

Chapter 2: Global E-Business and Collaboration

Learning Track 3: Challenges of Using Business Information Systems

Organizations still need different types of information systems serving various organizational levels, functions, and business processes, and they increasingly need systems providing enterprise-wide integration. These needs create both opportunities and challenges.

Opportunities

Businesses face extraordinary opportunities to apply information systems throughout the firm to achieve higher levels of productivity, earnings, and ultimately advance share prices. Today information systems support virtually all levels and functions in the firm. In addition they enhance decision making of both managers and employees, providing information where and when it is needed in a format that is easily integrated into everyday business life.

Management Challenges

There are challenges to achieving these objectives.

INTEGRATION AND THE WHOLE FIRM VIEW

In the past, information systems were built to serve the narrow interests of different business functions (such as marketing, finance, or operations) or to serve a specific group of decision makers (such as middle managers). The problem with this approach is that it results in the building of thousands of systems that cannot share information with one another and, worse, makes it difficult for managers to obtain the information they need to operate the whole firm. Building systems that both serve specific interests in the firm, but also can be integrated to provide firmwide information is a challenge.

MANAGEMENT AND EMPLOYEE TRAINING

With so many systems in a large business firm, and with fairly high employee turnover typical of the last few years, training people how to use the existing systems, and learn new systems, turns out to be a major challenge. Obviously, without training or when training is limited, employees and managers cannot use information systems to maximum advantage, and the result can be a low return on investment in systems.

ACCOUNTING FOR THE COST OF SYSTEMS AND MANAGING DEMAND FOR SYSTEMS

As the cost of information falls because of the power of information technology, demands for information and technology services proliferate throughout the firm. Unfortunately, if employees and managers believe information services are free, their demands will be infinite. One of the challenges facing business managers is understanding which systems are truly necessary, truly productive with high returns on investment, and which are merely conveniences that cost a great deal but deliver little.

Solution Guidelines

A number of solutions exist to the challenges we have just described.

INVENTORYING THE FIRM'S INFORMATION SYSTEMS FOR A 360-DEGREE VIEW OF INFORMATION

You should develop a list of firmwide information requirements to get a 360-degree view of the most important information needs for your company as a whole. Once you have this list developed, examine how your existing systems—most built to service specific groups and levels in the firm—provide this information to corporate-wide systems. You'll need to inventory your firm's existing information systems and those under construction. (Many firms have no idea of all the systems in their firm, or what information they contain.) Identify each system and understand which group or level in the firm benefits from the system.

EMPLOYEE AND MANAGEMENT EDUCATION

Systems are usually not obvious or self-taught for most people. You will need to ensure that you understand how much training is required to support new systems, and budget accordingly. Once you have an inventory of just the major systems in a firm that are used every day by thousands of employees, try to identify how they learn how to use the system, how effective their training is, and how well they use the systems. Do they exploit all the potential value built into the systems?

ACCOUNTING FOR THE COSTS AND BENEFITS OF INFORMATION SYSTEMS

To manage the demand for information services, you'll need an accounting system for information services. It is worthwhile to examine the methods used in your industry and by industry competitors to account for their information systems budgets. Your system should use some method for charging the budgets of various divisions, departments, and groups that directly benefit from a system. And there are other services that should not be charged to any group because they are a part of the firm's general information technology (IT) infrastructure and serve everyone. For instance, you would not want to charge various groups for Internet or intranet services

because they are services provided to everyone in the firm, but you would want to charge the manufacturing division for a production control system because it benefits that division exclusively. Equally important, management should establish priorities on which systems most deserve funding and corporate attention.

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