

# **Book Making the Invisible Visible**

## How Companies Win with the Right Information, People and IT

Donald A. Marchand, William J. Kettinger and John D. Rollins Wiley, 2001

### Recommendation

Donald A. Marchand, William J. Kettinger and John D. Rollins, professors and consultants on information technology and management, explain how your company can improve its business performance using information orientation (IO). The authors present ways to improve corporate capabilities in information management, information technology and employee use of information. The authors draw from interviews with about 1,000 senior managers from more than 100 companies, representing two dozen countries and two dozen industries. The book uses case histories and examples from these interviews to support its central model, which is based on building, using and measuring these three information capabilities. The authors present innovative answers to the perpetual question of how to quantify subjective measures. The one shortcoming, beyond explanatory repetition, is the problem of sorting out programs with initials instead of names. Yet, *BooksInShort* found this book quite solid, albeit academically written, and suggests it to all managers and executives involved with IT initiatives at large companies.

## Take-Aways

- You need information capability to improve your business' performance.
- Your mind-set and perceptions as a manager are critical to effective information use.
- You must leverage information, people and information technology (IT).
- Follow the Information Orientation model to maximize your IT use.
- Information Orientation measurements will help you evaluate your IT.
- They will also tell you how well your IO links to your business performance.
- Your company's Information Behaviors and Values Capability reflects how well you promote effective employee use of information and IT.
- Your company's Information Management Practices Capability reveals how well you sense, collect, organize, process and maintain information.
- Your company's Information Technology Practices Capability measures how effectively you use IT to support operations, decision making and communications.

 While improving your IT system, you must also continually boost people's behaviors and mind-set because people adapt very gradually.

## **Summary**

#### **Information Orientation**

To improve the performance of your business, you need to leverage information, people and information technology (IT) effectively. Together, these three information capabilities will give your business more speed, agility and responsiveness. Mustered properly, they can help you improve, replace or reduce the need for personnel, organizational structures or business processes. With superior use of these information capabilities, you can better integrate people, information and IT, resulting in greater profits and improved innovation.

"Employing IT for operational support involves using software, hardware, telecommunications and technical expertise to control business transactions, to ensure that less skilled employees perform their responsibilities consistently and to improve the efficiency of operations."

In research interviews, 1,000 senior managers from 100 companies in 25 industries and 22 countries say that companies can achieve superior results by synchronizing the management of their people with information and IT.

Liechtenstein's Hilti Corporation, which creates drills, fasteners and demolition systems for the construction industry, and Spain's Banco Bilbao Vaizaya (BBV) demonstrate the value of leveraging information technology, personnel and information. For example, senior managers and employees at Hilti use their information network to communicate regularly with customers and then use customers' responses to improve product development. Managers at BBV use IT to integrate customer and product information so they can deliver better services and cross-sell to new and existing customers.

"Companies that develop superior levels of information capabilities in the ways they integrate their people, information practices and IT can be more profitable and innovative than their competitors."

These two companies illustrate ways managers and employees can benefit from using IT on a day-to-day operating basis. Information they can use and improve daily helps them understand which customers, products and operational information create business value. They garner the knowledge to introduce changes in their internal processes so they can reduce or eliminate unnecessary complexity and help people use targeted information.

#### The IO Model

You can use the information orientation (IO) model to maximize the utility of data, people and information technology. This model is based on three information capabilities, all of which must be improved to achieve better business performance. These capabilities are:

- The information behaviors and values capability (IBV) A company's ability to promote employee behaviors and values that lead to effective use of information and IT.
- The information management practices capability (IMP) A company's ability to manage information, i.e. sensing, collecting, organizing, processing and maintaining it.
- The information technology practices capability (ITP) A company's ability to manage various IT applications and infrastructure in a way that supports company-wide operations, decision making and communication.

"To differentiate themselves from their competitors, managers must focus on the ways people use information."

To measure how well you are fulfilling this model, use the IO dashboard, a measuring tool for evaluating your company's information orientation level and how well your IO links to performance. This business metric, based on statistical and psychometric research methods, lets you measure your information capability, benchmark it over time and run comparisons. If you identify weaknesses, you can determine what steps to take to improve them.

"Senior managers believe that the competitive advantage goes to companies that create superior business results by synchronizing the management of their people with information and IT."

Your mind-set and perceptions as a manager are critical to your company's effective information use, because the way you view events, behaviors and actions affects your assessment of a situation and your actions. The IO model will help you analyze and make such decisions. Companies with high IO scores - those that do a good job of implementing their information capabilities - also scored high on business performance, while those with a low IO had low performance results.

"The mind-sets and perceptions of managers count. How a manager sees events, behaviors and actions in the world will directly influence first, his or her diagnosis of what is good or bad about a situation, and second, which course of action to pursue to improve the situation."

Senior managers clearly distinguish between the three aspects of information capabilities, each of which can be measured. The first step to managing these capabilities is to recognize how you might improve your own abilities to manage people, information and IT.

### Measuring Information Capabilities

Measuring your current information capabilities is critical, since what your company measures and how it conducts the measuring process affects managerial attitudes and employee behavior. For the best results, select measurements that are tied to business performance and linked to your company's business abilities and strategies.

"Improving any single information capability does not lead to better business performance. It is only when managers improve all three information capabilities concurrently that higher levels of business performance are achieved."

You can use the information orientation or IO metric to measure the strengths and weaknesses of your company's information capabilities. This enables you to identify priority areas for targeted and strategic change. To this end, use the IO or information orientation dashboard, which gives you percentage rankings for each capability, so you know areas of strength to build upon and areas of weakness to improve.

"Companies with high IO (those that are good at implementing their information capabilities) will be high on business performance. Companies with low IO will, in turn, be low on business performance."

For instance, the information behaviors and values (IBV) category measures information integrity, formality, control, sharing, transparency and proactiveness. The information management practices (IMP) standards measure your ability to sense, collect, organize, process and maintain information. The category of IT practices (ITP) measures how well you use information technology for operations, business processes, innovation and management support. After you rate yourself in each area by percentile, you combine the areas to get overall scores. The IO dashboard also enables you to derive a business performance total, based on your percentile rankings in market-share growth, financial performance, product and service innovation, and company reputation.

"Measurement counts. What a company measures and the way it measures influence both the mind-sets of managers and the way people behave."

Comparing your total IO score and your overall business performance score will give you a picture of where your company stands in using information effectively and how this relates to your overall business performance. When you plot these points on a matrix, with business performance on the vertical axis and information orientation on the horizontal axis, you can see a snapshot of how your company is doing. Essentially, this matrix has four key quadrants into which you might fall:

- Self-aware winner (high in IO and performance) You understand the information orientation and use it.
- Winner at risk (high in performance; low in IO) You have good results, but may not continue to do so for long.
- Info-oriented laggard (high in IO; low in performance) You understand IO, but have fundamental weaknesses in your business.
- Blind and confused (low in IO and performance) You need to make major business changes to succeed.

"Improving business processes depends on the quality of the information that is used in the process as well as on how it

can be changed and improved."

Once you view and analyze your IO dashboard, you will see how you are doing as a company as a whole. Using the dashboard, you also can assess the information performance of your individual business units. This can help you clarify which business strategies you need to build over time, so you can plan strategies to align your information capabilities with your business performance. You also can use the dashboard to show employees your current situation and to explain which improvements are needed.

### **IO Maturity**

As you work on achieving a high IO, focus on developing all three information capabilities at the same time. Companies with a high IO or "IO maturity" also are aware of the key relationships or linkages within each of these information capabilities, so they work on effectively managing these linkages to increase the interaction among all three capabilities.

"Building information capabilities takes time. This means that senior managers must be persistent and focused in improving information capabilities that improve business performance."

For example, mature IO companies use IT systems to support their operations, business processes and product innovations, and to improve the ability of their managers to make decisions. As they use information management practices to meet the standard of collecting, organizing and maintaining information, they further use it to enhance sensing and processing practices. These firms instill a set of good information behaviors and values in their employees, so staffers develop strong proactive information behaviors. For example, senior managers at Skandia Banken paid close attention to the development of an IT system designed to help their employees better interact with customers. Each day, they recorded information from each representative in databases. Then, employees and managers reviewed the data to get a better sense of new market and customer needs.

#### The Information Mind-Set

As you work to improve your IT system, you must also work continually on improving people's behaviors, since people only adapt gradually. Generally, they come to accept new circumstances over a period of months and years, not in a few days or weeks. People need to change their mind-sets to change their behavior. But the more important the value or behavior being addressed, the more people hesitate before changing. Even when people change their mind-sets, they may not exercise the new belief consistently. People often hesitate to adopt new mind-sets and behaviors until they see their managers doing so. Thus, you need to put new mind-sets, values and behaviors into practice yourself to change your employees mind-sets. For example, they should see you proactively use information systems.

To develop high information integrity, people need to believe that your company's reports and records are accurate and will be used appropriately. They need to trust that information won't be used in an inappropriate manner, such as to reveal personal information about a customer or employee. They need to feel comfortable with the way the company uses information about mistakes and failures, since information integrity promotes transparency in operations. To develop information proactiveness, encourage people to seek information about changes in the business environment and respond to them. Critical steps to take to improve your employees' information behaviors and values include:

- Don't compromise on integrity.
- Use integrity to build faith in your company's formal information.
- Make performance information explicit, such as by using detailed "cockpit charts" which link individual and team performance to company performance.
- Spread performance information throughout your company.
- Use formal performance information to encourage people to share and learn from their mistakes and those of others.
- Develop team-based performance information so people are open about their work.
- Use mistakes as a way to learn.

Try to sense, collect, organize, process and maintain the right information about your customers, products, operations and business conditions so you can act effectively. Make this knowledge explicit, so others in the company can use it to make decisions about customers, products, operations and business conditions. You can increase your IT payoff by using it to manage operations. Use IT

to prepare your managers and employees for future information-based competition and to help them be more innovative and create future value.

## **About the Authors**

**Donald A. Marchand** is a professor of information management and strategy at the International Institute of Management Development in Lausanne, Switzerland. **William J. Kettinger** is director of the Center of Information Management and Technology Research at the Darla Moore School of Business at the University of South Carolina. **John D. Rollins** is the managing partner of Strategic Information Technology Effectives for Accenture.