

Link 7.3 Answers to Exercise 7.1

1. What is information paralysis and how is it caused?
 - Information paralysis is the inability to act on information received due to information overload.
2. Explain the difference between pull technologies and push technologies.
 - Pull technology refers to tools that help to refine searches for relevant information and filter out less relevant information – the recipient chooses to pull the information towards them. Push technology sends information to the recipient based on predefined preferences, without the need to search for the information.
3. What are the effects of information overload?
 - Information overload causes stress and the inability to make decisions.
4. Give an example of how someone may demonstrate poor information responsibility which contributes to information overload.
 - Broadcasting information to people who do not need the information contributes to information overload.
5. Explain the difference between feasibility and acceptability.
 - Feasibility means it can be done, but acceptability means that the time and cost involved in doing it are appropriate.
6. If two computer systems are interoperable, what does this mean?
 - Interoperable systems can exchange information and use the information they have exchanged due to compatible data formats and communication protocols.
7. Explain the difference between accessibility and usability.
 - Accessibility focuses on providing the information required to the person who needs it. Usability refers to providing the information in a way that meets a person's needs, enabling them to use the information effectively.

8. What are the three components of information accessibility?
 - Characteristics of the information.
 - Permissible actions on the IT device.
 - Requirements of the recipient.
9. What is an information silo?
 - An information silo is where data available in one area of the organization are not accessible to other parts of the organization and other parts of the organization may not know that the data exist.
10. Why is a silo culture difficult to eradicate?
 - A silo culture is difficult to eradicate because staff hoard data and do not trust the quality and reliability of data captured or created by others areas of the organization.
11. List four barriers to sharing data.
 - Differences in definition and interpretation of terms.
 - Lack of trust in the data captured from other departments.
 - Lack of awareness of the data available or how to access the data.
 - Length of time required to gain access to the data.
12. Why might data be inconsistent?
 - Data may be inconsistent due to inconsistent data definitions or the use of different time frames in generating the data.
13. Why is fitness for purpose a subjective measure of data quality?
 - Fitness for purpose is subjective as it depends on the purpose for which the data are being used and the individual using the data.
14. Give two definitions of timeliness of data.
 - Frequency with which data are captured
 - Time taken between the event occurring and the data about the event being available.
15. Why might inaccurate data be deliberately entered into a computer system?
 - Inaccurate data may be deliberately entered into a computer system for malicious purposes or to workaround business rules preventing a legitimate business process being completed.
16. At what stage in the data life cycle should the accuracy of data be checked?
 - The accuracy of data should be checked at the data capture stage.

17. Explain how a data value can be valid but inaccurate.

- A valid data value is consistent with the values expected for the data item but the value may not accurately relate to the instance of the data.

18. Why is defining data difficult?

- Defining data is a difficult task as it questions how words are used and how individuals view the world.

19. Who is responsible for gaining agreement of a data definition?

- Data owners are responsible for gaining agreement of data definitions.

20. What is a business rule?

- A business rule specifies how information is used in the organization and its relationship to other information. It determines the controls that need to be imposed to structure data and maintain data integrity.