Chapter Review

The Role of Information Technology

30

Objectives...

1 differentiate between the concepts of data, information and knowledge resources

2 Identify the role of information resources within the organization

3 discuss how information resources can be used to deliver value and help the organization compete

4 explain the roles of technology, people, structure, culture and processes in knowledge management

5 identify the various types of information system

6 identify ways the use of the Internet and Internet (Net) technologies can help the organization compete, create wealth and add value

7 explain what is meant by e-commerce and e-business

Key Terms

Business information system	specific information system used to support business
Digital organization	an Organization where nearly all significant business processes and relationships with customers, suppliers, and employees are digitally enabled and key corporate assets are managed through digital means
Enterprise system	An information system that integrates information from all functional areas of an organization with the goal of providing a more whole or complete information resource for the organization
Information	data that has been processed (sorted, summarised, manipulated, filtered) so that it is meaningful to people
information system	A set of people, procedures, and resources that collects, transforms, and disseminates information in an organization - accepts data resources as input and processes them into information products as output.
Information technology	the hardware and software that are used to store, retrieve, and manipulate information

36. Information resources include data, information, and knowledge. Data refers to raw facts and Information is the summarization of data. Technology and information/ knowledge represent 'hard' and 'soft' resources available to the organization. Unlike most resources which deplete when used, information and knowledge can be shared, and actually grow through application. It is now widely accepted that winning strategies are more often grounded in the accumulation and creative exploitation of intangibles that are more difficult to replicate. Computer-based Information Systems are used to support all roles at all levels of the organisation. They improve information access and (in the case of integrated systems) the flow of information within the whole organisation. Traditionally, the business functions acquired and developed computer-based Information Systems to help them meet their localised goals. A functional business information system is used to support a specific organisational activity. Businesses compete in two worlds: a physical and a virtual world. The latter has given rise to the world of electronic commerce (EC) and e-business (EB), a new focus of value creation. Much of the value created by e-business is due to the more effective use of information. Managers must now focus upon how their companies create value in both worlds alike. The effectiveness and efficiency of organizational information systems can be enhanced significantly by a move to Internet technologies. Internet technologies enable EC and EB. The Web provides the connective tissue for information flow within and between organizations anytime- anyplace. Interoperability of Web services permits the creation of enterprise-wide information-system architectures linking all the corporate core business systems to the firm's Web site. Information systems extend far beyond the boundaries of the organization to encompass vendors, customers and even competitors. The Internet has both created new industries and enabled the reconfiguration of existing industries. Whilst the Internet presents new opportunities it also intensifies competition. The Internet is an enabling technology - a powerful set of tools which rarely offers a direct competitive advantage. Internet technology, itself is not as a source of advantage because it is readily available to all. Competitive advantages arise from traditional strengths fortified through Internet technology - by tying a company's activities together in a more distinctive system.