

# Value discovery: A better way to prioritize IT investments

By Gary A. Curtis, Richard M. Melnicoff and Tor Mesoy

The current debate over IT spending often misses the point. It's not how much you spend, it's the way you manage your IT spending that counts. The goal is not reduced spending but selective, value-creating spending that makes a greater contribution to the bottom line.



■ When it comes to perceiving the competitive advantage offered by information technology, today's senior business managers often hope that "more is more." These top managers understand that strong IT capability is crucial to competing effectively. Many line managers, however, have a much more distressing perception of IT: that it is misaligned with current business needs and that it is underdelivering, almost regardless of budget. They aren't really sure what they get for their IT budgets, and perhaps worst of all, they worry that the problem of IT's accountability for building business value has been discouragingly resistant to remedy.

Until recently, these less flattering views were not widely debated, at least not by CEOs and boards. Now, they are breaking into the open, with the beginnings of what might be a collective crisis of business faith.

One very public sign of the times: In the May 2003 issue of *Harvard Business Review*, editor-at-large Nicholas G. Carr weighed in on the question of "how much IT is enough?" with his provocatively titled article "IT Doesn't Matter." With schismatic determination, Carr nailed his theses to the door: The competitive value of IT is overestimated and widely misunderstood, and the major IT risk facing companies today—across all sectors and regions—is overspending. (Similarly skeptical views of technology have appeared recently in *The New York Times* and *The Economist*.)

Actually, in Accenture's experience, the more accurate word is *mis-spending*. For the CEO or CIO in the budget-cutting crosshairs, the challenge is separating critical IT investments from those that are nonessen-

tial or, as Carr puts it, "unnecessary, or counterproductive."

This prioritization of IT investments may be fine as far as it goes, but as an actionable plan, it is only a first step. The more significant possibilities lie in the opportunity to create entirely new IT-enabled business value. Selective funding of IT-enabled business improvements, justified by a rigorous, measurable process of discovering exactly where value-creating business opportunities lie, broadens the meaning of *IT strategy*. It also expands the vision of the top management team to include reduced IT spending *and* a stronger contribution to the company's operating results.

The goal becomes selective, profit-focused spending, rather than simply reduced spending. Put another way, the real differentiator in a company's financial performance, it turns out, is not overall IT spending but the allocation to IT-driven business improvement.

### **Eating the seed corn**

As any top manager can attest, IT budgets are more vulnerable than ever, and IT leadership is facing unprecedented pressure to deliver demonstrable returns on investment. Various industry surveys show that most companies spend an amount that hovers at about 3 percent of their revenues on IT, with spending determined, for the most part, by past practice rather than by strategic alignment to business imperatives. The real point of exposure is the enterprise capital budget, where IT now typically consumes half of available funding. In this environment, how can senior executives make the business case for continued IT investment as the foundation for creating new business value?

Sadly, this is not an environment in which top management can look to peers for model solutions, nor are they likely to find successfully resolved case studies generated by academics or the business press. Instead, management surveys an IT landscape dominated by short-term solutions and littered with former CIOs. Some companies attempt to starve the problem into submission through sweeping cost-reduction mandates (often evidence of a lack of appreciation for IT's contributions to existing revenues). Others attempt wholesale IT renewal, without the benefits of reliable, up-to-date metrics or an accurate understanding of the business vision that IT must support.

In this environment, value-adding and innovative IT initiatives, unprotected by committed stakeholders, often go on the chopping block first. In times of corporate infighting for finite resources, the laws of budgetary entropy favor existing commitments—backed by existing internal constituencies—over new ones.

For the CIO under pressure, this can be likened to eating the seed corn during a famine: The organization has eliminated the very initiatives that are the foundation for future revenue and profit growth. Recent Accenture research, conducted among 100 large European companies in 2002, suggests that this approach to budget cutting almost invariably results in higher spending down the line. Eventually, there is a day of reckoning: IT capabilities (and productivity) deteriorate and IT maintenance costs rise as supporting aging applications and technologies becomes more costly.

Muddying the issue is one of the most deeply held principles of faith regarding IT—that there is a direct correlation between IT ubiquity and competi-

tive advantage. In fact, scarcity is what drives competitive advantage. Accenture's experience shows that IT, like any other technology, can confer short-term competitive advantage for first-mover companies. And as *Harvard Business Review's* Carr also acknowledges, in some cases, IT innovation confers advantages such as critical mass and brand awareness that will outlast the innovation itself. But windows of IT opportunity based on nonproprietary processes and assets are invariably finite, because able competitors eventually catch up.

Sustained competitive advantage derives not from proprietary IT assets, which are vulnerable to replication and commoditization, but from proprietary business assets, such as customer relationships and intellectual property. As long as they remain protected, these assets can be the foundation for long-term sustained competitive advantage.

### Value discovery

IT can play an essential role in helping to build such assets. In the pharmaceuticals industry, for example, IT spending goes disproportionately to manufacturing, which accounts for a far lower percentage of added value (and margin) than research and development. IT spending to support manufacturing efficiency remains vulnerable to such competitive factors as the wholesale shift of facilities to less costly labor markets. From a potential earnings-per-share perspective, a decision to focus discretionary IT spending on R&D-related processes—improved clinical testing, faster government-approval processes, streamlined internal R&D project-approval processes—would create more impact and cause far less exposure to erosion over time.

At any company, the range of strategic IT options will be determined by

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the discretionary side of the budgetary ledger—that is, the portion of the budget not fixed because of previous decisions and commitments. This is different from a simple “want versus need” breakdown. In a well-functioning organization committed to growth, this discretionary portion of the total IT budget will usually be at least 45 percent.

From the viewpoint of internal corporate stakeholders, all discretionary IT spending options may be, or perhaps ought to be, equal. But our experience shows that when it comes to revenue or profits, some options are clearly more equal than others.

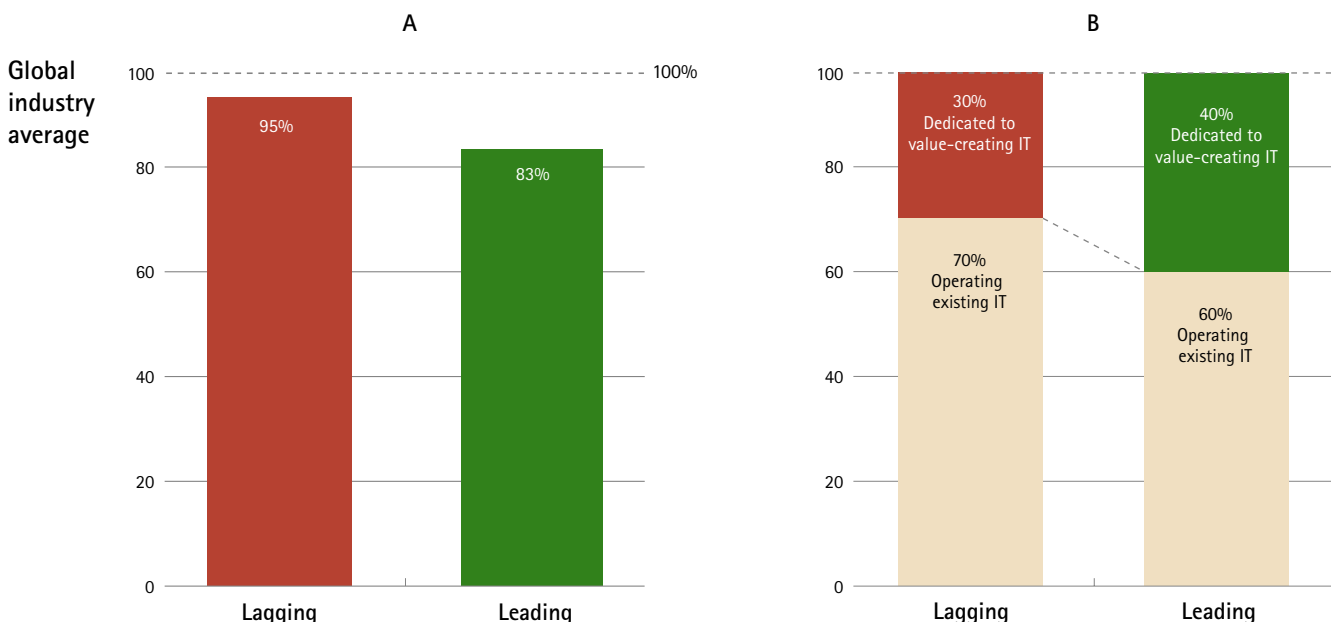
At the apex of the value-discovery process are initiatives that can vault a company into the top of its indus-

try—that is, new strategic IT capabilities that enable corresponding new business capabilities and sources of revenue. In early 2000, for example, a major global pharmaceuticals company worked from this perspective when it developed an IT-enabled process to leverage the intellectual capital surrounding one of its patented medicines.

The drug, developed for asthma control, was considered highly effective but had met market resistance from the managed care industry in the United States because it was expensive. The company knew the drug could be made more cost-effective by modifying the prescribed dose. It also acknowledged the administrative difficulty of communicating modified-dosage infor-

## Spending smarter

The two charts below are based on an Accenture survey of more than 100 European manufacturing, engineering and service companies on their IT spending. Chart A shows the percentage deviation of survey participants' IT spending from the Gartner industry average. Both leaders and laggards in terms of profit margin growth spend less than the average. But whereas the spending pattern by industry laggards likely reflects a simple reduction in spending, Accenture research suggests that industry leaders spend less because they spend more selectively, with an emphasis on business value creation. This point is illustrated in Chart B, which shows that leading companies dedicate a greater percentage of their IT spending to value-creating investments.



SOURCE: "BUSINESS VALUE CREATION THROUGH IT" (ACCENTURE 2003); GARTNER 2001 IT SPENDING AND STAFFING SURVEY

mation to thousands of doctors in managed care organizations. The company's response: an IT solution that would allow patients both to track their condition against standard asthma metrics and to communicate data about their condition to their physicians via password-protected e-mail accounts.

One objective of the program was to use the resulting database, derived from thousands of daily patient entries, to position the company as the expert of choice in recommending modified-dosage levels to physicians. The drugmaker countered managed care concerns by absorbing the operational and financial risk posed by patients (from full reimbursement for prescriptions through, if necessary, emergency room treatment) for a fixed monthly per-patient fee.

Thus, through a value-creating strategic IT investment, the company developed the potential for expanding its sustainable competitive advantage from a patented pill to an integrated solution—drug, diagnostic methodology, delivery mechanism, financing proposition—which could benefit the customer as well as the company. This and similar programs in the industry remain in the pilot phase.

This is not to say that other categories of IT investment—in workflow automation, for example, or e-enabled services—do not produce returns. They do. When many companies moved during the 1990s to equip their field sales forces with database-supported point-of-presence technology, they were optimizing existing business models. The rates of return from this type of IT investment may vary by industry. But they are measurably less than those created by IT investment in

new business activities. The issue is comparative rate of return.

### **Strategic foresight**

At the end of the day, any worthwhile IT investment must be thoroughly understood with respect to how it will contribute to improving operating results and building shareholder value. Without a rigorous value-discovery process, any effort to create IT-enabled business value will certainly involve some degree of educated guesswork—hardly the basis on which to plan a future. The challenge is to identify, on a regular basis and through a rigorous process, the precise points in the business system where discretionary IT expenditures can add business value.

Is such strategic foresight possible? In fact, this has already been proven, at least in part. Indeed, the value-discovery process lies behind some of the most famous contemporary business successes.

More than a decade ago, when Wal-Mart was a market leader but not yet the category dominator it is today, it developed business systems that have become standard industry practice in large-scale retail distribution. For instance, to tackle a business problem that was considered insurmountable—just-in-time store restocking—Wal-Mart built the first supplier-accessible, real-time supply chain management system. With this system, vendors were able to access real-time inventory information about their products, which enabled them to provide just-in-time replenishment. Wal-Mart, in turn, was able to use its system's scale to force suppliers to work more efficiently and to pass supplier cost savings back to Wal-Mart.

The system's success is well known. Less clearly appreciated was the

dependence of Wal-Mart's new business practices on IT innovation, which was envisioned, funded and executed through a highly unusual marriage of front-office line management and senior IT executives. In that sense, Wal-Mart might be considered an early adopter of the value-discovery process.

In Wal-Mart's case, the identification of value-creating IT investment opportunities was an incremental and methodical process, carried out over a decade. This does not preclude a bet-the-company IT value-creation approach. As FedEx built not only a company but an industry—guaranteed overnight delivery—it developed and launched one IT-enabled innovation after another, at considerable expense, from point-of-presence package-scanning devices (and the digital network to support them) to the company's online transaction capability.

The company's executive team understood that IT and the business enabled each other, and that to engender this new industry there had to be an IT system of unprecedented scale, reliability and functionality underneath the business system. So FedEx innovated at considerable risk, again through a tight IT/line partnership, and through extremely strategic and farsighted IT investment planning.

### **How much to spend?**

While developing a brilliant business model and meticulously delivering the IT to support it, Wal-Mart neither overbuilt nor underbuilt its IT. During this period, in fact, the retailer's total IT spending as a percentage of revenues was well below the average of its competitors. This is not an anomaly. In fact, study after study shows that leading companies almost always spend less than their industry peers on IT.

The budgetary latitude and internal credibility necessary to make strategic IT investment recommendations rest directly on the ability to contain nondiscretionary IT spending.

The explanation for this seeming incongruity lies in differing IT management philosophies and objectives. Industry leaders are smart about their use of technology. They understand that IT is an enabler, a means to a business end that is always measured in market position, operating results and earnings. If such a company happens to become a technology innovator as a by-product of these objectives, fine. Otherwise, they are willing to let competitors absorb the cost and risk of technology experimentation and to let Moore's Law (which states that data density will double every 18 months) work its efficiencies over time. Notably, many of these leading companies have had CIOs with significant line experience.

*Harvard Business Review's* Carr points to some famous examples of this pattern, and draws another incite-to-riot conclusion: "Follow, don't lead." Accenture's research indicates the conclusion should be more nuanced: What companies may actually find is a shifting of IT effectiveness metrics. Traditional productivity-oriented top management teams tend to have intratechnology concerns, such as "keeping up with platform lifecycles." Profitability-oriented management teams, on the other hand, tend to focus more on line-driven issues, such as "internal customer adoption," "fulfillment of business expectations" and, of course, "time to market."

Let us acknowledge that discretionary IT investment decisions can never really be made separated from nondiscretionary considerations. The budgetary latitude and internal credibility necessary to make strategic IT investment recommendations rest directly on the ability to contain nondiscretionary IT spending. It's also true that the very favorable cultural and operational situation found at Wal-Mart does not exist at many companies.

Given these realities, the executive team might benefit from asking some very specific symptom-predicated questions about their companies' IT spending. Is it growing faster than revenues? Does it increasingly support older applications that require continual work to adapt to business changes rather than applications that accommodate business changes faster and at lower cost? Is there a mechanism to determine how IT spending aligns with the business's value-adding processes? Is there conflict over IT budgets absent an analytical business case-bound decision process? Is there a process in place to cancel unpromising IT projects in mid-flight?

Top managements at some companies will follow the logic of their answers all the way through to a "more selective is more," ROI-driven perspective that is founded on systematic value discovery. In Accenture's experience, the operative word is *systematic*, resting on a true understanding of how the business delivers value and the role that IT plays. Executives who reach this understanding will wield a powerful competitive weapon.

We would be remiss if we failed to point to an example, evolving as we speak, that seems very likely contrary to the assertion that IT-based "advantage" inevitably regresses to commodity economics. For decades, landline telephony has been a ubiquitous commodity in most of the world, and its markets the epitome of boring stability. Since the mid-1980s, mobile telephony and its integrated wireless services progeny have continually redefined the global market for telecommunications. Despite its ubiquity in many markets, this technology, and its unique packaging of infrastructure and IT-based value-added capabilities, continues

to drive rapid product and market evolution—with no end in sight.

We know today that IT changes boundaries—between market segments, among competitors and across borders. As Moore's Law and its network equivalent, Metcalf's Law, do their work, and as technology's rate of evolution increases, the relationship between ubiquity and commodity economics will probably change as well. Stay tuned. ■

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