

Data Management



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1. Data Management & Governance

Section 1.1 (recall)

1) Fill in the missing gap.

Data management is the activities involved in treating data as a .

2) Complete the sentence starting with "Data governanc" using the following phrases:

"directly managing the data"

"providing guidance to make sure data is managed

Data governance is about
and data management is about

Section 1.2 (rephrase)

3) Name three benefits to an organisation of managing data.

4) Are the following statements true or false?

Statement	True/False?
1. The first stage in a data lifecycle is where data is stored.	<input type="text"/>
2. Data quality is important throughout the whole data lifecycle.	<input type="text"/>
3. 'Data governance' is another term for 'data privacy'.	<input type="text"/>
4. Data governance is shown at the centre of the DAMA Wheel because it is the foundation of the other areas.	<input type="text"/>

2. Data Security, Quality and Document and Content Management

Section 2.1 (recall)

1) Are the following examples of **Data Security**, **Data Quality** or **Document and Content Management**?

1. In the GP's practice, the administrators use a checklist to ensure that patients data being entered into the system is accurate, complete and up-to-date.

2. After a number of printed documents were lost, Jessica suggests to her line manager that the company needed a way to avoid this happening again in the future.

3. Minesh insists that his employees use encryption and multi-factor authentication on their computers to reduce the chances of hackers accessing the company's IT systems.

Section 2.2 (apply)

2) According to a report*, 84% of CEOs (people leading their organisations) globally are concerned about the quality of the data they're basing their decisions on.

Here are some examples of decisions a CEO may make.

1. decide to spend money on something that isn't profitable (or is very risky).
2. decide to expand the business into a new area/country
3. decide not to expand the business into a new area/country
4. decide to develop a new product or service
5. decide not to develop a new product or service
6. decide to employ/dismiss staff

a) If the CEO has based their decision on low-quality data, which of the above decisions may lose

b) Which of the decisions above may miss the opportunity to make money?

2. Data Security, Quality and Document and Content Management

3) Think of a course/subject you have taken, which has an exam at the end to test your understanding.

Imagine that the only learning resources (e.g. printed handouts) for it are issued by your teacher, but that these resources had not been updated for years and are out of date. You only discover this when you sit down to take the exam.

It's at this point you realise that what you have learned from the resources does not match what you are being tested on in the exam.

What might the consequences be of this failure of document management?

3. Data Architecture, Modelling and Design

Section 3.1 (recall)

- 1) Data architecture is the for the data management resources that an organisation should build to meet its needs.
- 2) A data model is useful for what data an organisation has, how it fits together and how it relates to things in the real world.

Section 3.2 (rephrase)

- 3) What does a data architect do?

Section 3.3 (apply)

- 4) In the example given in the slides for the small e-commerce company, what could the consequence(s) of the reporting database being missed from the data architecture be?

- 5) If you were to create a data model for a school, what data should it include e.g., 'pupil' and 'class'?

- 6) For the data that you have listed in **Question 5**, select two items (e.g. 'pupil' and 'class').

For each of these items, write some statements about the relationship the item has to other items in your data model.

For example:

1. a class can have multiple pupils
2. a class can have one or more teachers
3. a class can have only one school

4. Data Storage and Operations, Integration and Interoperability

Section 4.1 (recall)

- 1) Which of the following are *not* a type of data storage?
database/website/data warehouse/email/data model

- 2) Are the following statements true or false?

Statement	True/False?
1. 'Content' is the data that is stored in a document.	
2. Documents contain structured data.	
3. Data stored in databases needs to be managed but data stored in documents doesn't.	
4. Most organisations have lots of documents, including emails and printed documents.	

Section 4.2 (apply)

- 3) Adam spends £5,000 on a new database and a separate reporting software package for his small holiday business. He is planning to use the reporting software to create reports using data stored in the database. He wants to use the data to help him make better business decisions.

- a) Which of the following are important considerations for Adam when choosing a new database? Put an 'X' beside

cost.	<input type="checkbox"/>
customer support for using it.	<input type="checkbox"/>
over 1000 users can access it at the same time.	<input type="checkbox"/>
ease-of-use.	<input type="checkbox"/>
colour.	<input type="checkbox"/>
it can hold customer records for over 5,000,000 customers.	<input type="checkbox"/>
it can integrate with other software systems.	<input type="checkbox"/>

- b) Which of the following are important considerations for Adam when choosing a new reporting software package? Put an 'X' beside those that he should consider.

it can generate the kind of reports and charts Adam needs it to.	<input type="checkbox"/>
it can integrate with other software systems such as databases.	<input type="checkbox"/>
ease-of-use.	<input type="checkbox"/>
it can print out over 1000 charts per second.	<input type="checkbox"/>
cost.	<input type="checkbox"/>

- c) Unfortunately Adam has not checked that the reporting software he has bought can integrate with the database. It can't - the reporting software and database are unable to communicate with one another.

What are the possible consequences of this for Adam's business?"