What is dirty data?

Earlier, we discussed that **dirty data** is data that is incomplete, incorrect, or irrelevant to the problem you are trying to solve. This reading summarizes:

- Types of dirty data you may encounter
- What may have caused the data to become dirty
- How dirty data is harmful to businesses

Types of dirty data



Duplicate data



Outdated data



Incomplete data



Incorrect/inaccurate data



Inconsistent data

Duplicate data

Description	Possible causes	Potential harm to businesses
Any data record that shows up more than once	Manual data entry, batch data imports, or data migration	Skewed metrics or analyses, inflated or inaccurate counts or predictions, or confusion during data retrieval

Outdated data

Description	Possible causes	Potential harm to businesses
Any data that is old which should be replaced with newer and more accurate information	People changing roles or companies, or software and systems becoming obsolete	Inaccurate insights, decision-making, and analytics

Incomplete data

Description	Possible causes	Potential harm to businesses
Any data that is missing	Improper data collection or	Decreased productivity, inaccurate insights, or
important fields	incorrect data entry	inability to complete essential services

Incorrect/inaccurate data

Description	Possible causes	Potential harm to businesses
Any data that is complete but inaccurate	Human error inserted during data input, fake information, or mock data	Inaccurate insights or decision-making based on bad information resulting in revenue loss

Inconsistent data

Description	Possible causes	Potential harm to businesses
Any data that uses different formats to represent the same thing	Data stored incorrectly or errors inserted during data transfer	Contradictory data points leading to confusion or inability to classify or segment customers

Business impact of dirty data

For further reading on the business impact of dirty data, enter the term "dirty data" into your preferred browser's search bar to bring up numerous articles on the topic. Here are a few impacts cited for certain industries from a previous search:

- Banking: Inaccuracies cost companies between 15% and 25% of revenue (source).
- Digital commerce: Up to 25% of B2B database contacts contain inaccuracies (source).
- Marketing and sales: 99% of companies are actively tackling data quality in some way (source).
- **Healthcare**: Duplicate records can be 10% and even up to 20% of a hospital's electronic health records (<u>source</u>).