WHY TECH

Market forces

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IT spending

to far outstrip

returns—but

changing bad

corporate

habits can turn

the tide

ISIP

FALLS SHORT OF EXPECTATIONS

The unsettling news about IT is becoming widespread: Businesses have invested too much on technology and seen too little return. We're hearing that, for the most part, IT investments are falling short of corporate goals and few companies have consistently obtained returns greater than their cost of capital.

Several reports document the problem: Charles Phillips, managing director at Morgan Stanley, estimates the software overexpenditure to be $130 billion in the last two years. Our research and his cite two major reasons: the Y2K phenomenon prompted businesses to spend significant capital to prevent catastrophe. Second, the recent Internet roller coaster further drove indiscriminate IT spending across corporations. Not only were IT organizations trying to keep up with demand for technology innovation, but they often viewed these projects as opportunities to shine in the eyes of senior management.

In the struggle to be owners of E-business, for example, IT often bumped heads with marketing, sales, and other functional managers who felt they were best positioned to own their E-business initiatives. These battles led to many poor investment decisions, including a focus on the home-run technology or killer app, technology silos, programs too loosely connected to corporate strategy, and costly spin-offs such as Kmart's entry into the Internet service-provider market with Bluelight.com.

The Standish Group International last year found that only 9% of technology investments were completed on time, on budget, or within scope. The same study found that 29% completely failed, wasting from $80 billion to $145 billion a year in capital investments.

Of course there are well-known success stories such as Cisco and Dell, which have effectively exploited IT and Internet-business solutions to scale and drive efficiencies. And Honeywell in the past year has focused its new corporate revenue strategy on IT investments (see sidebar, page 24). But why the disparate results? At Mainstay Partners we've been trying to understand how dif-

BY AMIR HARTMAN

EXECUTIVE SUMMARY

IT spending has been like a runaway train fueled by Y2K worries, the Internet boom, and lately, uncertain economics. Mainstay Partners studied how 450 companies manage their strategic IT investments in an effort to discover what makes some companies IT-smart while others struggle to justfiy investments. One key finding: Management must become more involved in the planning, execution, and review of investments. Otherwise, the CIO is left out of key discussions and IT investments have little chance of driving value to the business.

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ferent companies manage their strategic investments, particularly technology expenditures, and how they can do better. Over the last four years, we surveyed 450 companies across different industries—energy, financial services, health care, manufacturing, retail and consumer products, and telecommunications. Several problem areas emerged, but like most bad habits, they can be fixed once they're recognized and addressed.

Smarter investments

We compared practices of "IT-smart" organizations—those that have yielded benefits from IT—versus their less-fortunate peers. Our study clearly shows that IT-smart organizations derive three kinds of value from IT:

- *Optimizing* existing processes for incremental productivity improvements, resulting in 10% to 15% general and accounting savings.
- *Reconstructing* core processes for changes in productivity and efficiency, resulting in 2% to 3% operating-margin improvements.
- *Inventing* new processes and organizational capabilities for growth that typically results in a 10X return on invested capital (ROIC).

Few businesses are seeing these benefits for several reasons. First, businesses that were once tolerant of incremental gains are re-evaluating their investments as the economy has slowed. With IT as a significant component of capital spending for most companies—typically more than 70%—a newfound interest has emerged from the CFO and CEO and they want a quick payback.

At the same time, however, the relationship between the business and IT is more complex. It's more difficult to specifically determine the extent to which IT is integrated into most business processes. That's making technology investments more difficult to quantify from both cost- and value-generation standpoints. For all of these reasons, technology-investment decisions are increasingly made quickly, with a lot less rigor than other corporate investments. The result? IT has a bad

RECIPE FOR DISASTER

DATA: MAINSTAY PARTNERS

rep and corporate executives have trouble figuring out how much they actually spend on technology, how those dollars are prioritized, or how to measure the ROI they generate. They're frustrated, which explains the common phenomenon of IT being viewed as strategic at the beginning of the fiscal year and costly by the end.

The survey revealed huge gaps between IT-smart companies and those that had a hard time managing their IT investments. The findings expose poor corporate habits in managing IT investments that companies must change. These habits, or failure modes, are a big reason for this ROI divide between IT and corporate executives.

> The CIO must ensure that IT is working on the right things vs. doing things right

One critical deficiency is that non-IT-smart companies do a very poor job of managing their portfolios of technology investments, and both IT and business executives are to blame. Most businesses don't dedicate adequate senior-leadership attention to these investments even though they know they should. CEOs and senior leadership teams who aren't involved in their companies' IT directions frankly deserve what they get—CIOs who don't have clout, and worse, portfolios of IT investments that have little chance of driving significant business value.

Although we prefer to focus on the positive, the ongoing Mainstay Partners study, which began in 1999, reveals many weaknesses and lax practices that have resulted in IT failures. Among those most commonly cited are:

- **Companies spend more than they think they spend.** The average company spends about 25% more on IT than its budget indicates. The larger the company, the larger the variance between actual spending and the budget. Fortune 500 companies spend 25% to 50% more on IT than their IT budgets indicate, and the largest companies often spend upward of 100% more. Part of the problem comes from the fact that IT no longer rests solely within the purview of the CIO. It's easy for a marketing VP to buy software within his or her operating budget and not have the expenditure show up on an accounting-budget. One Fortune 50 company we studied spent $2 billion on IT when its IT budget was $1 billion—a huge discrepancy.
- **Lack of a decision-making process.** Only 21%

of companies have processes for prioritizing and managing their technology investments. Most choose their IT investments ad hoc, favoring the pet projects of powerful managers.

• **Poor visibility.** Fewer than 12% of companies can accurately measure the business impact of their technology investments. Nearly all of those surveyed felt they did a poor job of clearly defining business metrics for their IT investments. In some cases, attempts were made to define the expected paybacks, but not in a rigorous way, and often ROI was not well understood across the organization

or metrics didn't exist. However, even more surprising, practically none of the IT investments studied were re-examined after the fact to determine the results of their execution. That means most companies don't have any idea whether they've even covered their costs of capital. This is inexcusable.

• **Poor integration into corporate strategy.** A full 72% of companies believe they don't effectively tie IT investments to their business strategy and goals, which explains why the vast majority of IT projects have little or no material impact on the financial performance of their

CASE STUDY: HONEYWELL BOOSTS TECHNOLOGY PRODUCTIVITY

Like just about every other major conglomerate, Honeywell International's management was under extreme pressure last year, experiencing volatile market conditions and economic uncertainty. In addition, the company was reorganizing for the pending merger with General Electric. Sales were $23 billion in 2001, and the company employs more than 120,000 worldwide.

After European regulators scuttled the deal, Honeywell realized it needed to quickly refocus. The board immediately asked chairman and former AlliedSignal CEO Larry Bossidy to serve as CEO. Bossidy brought with him many of his top lieutenants, including Larry Kittelberger, CIO of Lucent Technologies, and embarked on an aggressive productivity and cost-cutting plan to bring Honeywell back into profit leadership .

Honeywell for years had relied heavily on Six Sigma processes to drive quality

and efficiency improvements. But Bossidy realized Six Sigma alone was not enough to meet his aggressive vision.

Honeywell believed that reinvention, not reengineering, of its core processes through the effective use of technology could drive productivity to a higher level. After a review of its technology investments, Honeywell recognized an immediate need to align and coordinate its technology plans across its four business units and functional areas, including finance, human resources, legal, and supply chain.

Honeywell created a corporate-digitization team focused on delivering a well coordinated plan. The team ranked areas for immediate productivity improvement, focusing on general and administrative (G&A) and direct and indirect cost of goods sold (COGS). Bossidy challenged the company to reach the $500 million target provided by the digitization team. Each

functional area:
• Selected a digitization team to lead the efforts.
• Took inventory of existing and planned technology initiatives.
• Analyzed and assessed budgetary allocations.

The next task was to develop and institutionalize a formal planning process. This included:
• Scorecards to monitor and manage investments.
• Assigning a champion to drive success within each unit and function.
• Developing awareness of the value of digital strategies and ownership at the unit and presidential levels.

The business units developed leading practices in technology-portfolio management, including short-term financial and operational targets and measures to monitor results at department and corporate levels.

The results? Honeywell is beating its productivity targets of $100 million in 2002 and $500 million by 2005. And the company cut tech spending by more than 20%.

business. In other words, if you were to assess which applications drive direct value, you would typically find that most value is driven by 20% of the applications in the company.

• **Lack of business-management involvement.** Fifty-seven percent of companies felt that senior business executives were not adequately involved in IT planning. This probably explains why the CIO and IT organizations are typically blamed for a lack of IT results. Most executives agree that IT is important and strategic to the business. However, few have placed an IT element in their strategic plans, and, even more fundamentally, they don't include key IT personnel in their senior teams' planning meetings.

• **Ineffective communication.** A whopping 82% of companies surveyed indicate they do a poor job of communicating their IT strategies across the company. This is partly the result of the business side's lack of involvement. However, in this area, the CIO needs to be a much better marketer. Clearly laying out a direction, key goals, and targets, and communicating those in an easily understood fashion to stakeholders are imperatives for any CIO.

• **An absence of effective governance.** Most companies—80%, in fact—are not organized properly to deliver IT value. Specifically, the structural elements of reporting, roles, responsibilities, and most important, funding of IT initiatives typically need to be revamped. In many cases, the IT budget is a fixed amount that has to be rationalized and this results in suboptimization.

Leading the way

There are tangible ways to turn this gloomy scenario into a brighter outlook. Both senior business and IT management teams need to adopt new rules to guide their attitudes and day-to-day approaches to technology. Businesses such as Dell and Honeywell have well-coordinated technology-management principles that distinguish them from companies that don't perform as well. Following these principles will help companies close the gap between their IT investments and the desired results.

Principle 1: Make IT a business-driven activity. The CIO and his or her business-executive colleagues must ensure that IT is working on the right things versus doing things right. There should be a balance of risk, opportunity, and understanding of short-term operational-improvement needs that also seed the growth agenda of company leadership.

Action: To that end, management must be unrelent-

ing about IT's link to business strategy. This can be done by demanding that:

• A significant portion of IT funding should come directly from the operating budget of the business units.

• Business executives have IT investments as part of their strategic plans and operations reviews, and are held accountable for their success.

• Every significant IT program should have a sound business case.

• CIOs should undertake an annual "voice of the customer" assessment to gain insight into aspirations, goals, improvement opportunities, needs, and level of satisfaction.

IT is often viewed as strategic at the start of the fiscal year and costly by the end

Principle 2: IT must be a strategic adviser to the business. If IT is seen as simply an execution or delivery component for the business, it will fall short. Becoming business-critical isn't easy. It requires business-savvy IT personnel to provide visibility into new technologies that can drive productivity opportunities.

Action: IT and the business should be colocated and IT should be an equal partner in business planning and operational-review meetings. Measure IT results not only for "on-time, on-budget," results but for business and customer satisfaction, too.

Principle 3: Drive technology simplicity and flexibility. IT organizations must strive for the proper balance between technology leadership and standardization.

Action: Create a road map that outlines how to balance the need for simplicity and next-generation capabilities. A good road map helps a company minimize technology complexity and communicate the enforcement of standards, while maintaining a degree of freedom for experimentation. Setting architectural standards and closely monitoring the costs and benefits of exceptions are key.

Principle 4: Optimize IT as an asset. CIOs and their business counterparts must make certain that technology dollars are being spent in the right areas. Moreover, senior management must ensure rigor around prioritization, investment, and measurement.

Action: Senior management should strive to:
• Make IT funding available on the basis of value.
• Conduct quarterly operational reviews.

What are your experiences with tech investments? Let us know at *optimizeletters@cmp.com.*

- Optimize the portfolio of IT opportunities, rather than rationalize budgetary constraints.
- Ensure that visibility into IT includes total project life-cycle costs.
- Avoid an overcommitment to initiatives.
- Demand clear business cases and business plans for IT investments.
- Create rigorous metrics and milestones to drive accountability.

Execute the plan

Principle 5: Ruthless execution. The IT organization must deliver near-term results in three-month increments. That's not to say that bottom-line results will necessarily be visible in three months, but components of expected value should be delivered and made visible to the business. CIOs and their business counterparts should:
- Use business-driven "80/20s" rules where a limited functionality set drives the majority of the value for design and development.
- Deliver year-to-year operational improvements.

- Monitor projects relentlessly against established milestones.
- Establish measurable "stretch" goals as an operational practice.
- Actively retire nonperforming projects every quarter.

Technology-investment success lies in an optimal management strategy in which a company's portfolio of technology investments is governed effectively, weighted against the company's business objectives, and driven by management—specifically the CEO. Institutionalizing such change across any company isn't easy. And unfortunately, within large corporations, it can be downright nasty. But ultimately, portfolio management will let businesses better allocate resources to more strategic projects, deriving better results. O

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ACTION ITEMS COMPLETE

★▶ **FIRST MONTH: Perform a "spend analysis"** ☐
- Assess the success or failure of existing investments.
- Analyze technology spending to gain visibility into historic investment allocation.
- Identify specific areas for improvement, realign spending, and eliminate underperforming investments.

★▶ **SECOND MONTH: Design a technology-management process** ☐
- Begin to create a rigorous prioritization process based on company-specific business goals.
- Institute ongoing operational reviews to track progress.
- Eliminate programs not ready for execution because they lack metrics or a business owner.

★▶ **THIRD MONTH: Measure the return generated by technology investments** ☐
- Identify specific key performance indicators and financial benchmarks.
- Benchmark capabilities against best-in-class performers.
- Make fast "keep/kill/fix" decisions about programs not meeting critical milestones.