for its core systems including infrastructure and applications. However, several years into the contract, the company shifted to a simpler operating model with a heavier focus on cost competitiveness. While the cost of its internally managed IT dropped by 27 percent over the first year after the operating model shift, the cost of services provided under the contract rose by 3 percent because the company was forced to continue to purchase services it no longer required. The issue was resolved only through a large and complex renegotiation with the vendor.

This permanence of contracts can leave companies that depend on outsourced infrastructure at risk for higher costs, outdated technology, or both. However, given the presence of high-performing companies that are significant outsourcers in our survey, we cannot conclude that outsourcing is a futile endeavor. It does, however, create an imperative for CIOs to preserve flexibility in infrastructure contracts while simultaneously investing in vendor management and sourcing capabilities.

## FINDING A BALANCE

## IT SPENDING LEVELS VERSUS NEW-TECHNOLOGY ADOPTION

NCE A COMPANY HAS determined which operating position currently defines its IT function, the next question is whether that position is well suited to the company's overall goals. In some cases, companies will find they need to improve—or even transform—their IT operating position.

Moving to a Sustainable Position

A company's course of action largely depends on its current spending level.

Frugal Spenders. A key issue for frugal spenders is how new-technology plans will fit within their low IT-spending levels. The CIO at a company that is a frugal spender and a mature-technology adopter who is facing demands for accelerating new-technology adoption should start by engaging in a dialogue with senior leadership. The goal: to determine IT's ability to invest in the capabilities necessary to deliver on those ambitions.

For frugal spenders that are already adopting leading technologies, two points are worth exploring. First, the current situation may simply reflect fairly limited deployments across the business—which means that spending may need to rise to support a broader rollout. Alternatively, it is possible that "shadow spending" by the business is the principal source of funding for new tech-

nologies, with IT playing mainly a peripheral role—for instance, setting up automatic user access to a SaaS application. In either case, the focus of the dialogue needs to be on whether a frugal spending level is sustainable and on what role IT should play in driving new-technology adoption.

Companies might need to improve—or even transform—their IT operating position.

Companies at the Low End of the Full-Scope Spending Range. Full-scope IT spenders span a broad range: from as little as 1.4 percent to as much as 2.8 percent of revenues. Companies at the low end of this range face financial constraints similar to those of frugal IT spenders and have, therefore, a comparable decision-making calculus.

Accordingly, those companies that are mature-technology adopters today will find it valuable to take a look at the incremental spending required to pursue new technologies more aggressively.

Full-scope, albeit low-end, spenders that already are speedy adopters of new technolo-

gies, however, should ensure the sustainability of their long-term IT-innovation roadmap by clearly linking it to their IT-funding plans.

Companies at the High End of the Full-Scope Spending Range. Regardless of a company's technology-adoption approach, the question of cost efficiency is paramount—and that is especially true for mature-technology adopters. The CIOs of these high-end, full-scopespending companies should establish a cost reduction program; doing so will help build credibility for the IT function as well as free up funding, both of which are critical assets in enabling IT to be the steward of new-technology adoption.

## Not Letting Up on Cost Discipline

One of the most crucial steps for moving to a better operating position is effective cost management, especially for companies with a full-scope spending model. The key to successfully driving down costs is to look at every facet of IT, the three biggest being infrastructure, applications, and projects. (See Exhibit 12.)

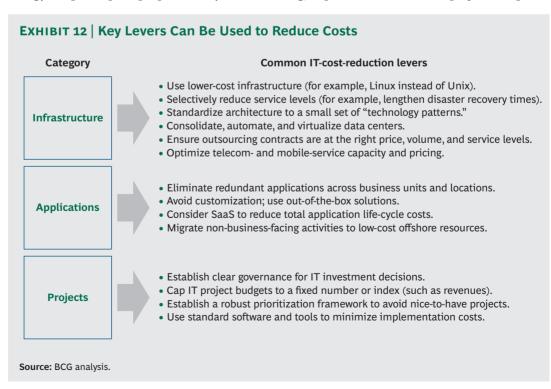
Infrastructure. The survey revealed a potentially counterintuitive finding: leading-technology adopters spent proportionally less on

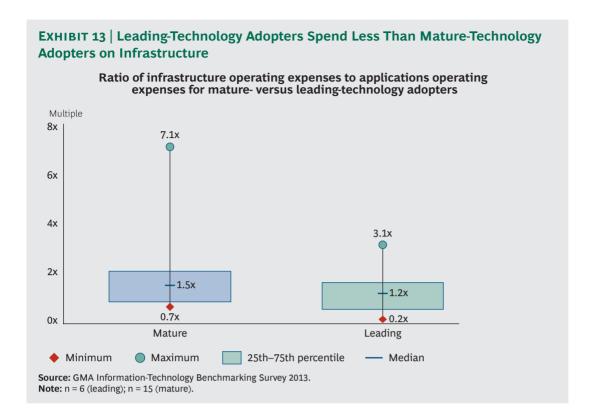
infrastructure than mature-technology adopters. Furthermore, infrastructure spending at these companies also fell in a narrower range. (See Exhibit 13.) The wider variation in infrastructure costs among companies with a mature-technology-adoption approach underscores the disparate levels of efficiency among that group.

The steps to bring down infrastructure costs are well known. Common levers include moving to a lower-cost technology such as Linux, standardizing hardware to a small set of technology platforms, and consolidating data centers.

Companies can also find infrastructure costsavings opportunities by closely scrutinizing their outsourcing contracts.

One major European company took the renegotiation of several of its contracts as an opportunity to do just that. This corporation took a novel approach and focused on developing multivendor KPIs—a shared set of KPIs jointly agreed to by all its major service providers. This approach yielded a multitude of projected benefits, including a significant reduction in business applications downtime, a multimillion-dollar reduction in infrastructure spending, improvement in on-time project-comple-





tion rates, and higher satisfaction scores for the services provided by those vendors.

Sometimes, cost reduction opportunities require a break with past practices.

One CPG company took aim at the high costs of its mobile-communications systems by adjusting policies for its coverage of mobilephone usage. Rather than issuing phones directly to employees and covering the monthly bills, the company installed software that allowed employees to connect their personal iPhones or Android devices to the corporate e-mail system. For employees who needed mobile connectivity to do their jobs, subsidies were given to cover the personal cost of that access. Of course, many employees who didn't qualify for the subsidies still used their phones to manage work communications.

In the end, the company was able to cut costs by about 30 percent while actually increasing the degree to which employees were using mobile devices to access their e-mail.

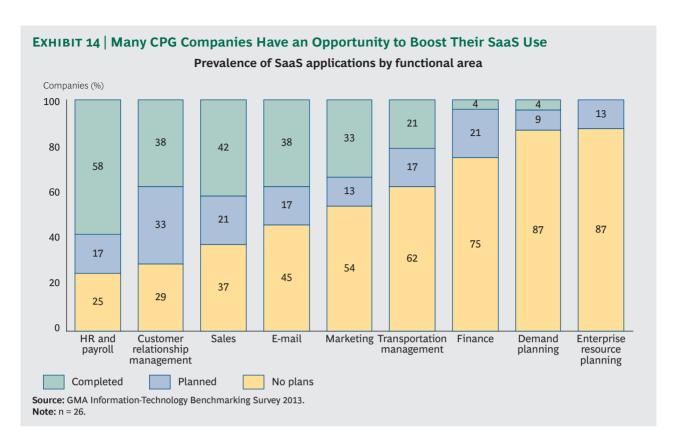
Applications. IT-enabled innovation often requires the deployment of new applications to the business. If not managed carefully, new-technology adoption can result in

application proliferation and excessive costs. Companies can take aim at these costs by eliminating redundant applications across business units and locations and using standard software packages with as little customization as possible.

SaaS solutions can act as a driving force for better application management and lower costs.

Use of SaaS solutions can often act as a driving force for better application management and lower costs. Onetime costs for SaaS are often lower than for traditional on-premise applications because of limited customization. Expenses for periodic upgrades are also avoided because the vendor continually makes updates in the background. Application support costs are often lower as well because they are included in SaaS subscription costs.

Overall, according to recent BCG research, the total lifetime cost of a SaaS application can be 20 to 50 percent lower than that of the



equivalent on-premise application—with the subscription fees more than offset by the lower development, deployment, and maintenance costs. (See "Profiting from the Cloud: How to Master Software as a Service," BCG article, June 2013.) In addition, migration to SaaS can substantially reduce IT infrastructure costs. Although SaaS is commonly used in functions such as HR, in other areas there is still much room for CPG companies to use more SaaS applications. (See Exhibit 14.)

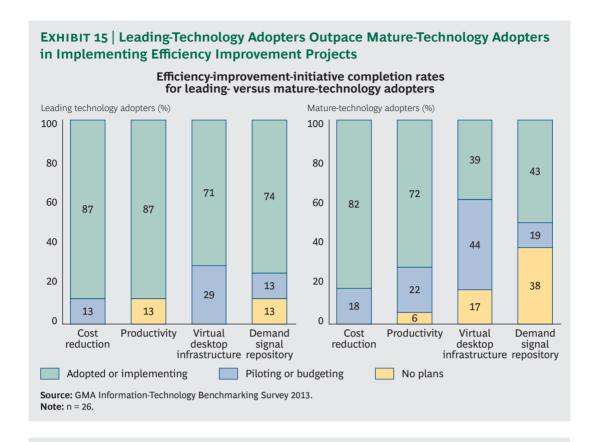
The costs of using disparate applications with little central planning are often hidden but sizable.

A large CPG company reviewed its application portfolio and found that more than 250 applications were being used across its manufacturing locations and supply chain. Fewer than 20 percent of these applications spanned more than one location; most were specific to individual locations. The company is now in the process of executing a plan to slash the number of manufacturing and supply chain applications to below 100. This move is expected to reduce costs by more than \$15 million, besides substantially improving the ability to share information

across the entire manufacturing and supply chain operation.

Projects. In most companies, there is no shortage of IT project ideas. And often decisions regarding which projects to execute are driven as much by internal politics as by objective evaluations. Critical elements of effective portfolio governance include establishment of a clearly defined and accepted decision-making process, including a fixed or revenue-indexed maximum for project spending if necessary, and a clear prioritization framework that distinguishes between must-have and nice-to-have projects.

Our survey showed that leading-technology adopters appear to be ahead of mature-technology adopters in executing efficiency improvement initiatives. (See Exhibit 15.) As a result of this higher project "velocity" in completing more-traditional work, leading-technology adopters have freed up IT management bandwidth for the time-consuming deployment of new technologies such as mobile or social platforms, advanced analytics, and new technical platforms such as in-memory computing. (See the sidebar "The In-Memory-Computing Conundrum.")



## THE IN-MEMORY-COMPUTING CONUNDRUM

The introduction of "in-memory computing" has created much buzz—and a bit of controversy. The technology allows users to analyze large volumes of data from various sources in real time. Several major software providers have rolled out in-memorycomputing offerings, including Teradata Intelligent Memory, Oracle's array of JD Edwards EnterpriseOne In-Memory applications, SAS Institute's In-Memory Analytics suite, and SAP's HANA.

Although the prospective uses of in-memory computing are potentially wide ranging. CPG companies are taking a measured approach to adoption. According to our survey, only 4 percent of respondents have fully implemented an in-memory-computing platform and another 8 percent are in the process of rolling out such a platform. About 60 percent are piloting a platform, and the remaining 28 percent have no plans to deploy in-memory computing. For those who don't see a strong case for in-memory computing, the decision

typically reflects a focus on the financial return of new technologies. Many companies that are not planning to adopt the technology believe that the tools they already have offer a solid price-for-performance tradeoff. And these existing systems can be augmented with other off-the-shelf tools for enabling additional analytics and insights.

Companies that have embraced the technology, however, are focused on the potential for enhanced analytical capability for users. At The Hershey Company, in-memory computing offers the potential to accelerate scenario planning and predictive modeling. Its value in sparking creativity, enabling rapid analysis, and reducing the number of different platforms used internally is meaningful, according to Joe Zakutney, CIO at Hershey. "In-memory computing offers the potential to boost analytical capacity and enable new business-insight generation," Zakutney noted.

# THE ROLE OF IT IN A SHIFTING CPG LANDSCAPE

T LEADERS IN THE CPG industry are at an inflection point. Although the task of managing IT costs is still vital, the role of IT in driving innovation and growth is moving to the fore.

A critical first step for CIOs in determining the mission for IT is to understand the current operating position for their companies. According to our survey, more than 40 percent of CPG companies spend significant sums of money on IT without delivering innovation in any significant way. Another 25 percent are prioritizing frugal IT spending over new-technology adoption—a position that may need to change as business expectations continue to evolve. A small slice of companies—fewer than 10 percent—are deploying leading technologies on tight IT budgets, an approach likely to be challenging to sustain over time.

A clear understanding of a company's current operating position is the foundation for a conversation with executive leadership about how the IT function should evolve to meet the needs of the business. Among the questions that CIOs are being asked:

- How can digital information be synthesized to understand consumer behavior in a way different from that revealed by traditional market research?
- How should direct relationships be maintained with millions of consumers?
   What new business processes are necessary to generate value from these direct relationships?
- How can existing supply chains become "smarter" with the combination of new consumer insights and transactional sales, finance, and product information gleaned from ERP databases?
- How can the idea-to-market cycle time be dramatically reduced?

As new technology continues to transform the CPG industry, those CIOs who "have the answers" and can lay out a roadmap for adoption will be in a position to maximize the value of their IT investments—and also have a true seat at the proverbial table.

# **APPENDIX**

Twenty-seven companies in the CPG industry participated in the GMA Information-Technology Benchmarking Survey 2013. (See Table 1.) On the basis of the information they

provided, we developed a set of 14 performance metrics with top-quartile, median, and bottom-quartile scores for each metric. (See Table 2.)

## **TABLE 1 | Participating Companies**

ACH Food Companies	L'Oréal USA
Agropur Cooperative	Mars
Anheuser-Busch InBev	McCormick & Company
Bush Brothers & Company	MillerCoors
Campbell Soup Company	Mondelēz International
Cargill	Procter & Gamble
ConAgra Foods	Ralcorp Holdings (now part of ConAgra)
Dean Foods	The Clorox Company
E. & J. Gallo Winery	The Hershey Company
General Mills	The Hillshire Brands Company
H.J. Heinz Company	The J.M. Smucker Company
Hormel Foods	Unilever
Kellogg Co.	Welch's
Kraft Foods Group	

Source: GMA Information-Technology Benchmarking Survey 2013.

## TABLE 2 | IT PERFORMANCE METRICS

	Metric	Top quartile	Median	Bottom quartile
Operating and capital expenses (% of revenues)	Operating expenses	1.11	1.61	2.14
	Infrastructure	0.35	0.61	0.79
	Applications	0.25	0.38	0.55
	Projects	0.11	0.16	0.31
	Depreciation and amortization, other	0.32	0.46	0.59
	Capital expenses	0.14	0.38	0.54
Cost ratios (\$000s)	Operating expenses per employee	6.5	8.2	11.7
	Operating expenses per end user	7.6	11.3	14.7
FTE ratios	IT FTEs per \$1 billion of revenues	20.2	34.5	40.7
	Employees per IT FTE	81.0	62.4	41.0
	End users per IT FTE	64.6	38.4	27.6
	Coverage of total FTEs (%)	100	67	47
External services	Outsourcing index1 (%)	50	32	3
	SaaS index² (%)	32	16	11

Source: GMA Information-Technology Benchmarking Survey 2013. Note:  $n=27.\,\mathrm{FTE}=\mathrm{full}$ -time employee.

Figures in the chart refer to the percentage of 19 capabilities that participants identified as "primarily outsourced." The survey itself listed 24 capabilities, but we combined overlapping or nearly duplicative capabilities to create the 19 used here.

2"SaaS index" is the percentage of 19 functions in the survey for which respondents reported they "currently utilize a cloud solution."

# FOR FURTHER READING

The Boston Consulting Group publishes other reports and articles that may be of interest to readers of this report. Recent examples are listed here.

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An article by The Boston Consulting Group, July 2013

#### Profiting from the Cloud: How to Master Software as a Service An article by The Boston Consulting Group, June 2013

How to Get Started with Big Data An article by The Boston Consulting Group, May 2013

## IT Outsourcing: Expectations Versus Facts

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## Simplify IT: Six Ways to Reduce Complexity

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#### Two-Speed IT: A Linchpin for Success in a Digitized World An article by The Boston Consulting Group, August 2012

Shared KPIs in Multivendor IT Outsourcing: Turning "I" to "We" An article by The Boston Consulting Group, February 2011

## Reinventing the IT Organization: Five Strategies for CIOs

A Focus by The Boston Consulting Group, February 2009

# NOTE TO THE READER

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