

# Perspectives for Managers

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## Reaping the business value of IT: Focus on usage, not just deployment, to optimize payback.



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If you ask senior executives and managers as I do in my executive programs at IMD whether their companies are extracting the expected business value of their investments in IT, the overwhelming answer by a large margin is “no”. There are a number of reasons for this. Some focus on the disappointments their companies have experienced with implementing Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and various “e-systems” internally and externally during the last several years. Many business-oriented IT projects have failed outright or not lived up to expectations. Blame is often shared on both sides between the business and IT.

Others point to a disconnect between what the IT industry promised them, namely that IT investments would lead to “competitive advantage” and what IT in their industries and companies has delivered – “competitive necessity” – where most firms competing in the same industry are deploying the same IT and using it more or less for the same purposes. Executives know that their companies must spend on IT, but want to invest no more than is necessary to keep up with competitors – a major reason why the IT function is under continuous pressure to reduce costs and deploy standardized systems and processes more efficiently. The competitive necessity argument has recently risen to prominence through the May 2004 Harvard Business Review article by Nicholas Carr provocatively entitled “IT Doesn’t Matter?” (1) Carr argues that, since IT is equally available to all firms in an industry and even across industries to be deployed in similar ways, IT is now more of a commodity than value delivering technology.

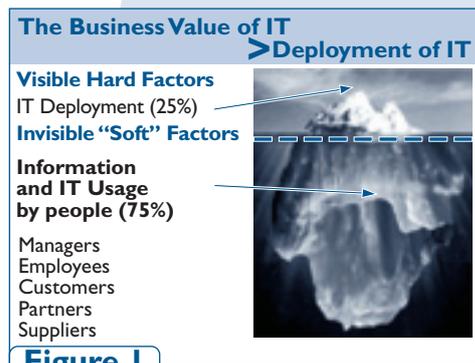
What is interesting about the “competitive necessity” argument by Carr and other

commentators is that it is partly right and partly wrong! Academic researchers have found during the last ten years that IT investments by companies have contributed to the increased productivity of companies and also increased price competition in industries. The chief beneficiary of IT deployments have been customers who have been able to buy more products and services from companies with less, and the IT industry itself which has directly benefited from these IT investments. Brynjolsson and Hitt have found no correlation between IT investments and company performance as measured in terms of profitability, thus leading some to conclude, like Carr, that there is no real relationship between IT spend and deployment with selected companies achieving competitive advantage in industry sectors. (2) It would appear that both the business commentators and researchers are correct – that the main effect of IT investments and deployment is its contribution to competitive necessity – you cannot “not” spend on IT as a company, but you do not want to spend any more than the minimum necessary to deploy and run IT efficiently in your company.

Thus, our disenchanted business managers are led to believe that IT is a commodity and deploying it should be done as economically and efficiently as possible – the partly “right” element of IT’s business impact. However, for most business managers, the actual *usage* of information and IT in their companies is a “black hole” – consuming human energy, time, attention and resources without any visible focus by business managers on its importance to realizing the business value of information and IT.

A major reason why usage of IT and information in a company is largely ignored or

overlooked by business managers is that IT investments and deployment are the most visible and hard factors to measure and manage. Business managers spend 90% of their attention on planning IT projects, aligning IT with the business needs, budgeting and investing in IT and dealing with the IT function and external suppliers. Other managers naively seek to solve business problems with IT thinking that these problems will go away if they implement IT “solutions” – a very common reason why companies have invested in the deployment of Customer Relationship Management (CRM) systems over the last 5 years to solve the perceived lack of “customer orientation” of their companies. What most business managers did not see clearly is that CRM systems have to be accompanied by significant behavioral and cultural changes in the ways information and IT are used by people in business functions such as sales, marketing and servicing. These “soft factors” of how people in a company behave with information and use IT have not been perceived, measured very well, or managed concurrently with the introduction of CRM systems leading to business disappointments over the results obtained from major CRM investments and deployments.



**Figure 1**

In contrast, academic research as [Figure 1](#) suggests points to only 25% of the business value of IT being linked to deployment and investments, whereas research suggests that 75% of the business value of IT and information is linked to so-called “soft factors” having to do with the usage of information and IT by managers and employees in the company and externally by customers, partners and suppliers. (3) So here we come to an important disconnect in the perceptions and mindsets of business managers. Most managers devote 90% of their time and attention to IT investments

### IT Deployment Differs from IT Usage

#### Deployment Focuses on:

- IT governance
- IT services and processes
- IT infrastructure
- IT applications and data management
- IT resources (people and expertise)
- IT investments

#### IT Deployment Measures Focus on:

- IT availability and access
- Quality of IT services
- User satisfaction
- Cost reduction and standardization
- Efficiency of IT
- IT ROI for projects

#### Usage Focuses on:

- Organization and governance of decision rights in a business
- Usage of IT and information processes for management decision-making
- Usage of information and IT in operational and business process management
- The behaviors and values of people that lead them to use IT and information in their work

#### IT Usage Measures Focus on:

- Information and IT usage in the business
- Effectiveness of information use by people, (Information Orientation Maturity)
- Contribution to top line growth relative to:
  - Profitability
  - Market share
  - EBIT
  - EVA
  - Innovation in products and services
  - Company reputation

**Figure 2**

and deployment that only account for 25% of the business value of IT and information! The focus on the effectiveness of information and IT usage by people receives much less managerial time and attention. Thus the potential business value residing in increased usage of information and IT in the company by people is largely lost. The result is that business managers often overlook the largest potential payoff from IT by **NOT** focusing on how effectively information and IT are used by themselves and their people in their companies.

### IT Deployment Differs From IT Usage

The deployment and usage of IT differ in managerial focus, mindset and measures of performance as [Figure 2](#) illustrates. On the one side, **IT deployment** is concerned with the governance and provision of IT services in most companies from networks, to IT projects, to the daily management of the IT function. On the other side, **IT usage** is concerned with the organization of decision rights in a company around lines of authority, accountability and expertise so that ideally information and IT can be used effectively in decision making at all appropriate levels. Can information and IT be used by people in the operational and business processes of a company as well as for managerial decision-making? Here the behaviors and values such as integrity, sharing and transparency that lead people to use information and IT effectively in their work take on critical importance.

Similarly, the mindset of deployment is more technically oriented and concerned with aligning IT to the business, the development of IT strategy and the management of the portfolio of IT projects, whereas the mindset of IT and information usage is more business oriented, concerned with business facing projects that enhance customer value, lead to product innovations, or improve customer loyalty through improved knowledge and information usage.

Finally, IT deployment measures the quality and availability of IS services, IT costs and ROI as well as on the efficiency of IT – none of these measures have been found to be directly correlated to business performance. In contrast, the focus on IT and information usage is concerned with measuring IT and information’s contributions to the bottom line and the effectiveness of information use by people in the business to the achievement of business results.

These differences in IT deployment and usage raise strategic choices by business managers that have very different impacts on achieving the business value of IT as [Figure 3](#) suggests.

In the first case, do business managers in a company really care about or want to know the impact of deployment and usage of IT on business results? During periods in a company of rapid growth through merger and acquisition or after periods of restructuring and downsizing, many business managers are less worried about IT deployment and usage than confronting the challenges and chaos of

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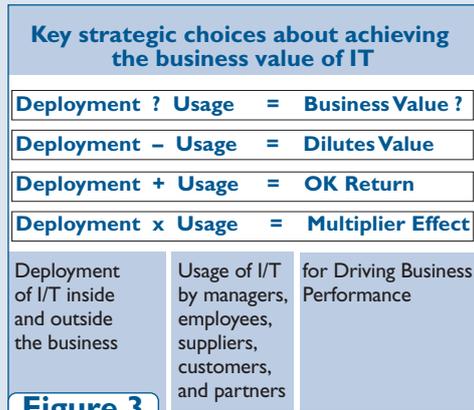


Figure 3

rapid change in the scale and scope of the company. After completing 30 plus acquisitions to redefine its business over the last 7 - 8 years, managers of a large specialty chemicals company had to redefine the structure, processes and culture of the their company – literally re-inventing a new company. It has taken these managers 2 - 3 years to move beyond basic restructuring and rationalization of people, processes and IT resources to lower costs and they are only now beginning to seek more business value from information and IT usage by their people.

In other companies, IT deployment is considered by business managers to be synonymous with usage so that the usage dimension is **invisible** to them. In these cases, IT priorities and deployment tend to drive the business uses of IT rather than the other way around. A common view of managers is that information management activities such as collecting, organizing and maintaining information about customers, products and operations is **boring** and usually delegated to lower levels in the company. People, in turn, at these lower levels such as sales or operational staff recognize that senior managers rarely pay much attention to these information management practices and thus conclude that they too can perform these responsibilities with less care and quality since they are rarely recognized or compensated directly for these activities. Thus, these less visible information practices obscure their real importance to the quality and value of information for decision making in the company. No wonder managers in such companies treat deployment and use of information and IT as synonymous!

In the second case, the relationship between IT deployment and usage may dilute business

value since neither IT deployment nor usage is the direct focus of managerial attention or are poorly implemented. There are companies today where business managers have abdicated their involvement in business and IT decisions to such an extent that the IT function drives IT deployment and indirectly usage in the business. In these cases, IT driven projects seldom meet business criteria for functionality, relevance and payback and therefore may dilute value in the company where IT cannot win business credibility with its initiatives and the business managers cannot understand why IT impact is so low in their company.

In the third case, the relationship between IT deployment and usage may be additive where two plus two equals four. Here the results are OK, and are better than the prior alternatives, so business managers in the company settle

fewer or simpler projects using IT, then they can follow and perhaps even keep up with their competitors in the industry, but not aspire to competitive advantage.

In the fourth case, the relationship between deployment and usage may be a multiplier of value since deployment of IT inside and outside the company is leveraged with excellent usage on the part of managers and employees internally and perhaps with customers, partners and suppliers externally. Again, researchers have identified companies in different industries capable of achieving a multiplier effect with good IT deployment and widespread usage of IT and information by people that leads to exceptional and sustainable gains in business performance. What do these managers know about IT deployment and usage that others do not or cannot implement?

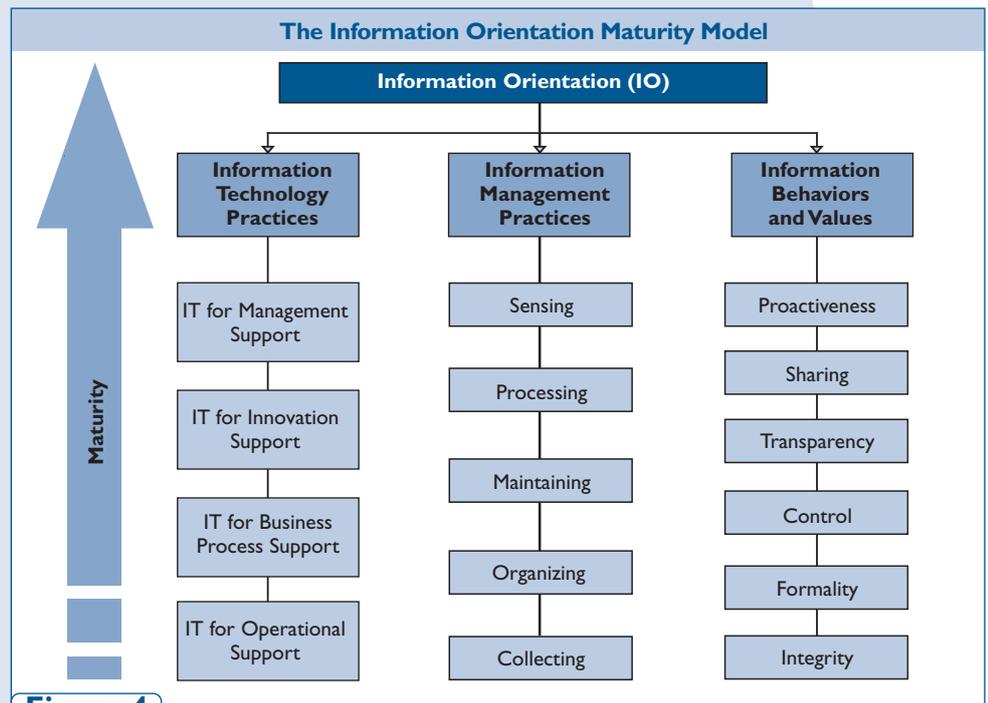


Figure 4

for competitive necessity in deploying and using IT. There are many companies today where business managers have low expectations about how effectively their company can deploy and use IT either due to the tortured history of the IT function's capabilities in the company or the mixed results from many IT projects that were poorly implemented or failed to meet expectations for value. In these companies, managers realistically assume that if they lower expectations about IT and deploy

### IT Deployment Enables, But Does NOT Drive Effective Information and IT Use in a Company

Our research has demonstrated that business managers see the business value of information and IT as going beyond IT deployment and the IT function to the knowledge and information embedded in their people. (4) Business managers possess a broader view of effectiveness in information



and knowledge use that incorporates the human behaviors and values related to information and IT usage and practices. We call this the Information Orientation (IO) of the company see Figure 4. We have proven that managers believe that effective information and IT usage by people is linked to business performance. (5)

In addition, we also know that business managers see valuable information and IT as embedded in the business capabilities of their companies. Thus, business managers seek business value from the market place with their business strategies and the business capabilities required to execute those strategies. Some business managers go beyond this view of value creation to develop the information capabilities of the company required to extract and use knowledge and information better than their competitors. This process of building the people, information and IT usage capabilities of a company we call the Information Orientation Maturity of a company. Moreover, since the IO Maturity of a company can be measured and benchmarked, business managers can explicitly evaluate their progress in developing their company's information capabilities to build business value over time. (6)

Thus, IT deployment can enable, but not drive usage of information and IT by people in a company. Creating value with effective usage of information, people and IT in a company is the multiplier of IT deployment. Moreover, the information, people and IT capabilities needed for high IO Maturity are difficult to replicate. Companies can enjoy competitive advantage in how they integrate their information capabilities into their business models and strategies over time. Some firms can be better positioned than others in achieving BOTH the output and productivity impacts of good IT deployment with the multiplier effect of Information Orientation Maturity that leverages how effectively information, people and IT practices work to impact company performance.

### **IT Does Matter, But Effective Information and IT Use by People Matter More!**

Managing well the IT deployment and function in a company does matter. Companies must deploy IT as least as effectively as their competitors and they should seek to do so as efficiently as possible. If a company's business managers do not seek to align IT strategy and projects with their business needs and develop an operationally effective IT function, then they cannot play at the table of competitive necessity in their industry or globally. However, settling for good IT deployment without concurrent focus on usage means that these managers will fall far short of the objective of optimizing the business value of IT in their company.

Competitive advantage goes to those business managers and companies that deploy and use information, people and IT more effectively to impact their growth and business performance in their industry and globally. They strive to extract 100% of the business value of effective information and knowledge use in their business through improving the IO Maturity of the people, information and IT practices. They seek to capture not only the 25% of the business value resulting from efficient IT deployment, but also go after the 75% of the business value resulting from effective use of information and knowledge by their managers, employees, customers and partners.

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1) *Nicholas Carr, "IT Doesn't Matter", Harvard Business Review, May 2004, pp. 41 – 49. It is interesting that the book is entitled "Does IT Matter?" (Harvard Business School Press, 2004) which appears to leave open the view that IT may deliver value in companies under certain business conditions.*

2) *Eric Brynjolsson and Lorin Hitt, "Paradox Lost? Firm-Level Evidence on the Returns of Information*

*Systems Spending", Management Science (1996), Vol. 42, Issue 4, pp. 541-558 and "Computing Productivity: Firm-Level Evidence", MIT Sloan School of Management, Center for eBusiness, Working Paper 139 (June 2003).*

3) *See Eric Brynjolsson and L. Hitt, "Intangible Assets: Computers and Organizational Capital", MIT Sloan School of Management, Center for eBusiness, Working Paper, (October 2002) and Donald A. Marchand, William J. Kettinger and John D. Rollins, "Information Orientation: People, Technology and the Bottom-Line", Sloan Management Review (Summer 2000), Vol. 41, No. 4, pp. 69 – 80.*

4) *See Donald A. Marchand, William J. Kettinger, and John D. Rollins, "Making the Invisible Visible: How Companies Win with the Right Information, People and IT" (John Wiley and Sons, London and New York, 2001).*

5) *See Donald A. Marchand, William J. Kettinger and John D. Rollins, "Information Orientation: The Link to Business Performance" (Oxford University Press, Oxford, 2001).*

6) *The IO Diagnostic™ and Benchmark are trademarked products of enterpriselQ® based in Lausanne, Switzerland. See [www.enterpriselQ.com](http://www.enterpriselQ.com).*

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