

Unit Title: Managing the Information Resource	Unit Code: MIR
--	-----------------------

Level: 6	Learning Hours: 210
-----------------	----------------------------

Learning Outcomes and Indicative Content:

Candidates will be able to:

1 Evaluate the importance and role of traditional and Internet based information systems in today's competitive business environment and be able to distinguish between computer literacy and information system literacy

- 1.1 Evaluate what is meant by the term 'information system'. Explain why information systems matter
- 1.2 Examine the new Internet business culture (e.g. Internet based real time online systems that have interactive capability) and be able to contrast with traditional 'transaction processing' and 'record keeping' (usually associated with 'master file' maintenance)
- 1.3 Discuss and explain the emergence of the 'digital firm', and how significant relationships with customers, suppliers and employees are digitally enabled
- 1.4 Examine and distinguish between the knowledge needed for understanding technical aspects of IT systems, and the knowledge necessary for information systems development and design
- 1.5 Explain why information systems can be considered a "strategic resource"

2. Evaluate the role and function of the information systems supporting the major business operations and assess how these information systems support the activities of managers in the organisation and competitive advantage

- 2.1 Describe and explain the structure and characteristics of different types of systems and the relationship between them e.g. transaction processing systems, management information systems, decision support systems
- 2.2 Describe and explain systems from a functional perspective e.g. manufacturing and production, marketing and sales, human resource management, etc
- 2.3 Explain the importance of knowledge management.
- 2.4 Describe and explain both different and common features of generic types of organisations
- 2.5 Assess the impact that IT can have on organisational structure (such as centralisation versus decentralisation, “virtual organisations”, networked organisations, etc) on managerial roles and decision making processes
- 2.6 Describe and explain how information systems support business strategy; and enable critical linkages in the firm’s value chain
- 2.7 Explain how IT can influence and impact on the wider industry competitive environment (supplier power, buyer power, etc), as well as activities in the value chain of companies (logistics management, POS, production planning and scheduling, data mining to target marketing, etc)

3. Evaluate the role of Internet technology in facilitating the management and coordination of internal and inter-organisational business processes

- 3.1 Explain and distinguish between main internet business models; (virtual storefront, transaction broker, online marketplace, online service provider, content provider, etc)
- 3.2 Explain and distinguish between different categories of electronic commerce (business-to-consumer, business-to-business, etc)
- 3.3 Explain how the web is enabling new approaches to customer service and support
- 3.4 Explain the role and benefits of B to B proprietary systems such as Electronic Data Interchange (EDI) and how they allow the computer-to-computer exchange of standard transactions such as invoices and purchase orders
- 3.5 Distinguish between the different roles of the internet, intranets, and extranets

4. Define IT infrastructure and describe its component parts and assess in outline contemporary computer hardware and software trends

- 4.1 Describe and explain the set of organisation-wide services comprising both human and technical capabilities that together define the concept of 'IT infrastructure'
- 4.2 Explain and distinguish between the different component 'technology' and 'service' clusters that make up the IT infrastructure (computing platforms, telecommunications services, data management services, application software service, etc)
- 4.3 Describe the typical computer configurations from earlier periods to the present time (mainframes, personal computer, client server, and enterprise internet)
- 4.4 Explain the main benefits and challenges of recent configurations
- 4.5 Describe and explain in outline the main contemporary operating system platforms; (Windows XP, Linux,) and Enterprise Software applications; (SAP, People soft)
- 4.6 Explain the benefits and problems associated with different software development approaches (outsourcing, prototyping and end-user development)
- 4.7 Identify the main networking and telecommunication trends; (growing dominance of internet technologies, broadband into homes, wireless networks and mobile internet devices)

5. Describe and examine the characteristics, resource implications, benefits and challenges of both basic file organisation methods and database management approaches to managing the information resource in organisations

- 5.1 Describe and explain the characteristics and problems of the traditional file environment (data redundancy and inconsistency, programme-data dependence etc)
- 5.2 Describe (in outline only) the different types of databases and the requirements for the creation of a database management environment and explain how to ensure data quality
- 5.3 Explain the developing trend of data mining and its possible applications and benefits
- 5.4 Identify some contemporary external sources (e.g. company logistics) of business information and outline the indicative content (e.g. annual report) contained in these sources

- 6. Evaluate the vulnerability of contemporary information systems and assess appropriate and cost effective controls to protect the information resource in a variety of situations**
- 6.1 Identify and explain the different threats to computer and telecommunication systems
(internet vulnerabilities, wireless security challenges, viruses, hackers, and internal threats from employees)
- 6.2 Identify and explain different types of information system controls
(general controls, application controls)
- 6.3 Analyse and propose in outline a disaster recovery and business continuity plan given a specific situation
- 7. Identify and describe the core activities in the system development process and critically evaluate alternative methods for building information systems giving advantages and disadvantages of each method**
- 7.1 Explain the importance of overall planning for the information system development portfolio and the benefits from linking this planning process with strategic business planning
- 7.2 Describe and explain the system development life cycle stages and different variations for alternative approaches (systems analysis, design, programming, testing, etc)
- 7.3 Identify and explain different conversion methods evaluating the advantages and disadvantages of each method (direct changeover, pilot study, etc)
- 7.4 Explain the role, benefits and risks associated with outsourcing and “offshore” outsourcing as components of information systems strategy

Assessment Criteria:

- Assessment method: written examination
- Length of examination: three hours
- Candidates should answer four questions. Section A is a compulsory question, comprising a mini case study scenario. In Section B, candidates should answer three questions from a choice of seven

Recommended Reading

ABE, *ABE Study Manual – Managing the Information Resource*, ABE

Laudon K, Laudon J, *Managing Information Systems* (2006) Pearson Higher Education
ISBN: 1405839228

Alter S, *Information Systems* (2001), Pearson Higher Education
ISBN: 0130432423