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BUSINESS INSIGHT

How to Tap IT's Hidden Potential

Too often, there's a wall between a company's information-technology department and everything else. That wall has to go.

By AMIT BASU AND CHIP JARNAGIN

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Some of the biggest names in the business world have used information technology to their competitive advantage: Merrill Lynch, American Airlines, FedEx, Barclays, to name a few. Despite their example, such companies are still exceptions.

Simply put, top executives at most companies fail to recognize the value of IT. It can help a company transform data from its operations, its business partners and its markets into useful competitive information. It can be the source of profitable innovations in the way a company interacts with its customers and suppliers. But there is still a tendency to think of IT as a basic utility, like plumbing or telephone service.

VIDEO: IT'S HIDDEN POTENTIAL



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The chief information officer's role has become² so important that it can now be a steppingstone to the CEO's

office. Amit Basu discusses this development and its implications in an interview with the Journal's Carol Hymowitz.

In many industries, IT consumes a significant amount of capital expenditures and gross revenue. Though recent research has shown that managing IT well can significantly increase a firm's profits and deliver substantially higher returns on IT investments, its potential is overlooked, and even its workaday application is often mismanaged.

The result isn't just missed opportunities -- it's also wasted money. Analysts estimate that hundreds of billions of dollars are blown every year on IT projects that fail to achieve the desired goals.

The reason for all this is the metaphorical glass wall that separates the IT group from the rest of the business at most companies. The wall prevents IT from being part of the discussion at the highest levels of company planning, robbing a firm of its full potential.

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Success in the digital economy of the 21st century demands a strategic role for IT. And for that to happen, the glass wall between IT and the rest of a company has to be shattered. There are several steps that can be taken to achieve this. But to implement them most effectively, it is important to first understand the origins of the wall and what sustains it.

How the Wall Was Built

There are five primary reasons for the glass wall's existence: mind-set differences between management staff and IT staff, language differences, social influences, flaws in IT governance (defined as the specification and control of IT decision rights), and the difficulty of managing rapidly changing technology.

JOIN THE DISCUSSION



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To what extent is there a glass wall between the IT group and the rest of your company? How has that wall hampered your company? What, if anything, has management done to break it down? Are there specific initiatives that you feel were effective or ineffective? [Join the discussion](#)⁴.

THE JOURNAL REPORT



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• See the complete [Business Insight](#)⁶ report.

FOR FURTHER READING

See these related articles from MIT Sloan Management Review.

• The Dynamic Synchronization of Strategy and Information Technology

By C.K. Prahalad and M.S. Krishnan (Summer 2002)

A new applications-portfolio scorecard helps managers assess information infrastructure before making investments.

<http://sloanreview.mit.edu/smr/issue/2002/summer/2>⁷

• Avoiding the Alignment Trap in IT

By David Shpilberg, Steve Berez, Rudy Puryear and Sachin Shah (Fall 2007)

The companies that achieve the highest growth at a low cost manage complexity down, source IT staffing and software wherever it makes the most sense, and create start-to-finish accountability connected to business results.

<http://sloanreview.mit.edu/smr/issue/2007/fall/02>⁸

• The Transforming Power of Complementary Assets

Interaction between logic-driven IT personnel and managers who deal mostly in gray areas can be exasperating for both sides. Too often the result is a minimization of such interactions, leaving the IT team feeling misunderstood, unappreciated and isolated.

Unfortunately, the chief information officer often reinforces this separation. That's because he or she usually is an IT professional chosen to be a director of technology, rather than an executive who is expected to fully integrate IT into the company.

The situation is exacerbated by language differences. IT people use jargon and acronyms that are indecipherable to others. Executives speak the language of business, fully expecting to be understood by everyone in the company. Much is lost in translation, leading to suboptimal results that IT is blamed for, which causes resentment and cynicism toward management.

Another divisive factor is the persistent perception of those who are oriented toward science and technology as "nerds." The recent boom in IT outsourcing has worsened this estrangement. Now, IT professionals are almost pitied as dinosaurs whose jobs will soon be sent offshore.

IT governance is another factor. IT decisions are

*By Alan Hughes and Michael S. Scott Morton
(Summer 2006)*

Successful companies recognize that information technology can fundamentally alter the very nature of work.

<http://sloanreview.mit.edu/smr/issue/2006/summer/11/>⁹

• **IT-Enabled Business Transformation: From Automation to Business Scope Redefinition**

By N. Venkatraman (Winter 1994)

IT has become a fundamental enabler in creating and maintaining a flexible business network.

<http://sloanreview.mit.edu/smr/issue/1994/winter/6/>¹⁰

• **Finishing Off IT**

By H. A. Marquis (Summer 2006)

The author re-examines the role of IT as a commodity and considers whether IT can still be used to provide strategic advantage.

<http://sloanreview.mit.edu/smr/issue/2006/summer/06/>¹¹

often made by the wrong people with insufficient input, and the resulting failures drive a wedge between senior managers and their IT colleagues. There is some irony here in the fact that outsourcing often appears to improve IT management, in part because a governance committee is needed to manage the relationship with the outside providers. If a similar committee had previously been in place, outsourcing could probably have been avoided in many cases.

Finally, applying IT to business needs, especially when a company is innovating, is still an experimental process with few standards. Technology changes rapidly and is subject to fads, which can be confusing even to IT professionals.

As a result of all these factors, senior executives at most companies have little desire to deal with IT and its role in their business and relegate this function to the CIO. In addition, many CEOs find the financial and business returns on their IT investments obscure and difficult to quantify, and feel that no matter how much money they spend on IT, there is always pressure for more applications, the latest hardware and software, more people and faster networks. So they focus more on containing the costs of IT than on tapping its potential. Meanwhile, the rapid growth of outsourcing over the past five years has discouraged many CEOs from developing competitive strategies that rely upon IT services provided by potentially unreliable external sources.

A Blueprint for Demolition

The reality today, though, is that CEOs can't ignore IT and expect to succeed. Technology has accelerated the pace of change in business, making it crucial for companies to detect, assess and respond to every opportunity and every threat as quickly and as effectively as possible. And that kind of agility can only be achieved by fully embracing the operational and strategic importance of IT.

CEOs who use obsolete metrics such as head count or benchmarking the competition to decide on the role and evaluate the performance of IT in their companies run the risk of being blindsided by competitors who take full advantage of IT innovations. Furthermore, IT is key to a company's ability to satisfy regulations such as the Sarbanes-Oxley Act on corporate governance, the Health Insurance Portability and Accountability Act and legislation in various states on the privacy of customer information.

We believe that the following seven steps will help shatter the glass wall between IT and the rest of a company so that the information-technology function can be fully integrated into the company's business culture. This will clear the way for the realization of IT's greatest value.

Begin with IT literacy -- and commitment -- at the top. The impetus for effective IT management must come from the CEO and the board. There has to be a willingness on the part of the CEO and the other executives to know enough about IT to understand its functions and its value to the company, in the same way that they understand accounting, finance and marketing.

Senior managers must also communicate to everyone in the company that IT has the potential to affect the competitiveness of the firm. Decision makers and planners throughout the organization should be encouraged to think strategically about IT and to offer suggestions and innovations.

Including IT considerations in company meetings and in-house written communications will help set the right tone. Companies with limited in-house expertise can conduct workshops and briefings with outside experts to increase IT literacy throughout the firm.

FedEx Corp. is a good example of a company in which top management realized the central role of information technology, communicated this message throughout the organization and structured the firm to effectively capitalize on it. The company was able to redefine itself as a technology-based logistics and transportation concern, creating several new business opportunities.

Hire an IT leader who sees the big picture. The next step is to hire a true chief information officer -- not just a technical expert, but a leader who understands the strategic importance and use of IT.

Choosing a CIO is much more difficult than choosing other top executives. There are very few people with the perspective and the skills to effectively deploy and leverage IT within a business. The best CIO can work within the management culture at the executive level, can present IT issues as business issues to the executive team, and is willing to learn the business as well as technology.

Rarely is the CFO the greatest financial expert in a company, or the CMO the greatest marketing expert. Similarly, some of the most effective CIOs at large companies have not

TEAR DOWN THAT WALL

Costly Neglect: Most top executives fail to recognize the value of information technology. They think of IT as a basic utility, or as an expensive headache that they'd rather not deal with. They don't see its potential to transform a business and boost profits.

The Separation: The reason for this is the wall that separates IT from the rest of the business at most companies. The wall is the result of differences in mind-set and language between management staff and IT staff, social influences, flaws in IT governance, and the difficulty of managing rapidly changing technology.

Breaking Through: There are several steps that can be taken to shatter the wall so that IT's full value to a company can be realized. These include a commitment from top executives to effective IT management, the hiring of an IT leader who sees the big picture, better communication within the company, changes in management training, and a new approach to IT planning and spending.

been top technologists. An excellent example is Patricia Barron, **Xerox Corp.**'s CIO in the 1980s. Ms. Barron wasn't an IT professional; she came into the CIO position from a marketing role. Two keys to her success were the full support of the company's CEO and president, which they communicated throughout the organization, and her commitment to learn enough about IT to enable her to deal with and represent the IT organization effectively.

Another very successful CIO, Charlie Feld -- currently senior executive vice president of application services at **Electronic Data Systems Corp.** -- helped Frito-Lay, **Delta Air Lines Inc.** and **Burlington Northern Santa Fe Corp.** dramatically improve their IT management by bringing IT into the boardroom and onto the executive agenda of each of those companies. A key tenet of Mr. Feld's approach was that IT leadership must have a clear understanding of the company's business and IT's role in that business.

Rotate management and executive candidates through IT. A stint in IT must be part of the training for people being groomed as general managers and senior executives. It is no coincidence that most large management-consulting firms evolved from accounting and auditing firms. Understanding the control and reporting processes gives accountants and auditors a vital insight into the business processes of each client company. Today, since most business processes have high degrees of automation, dealing with IT development and management provides a similar insight into a company's operations, which is an invaluable education for executives.

At the same time, IT personnel should be groomed as integral components of the enterprise, just as personnel within functional areas like marketing or accounting are developed to take on increasingly significant and broader-ranging responsibilities that ultimately extend beyond departmental boundaries. They should participate in management classes, cross-functional training, and rotations through non-IT functions, and should be included on planning and control committees and cross-functional teams.

Similarly, as the role of a marketing manager doesn't diminish if an advertising firm is used to develop advertising materials, neither should the role of IT managers be diminished if IT outsourcing is adopted. Outsourcing simply shifts the emphasis of IT management away from everyday operations and toward broader business considerations such as contract, relationship and performance management.



Create demand for IT solutions. Managers at all levels across the organization need to be convinced that innovations in IT-related areas such as knowledge management, business intelligence, information security, change management and process integration are essential to the success of the enterprise. Knowledge of them should be as mandatory as functional knowledge in marketing, finance and manufacturing. Only then will the use



Jim Frazier

of IT to address these concerns move from a "technology push" driven by the IT group to a "demand pull" from people across the organization, which will ensure that the company's IT services are strategically aligned with its business and that capital won't be allocated for expensive and unnecessary IT services.

For example, a leading global company in the chemical industry approached this challenge by inviting business and IT leaders throughout the firm to a series of IT strategy workshops. A key

outcome was that senior managers realized that the real goal of the process was better performance of their business units and the company. Both they and their IT colleagues started thinking of ways to improve their businesses and considering how IT could support those changes.

Make sure nothing gets lost in translation. A company must have people at all levels who can translate IT language for those outside that department and translate the language of management for those in IT. Some of the greatest mistakes in the use of IT occurred in the late 1990s when CEOs bought into IT initiatives and IT-based business models blindly without bothering to truly understand what the technology could and couldn't do.

At the same time, IT staff should have a clear understanding of the business role and value of their work. This should include awareness of the costs and benefits of systems, applications and operations, and an understanding of the interdependencies of IT and other resources within the organization. Including IT personnel in business planning and control committees, task forces and cross-functional teams, as suggested above, and similarly, having non-IT managers on IT planning committees, can facilitate this.

For example, when **Cisco Systems Inc.** adopted ERP systems -- software that helps automate back-office functions -- in the 1990s, the development teams included influential staff from all relevant functional areas. The liaison role of these non-IT leaders was a major factor in the successful adoption of the resulting systems.

Rationalize IT spending. The planning of IT expenses and investments should be subject to the same rigorous procedures and methods as any other expenditure. Too often, executives sign off on IT spending without a clear understanding of its business value.

To ensure that all IT spending makes sense for the business, the executive management of the firm must institute proper IT governance -- that is, ensure that every part of the organization that is affected by IT decisions is part of the decision-making process, and that decisions are made at the highest levels with a full understanding of all their implications.

Create an IT portfolio by evaluating risks and returns. Just as an investor balances risk

and returns in constructing a portfolio of investments, management should analyze the costs, benefits and risks of all IT projects to determine how to get the most benefit from the dollars invested in technology.

There is a myth that IT investments can't be evaluated because many of the advantages are intangible or can't be monetized. While such uncertainty often is part of the equation, thoughtful analysis of the costs and benefits of IT projects can still lead to greater confidence in the value of these projects.

One way to move toward this is by breaking large projects into smaller pieces that can be analyzed and implemented more easily, thereby benefiting the company sooner. This will help prevent investment in the kind of monolithic IT projects that have wasted so much capital at so many companies.

Careful analysis of this sort will help executives avoid being swayed by the features and performance of technology that doesn't pay off. Conversely, it also will help them avoid misplaced conservatism, based purely on cost, when an expensive technology investment is of real value to the company.

Getting Started

So where should one start? While there is no set sequence of actions to be taken, a good starting point is for the CEO and the board to evaluate the role of IT in their organization through questions like: "What would happen to my company if my information systems failed?" and "How is IT reshaping my industry?"

As top management faces these fundamental questions, the importance of understanding the key issues in IT management and leadership becomes apparent, and the seven steps can move the company toward a solution. Having IT leadership that can help make sense of the important issues and champion the process is crucial. This, in turn, will facilitate the other steps.

Once IT becomes an integral part of the company's executive dialogue, the glass wall will be shattered, and IT's full value to the organization can be realized.

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