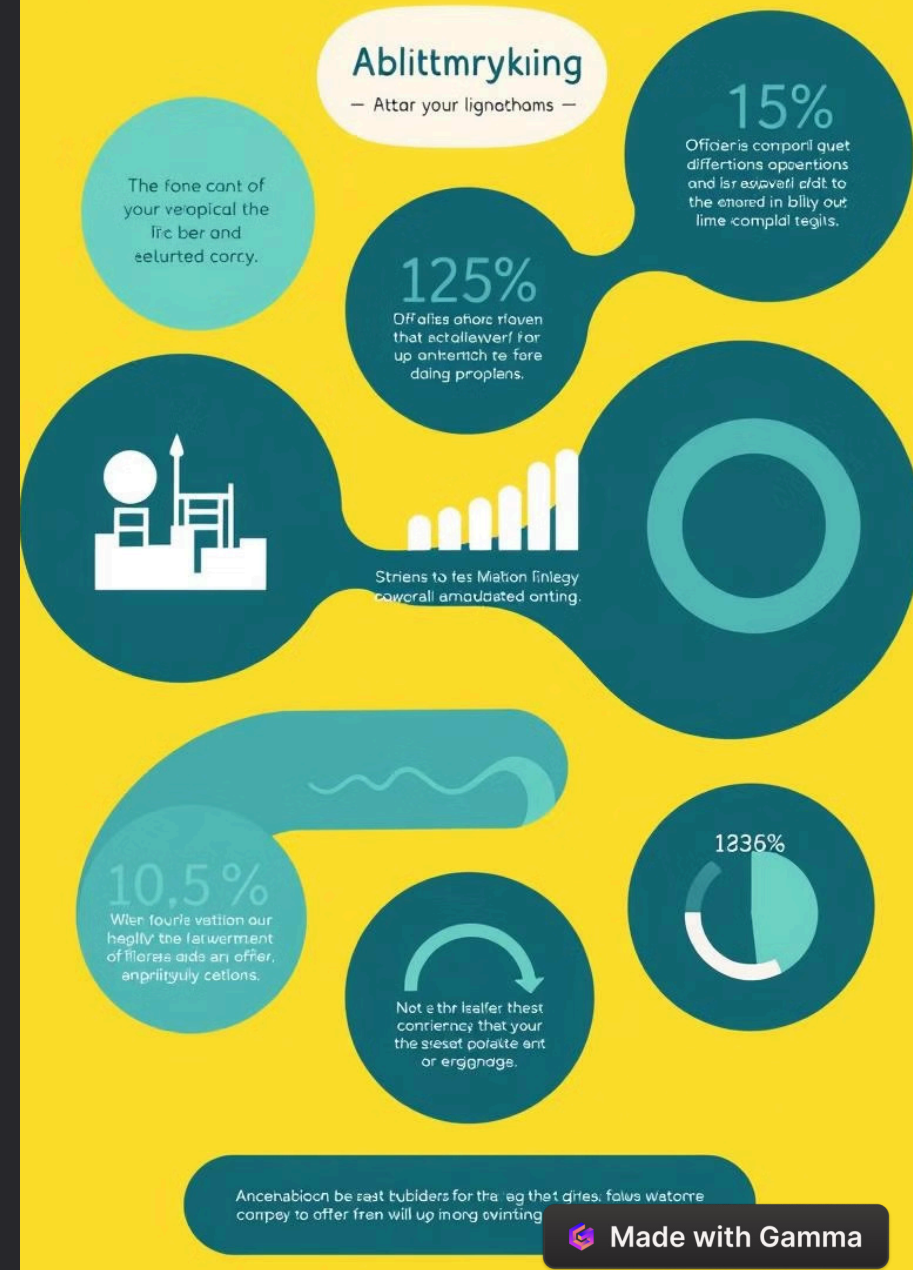


Data and Information Handling

This presentation will explore the fundamental concepts of data and information, the data lifecycle, the importance of effective data management, and key considerations and best practices for working with data.



Defining Data and Information

Data

Raw facts, figures, and observations

Information

Data that has been processed and given context

The Data Lifecycle





Importance of Data Management

- 1 Informed Decision-Making
- 2 Operational Efficiency
- 3 Regulatory Compliance



Data Collection and Storage

Databases

Structured storage of data

Spreadsheets

Flexible data management

Sensors

Automated data collection

Data Cleansing and Preparation



Cleaning

Identify and fix errors



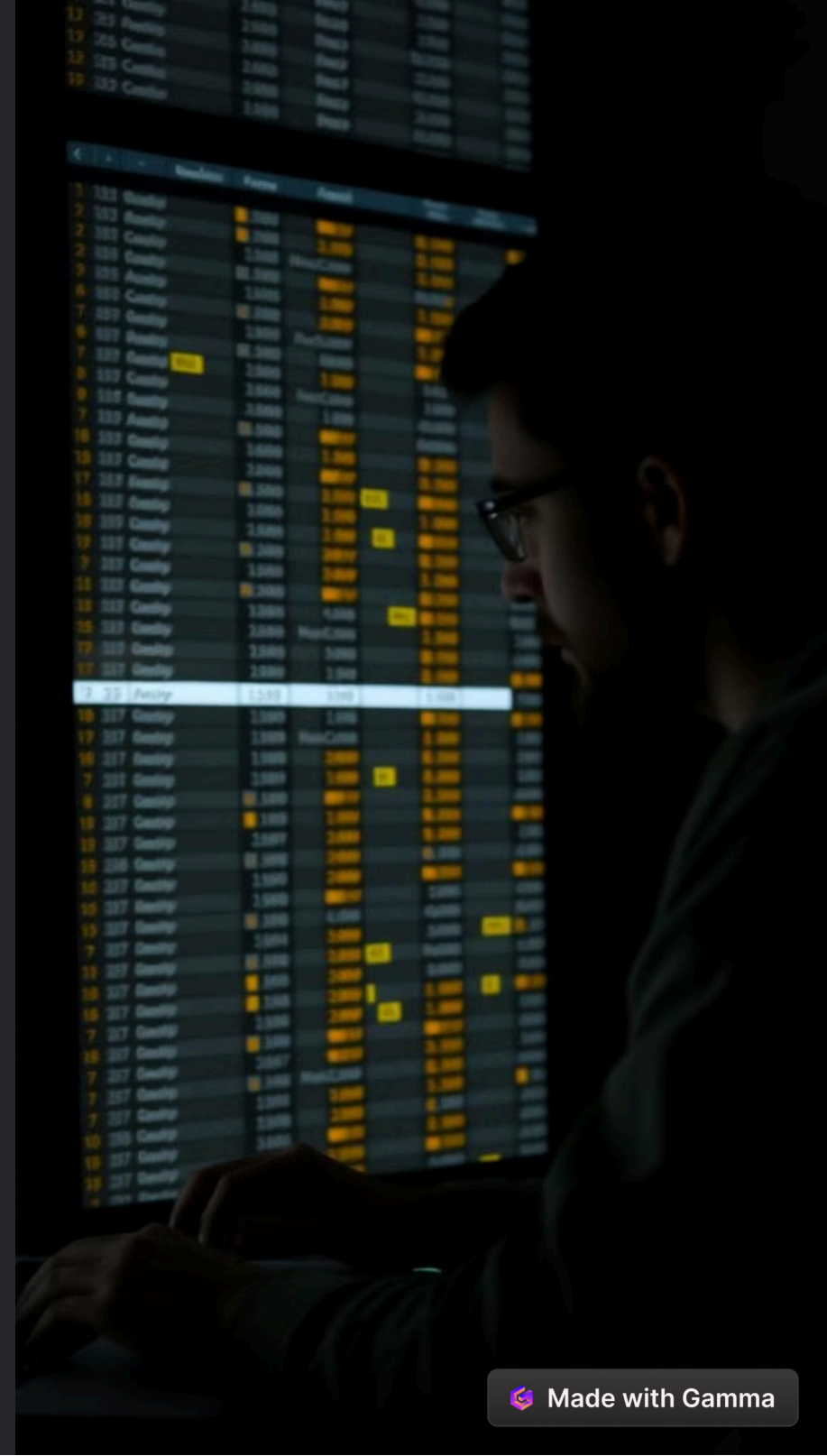
Transformation

Format data for analysis



Enrichment

Add contextual information



Data Analysis and Visualisation

Analysis

Uncover patterns and insights

Visualisation

Present data in meaningful ways



Ethical Considerations

● Privacy

● Security

● Bias

Best Practices for Data Management

1

Governance

Establish policies and procedures

2

Quality

Ensure data accuracy and reliability

3

Accessibility

Make data available to authorized users