

Managing Information in Organizations

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Chapter 3 Role of Information Technology in Managing Information

Link 3.6 Answers to Exercise 3.1

1. What is the difference between a formal and an informal information system?
 - A formal information system is a defined official way of working.
 - An informal information system is an unofficial way of working which evolves from the organizational culture.
2. What does URL mean?
 - URL is a Uniform Resource Locator, the address entered into a web browser to access a website.
3. What are the three views of information proposed by Buckland (1991)?
 - Information as a tangible object.
 - Information as a process which changes what a person knows.
 - Information as a person's intangible knowledge.
4. What is the role of a network in information management?
 - A network transmits data.
5. What is EDI?
 - Electronic data interchange (EDI) is an approach to transfer data between computer systems in different organizations using an agreed format so that the data can be received and processed without the need for human intervention.
6. Which view of a database is seen by the business processes?
 - External view.
7. Why are there different views of a database?
 - The different views of a database are needed in order to maintain physical data independence,(that is, the end user does not need to know where the data are physically stored. This means the storage location can be changed without affecting the systems that use the data.

8. What is the difference between a database and a data warehouse?
 - A database captures transactional data. Data warehouse store summaries of data extracted from transactional databases at regular intervals to provide a single source of data to support decision-making.
9. Do XML or HTML tags refer to how the information is to be displayed without considering the content of the information?
 - HTML tags refer to how information is displayed.
10. What is the purpose of data mining?
 - Data mining is used to discover new, unknown information from the data in the database or data warehouse.
11. List three reasons why data need to be backed up regularly.
 - Data can be deleted by accident, maliciously or through defined purging policies.
 - Media on which data are stored may become faulty.
 - The location where the storage device is located may become damaged through, for example, fires, flood, natural disasters, wars or terrorist attack (Matthews *et al.*, 2009).
12. What is the purpose of hierarchical storage management?
 - Hierarchical storage management automatically migrates (moves) less accessed data to slower and cheaper forms of data storage such as magnetic tape or optical storage.
13. What is meant by green computing?
 - Green computing aims to minimize the impact of IT on the environment throughout the life cycle of the technology including its production, use and disposal.
14. Why is green computing relevant to information management?
 - Data centres (where data are stored) are high consumers of energy.
 - Information needs to be managed about green issues such as energy consumption and the disposal of equipment.
15. How does IT assist an organization in implementing a strategy of cost leadership?
 - IT can be used to reduce organizational costs through efficient business processes supported by effective information management.

16. Match Lighting has had to implement an information system to demonstrate that equipment from the asset register has been disposed of in accordance with legislative requirements. Where would this information system be positioned in the evaluation ladder?

- The system would be positioned in the mandatory systems rung.

17. In Scenario 3.3. why is Mr Selas prevented from purchasing desktop computers?

- The IT policy states that only the IT department can purchase computer equipment.

18. How does IT affect trust in an organization?

- Technology can facilitate the development of trust in an organization by facilitating communication; however, technology can also destroy trust by failing to secure, maintain and process information appropriately. Technology changes structures and processes which impact the way trust can be developed and destroyed.

19. How does an information architecture differ from an information infrastructure?

- The information technology architecture establishes the policy and procedures for selecting hardware and software to be used in the organization. The information technology infrastructure is the implementation of the architecture.

20. Explain the relationship between information systems and IT.

- Information systems identify '**what**' information and information processes are needed by the organization.
- Information technology identifies '**how**' the information systems can be implemented using information technology.