Chapter 1: Organizations, Business Processes, and Information Systems

Teaching Objectives

The teaching objectives of this chapter are to:

1. Understand that work in organizations is completed in processes that consist of many steps
2. Compare and contrast the functional and process views of organizations and identify the negative consequences of the traditional functional organizational structure
3. Discuss and describe the various flows in a process – physical, data, document, and information
4. Explain how enterprise systems enable organizations to execute and manage processes

Chapter Outline and Teaching Suggestions

1. The Modern Global Business Environment
   a. Global Competition
   b. The Information Revolution
   c. Knowledge Worker

   Explain these three key concepts and why it is important for your students to understand them.
   Explain the reasons for the growth in global competition and the use of information in organizations. An interesting question is which came first – did technology drive globalization or vice versa.
   Explain what a knowledge worker does.
   Explain the key skills expected of a knowledge worker.

2. Key Business Processes
   a. Generic Process
   b. Procurement Process
   c. Fulfillment Process

   Define and explain a business processes. Ask students to identify some other processes that they are familiar with. Identify the three key processes covered in this book and the steps in these processes – in very general terms.

3. The Functional Organizational Structure
   a. The Silo Effect
   b. Delays in Executing the Process
   c. Excess Inventory

      d.   Lack of Visibility across Processes

Discuss how companies are organized and that the functional structure is the most common one. You can use the university or business school departmental structure as an example. Point out that processes are cross-functional. Ask the question: why is the functional structure so common?
Briefly discuss the history of the evolution of the functional structure
Explain the silo effect and the negative consequences of the silo effect.
Explain each of the negative consequences in detail focusing on the example of the fulfillment process provided in the book. Ask students to perform a similar exercise for another process.

4. The importance of Information Systems
      a.   Data and Information
      b.   Functional Information Systems
      c.   Enterprise Systems
      d.   Why is This Information Important to You?

Define the term information system and explain why they are important to modern organizations.
Explain the evolution of information systems from functional systems to integrated enterprise systems.
Define functional systems and their value and how they reduce some of the negative consequences of the silo effect previously discussed.
Define enterprise systems and their value and how they further reduce these negative consequences.
Explain why information systems are important to your students, regardless of their major.

5. Flows in Business Processes

Explain the framework that will be used in the book. The framework consists of several flows – physical, data, document and information.

6. The Roles of Enterprise Systems in Organizations
      a.   Execute the Process
      b.   Capture and Store Process Data
      c.   Monitor Process Performance

Explain the key role of enterprise systems in supporting business processes. Three key roles are highlighted in this book. Point out that there are other roles as well.

7. Financial Impact of Process Steps
    a. Income Statement
    b. Balance Sheet
    c. Chart of Accounts

Understanding the financial impact of process steps is important. Introduce students to the two key financial statements – balance sheet and income statement - in very simple terms. Briefly explain the double entry system. Explain the idea of offsetting increases and decreases in accounts.

Review questions

1. What are the reasons for increased global competition? What are the consequences of global competition to organizations?

   One reason for increased global competition is changes in national and international politics and policies. These policies have encouraged organizations to source their activities in the most advantageous locations. Since organizations are no longer geographically limited, they must ensure that their operations are properly integrated. This is more difficult when organizations are spread all around the globe.

2. What is meant by the term "information revolution?" What caused this revolution? What are the implications of the information revolution for you?

   The information revolution refers to the increased use of information and communication technology to create, deliver, and use information. ICT includes such things as the Internet (e.g., e-mail, web) and computer-based business information systems (e.g., SAP ERP) that support the work of organizations. This revolution was caused because organizations were expanding rapidly and their processes were becoming widely dispersed. A key implication is that this has given rise to the knowledge worker whose skills are quite different from workers of the previous generation.

3. What are knowledge workers? What skills do they possess? Why are they important to organizations?

   A knowledge worker is one who uses ICT to create, acquire, process, synthesize, disseminate, analyze and use information to be more productive. They develop the skills to find and use the information they need rather than rely on others to find it for them. They are important to organizations because they can look at something and see how it fits into the whole organization. Knowledge workers are scarce and most organizations do not have enough of them.

4. Explain the difference between the functional view and the process view of organizations. Why is the process view important today?

The functional view of an organization view the work performed in organizations in terms of loosely coupled functions. Whereas, the process view focuses on the interrelationships between functions that are needed to effectively complete the work of organizations. The process view is extremely important today because pressures of global competition are forcing organizations to find way to reduce costs, lead times, and delays.

5. What are some of the key business processes in an organization? Do all companies have the same key processes? Why or why not?

   Some key business processes in an organization are procurement, fulfillment, and production. While most companies in the same industry do have similar key processes they may execute them differently. Some companies may not execute certain processes at all. For example a retail store like Home Depot wouldn't have the manufacturing process.

6. What is a common organizational structure? Why did this structure evolve? What are the benefits of such a structure?

   The most common organizational structure is a functional structure. This structure evolved to solve the problems of managing organizations that evolved from being relatively small corporations that were centralized to large corporations that were located across the world. The functional structure emphasizes division of labor and specialization and makes the task of managing large organizations simpler.

7. What are the typical functions or departments in an organization? What type of work is done in each of these functions?

   Typical functions or departments in an organization are *purchasing, operations, warehouse (inventory management), sales and marketing, research and development, finance and accounting, human resources,* and *information technology*. Each function performs a narrowly defined (or specialized) set of activities. Specific activities are provided in Table 1.1.

8. What are the drawbacks of a functional organizational structure? What negative consequences do they lead to?

   The major drawback of a functional organizational structure is the silo effect where persons in a function are very focused on the work performed in their functions and lose sight of the bigger process that they support.

9. What are functional information systems? What is their value to organizations? What are their main drawbacks?

   Functional information systems are information systems that only support by one functional area of the organization. They are valuable in that they can help the functional area be more efficient, but they lack the ability to communicate with other functional areas to help complete a process more efficiently.

10. What are enterprise systems? How do they differ from functional information systems? What is the value of enterprise systems to organizations?

Enterprise systems support processes across the entire organization rather than just parts of the process. They differ from the functional information systems because they integrate all the functional areas together and enhance effectiveness and speed of the process. Enterprise systems are critical to organizations as they provide better visibility, reduce delays, and inventories.

11. What is a business process? Explain the various "flows" associated with a business process.

    A business process is the series of steps that are necessary to create value in an organization. The flows associated with a process include physical, data, document and information. Physical flows refer the physical steps executed in the process. Data is what is created and accumulated as the process steps are executed. Data is captured in documents. Information is organized data that is meaningful. Information is associated with each instance of the process as well as at the aggregate process level, that is, across multiple instances or executions of a process.

12. Describe two key financial documents.
    The two key financial statements are the income statement and balance sheet. The income statement represents the state of an organization over a given period of time, such as one year. A balance sheet represents the state of an organization at a point in time. A variety of accounts from the chart of accounts are included in these statements.

13. What is a chart of accounts? How is this related to the two key financial documents?

    The chart of accounts is the list of accounts that are in the General Ledger. The financial impact of transactions are recorded in these accounts.

14. Explain how processes impact the two key financial documents. Under what circumstances does a process step have an impact on a company's finances?

    Processes impact key financial documents by increasing or decreasing accounts in the chart of accounts. Typically, there has to be an exchange in value between the company and an external entity for there to be a financial impact.

Assignments

1. Research some jobs (online or by talking to people in companies) that require knowledge workers. Describe these jobs and explain how and why knowledge workers are needed to fill these jobs.

    The answer to this question will vary.

2. In this chapter we introduced three key processes – procurement, fulfillment and production. There are a number of other processes in an organization, such as those related to product development, managing people. Identify one additional process that is typical in organizations. You may consider an organization you have worked in or the educational institution you are attending. For the process provide the following:
    a. A brief description of the process

      b.   The purpose or desired outcome
      c.   Steps in the process and the person and functional area responsible for completing the step
      d.   Data, document and information flows associate with the process
      e.   The types of inefficiencies (delays, etc.) associated with the manual execution of this process
      f.   The role of enterprise systems in supporting this process

The answer to this question will vary.

3.   We have identified one specific enterprise system – SAP. Identify other enterprise systems that are available to organizations, and highlight the relative advantages and disadvantages of each one.

The answer to this question will vary.

Test Questions

Three types of test questions are provided – True/False, Multiple Choice (one right answer), and multiple answer (at least two right answers). These are provided in MS word format as well as in a format that can be imported as a test in blackboard.

The files are:

Chapter01 Test Questions True False.docx
Chapter01 Test Questions Multiple Choice.docx
Chapter01 Test Questions Multiple Answer.docx

Blackboard versions of these files are also provided. These versions end with the word Blackboard. Remember that these are zipped files that should be uploaded to blackboard as they are, without unzipping. Your blackboard administrator can help with problems uploading these to your course on blackboard.

If you include all three types of questions, the following grading suggestion is offered.
T/F questions 1 point each
Multiple Choice questions 2 points each
Multiple Answer questions 3 (or 4) points each.
      Partial credit is recommended. Grading is typically as follows:
      All correct answers selected; no incorrect answers selected: full points
      X of Y correct answers selected; no incorrect answers selected: x/y * points
      Each incorrect answer selected negates a correct answer selected