Data Quality - Notes

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Tasks for Exercise 01: Introduction

Task 01

Data quality describes data characteristics at the meta-level. High-quality data provides a reliable and useful structure for information. Conversely, poor data quality can lead to mistrust and inaccurate outcomes.

Note: Personal definition.

Task 02

Scenario 2: E-Commerce – Inventory Management

How would incomplete data affect decision-making in your scenario?

Incomplete data can lead to a misunderstanding of consumer behavior and purchasing patterns. Without a full picture, businesses may fail to identify emerging trends or customer needs.

What could go wrong if the data in your scenario is not accurate?

Inaccurate data can result in supply chain bottlenecks or an oversupply of products. This leads to either lost sales due to stockouts or increased storage costs due to excess inventory.

How could the fact, that data is not available when required, affect your scenario?

A lack of real-time data availability undermines trust in data-driven processes. If stakeholders cannot access information when needed, they may revert to "gut-feeling" decisions, which are prone to error.

In what ways does the data need to be reliable and relevant?

To support effective inventory management, data must meet specific quality standards, such as:

- Availability: Data must be accessible to decision-makers at all times.
- Velocity: Data must be processed and updated at the speed of the business.
- Completeness: No critical data points (like regional demand) should be missing.
- Usability: Data must be in a format that is easy to interpret and act upon.

  Note: The answers are not disjunct.