



Dr. SNS RAJALAKSHMI COLLEGE OF ARTS & SCIENCE
(Autonomous)
Coimbatore -641049



Accredited by NAAC(Cycle–III) with ‘A+’ Grade
(Recognized by UGC, Approved by AICTE, New Delhi and
Affiliated to Bharathiar University, Coimbatore)

DEPARTMENT OF COMMERCE (IT)

COURSE NAME : 21UCI508 - Business Intelligence

III YEAR / V SEMESTER

Unit II

Business Models and Information Flow

Stages of Information Flow in BI

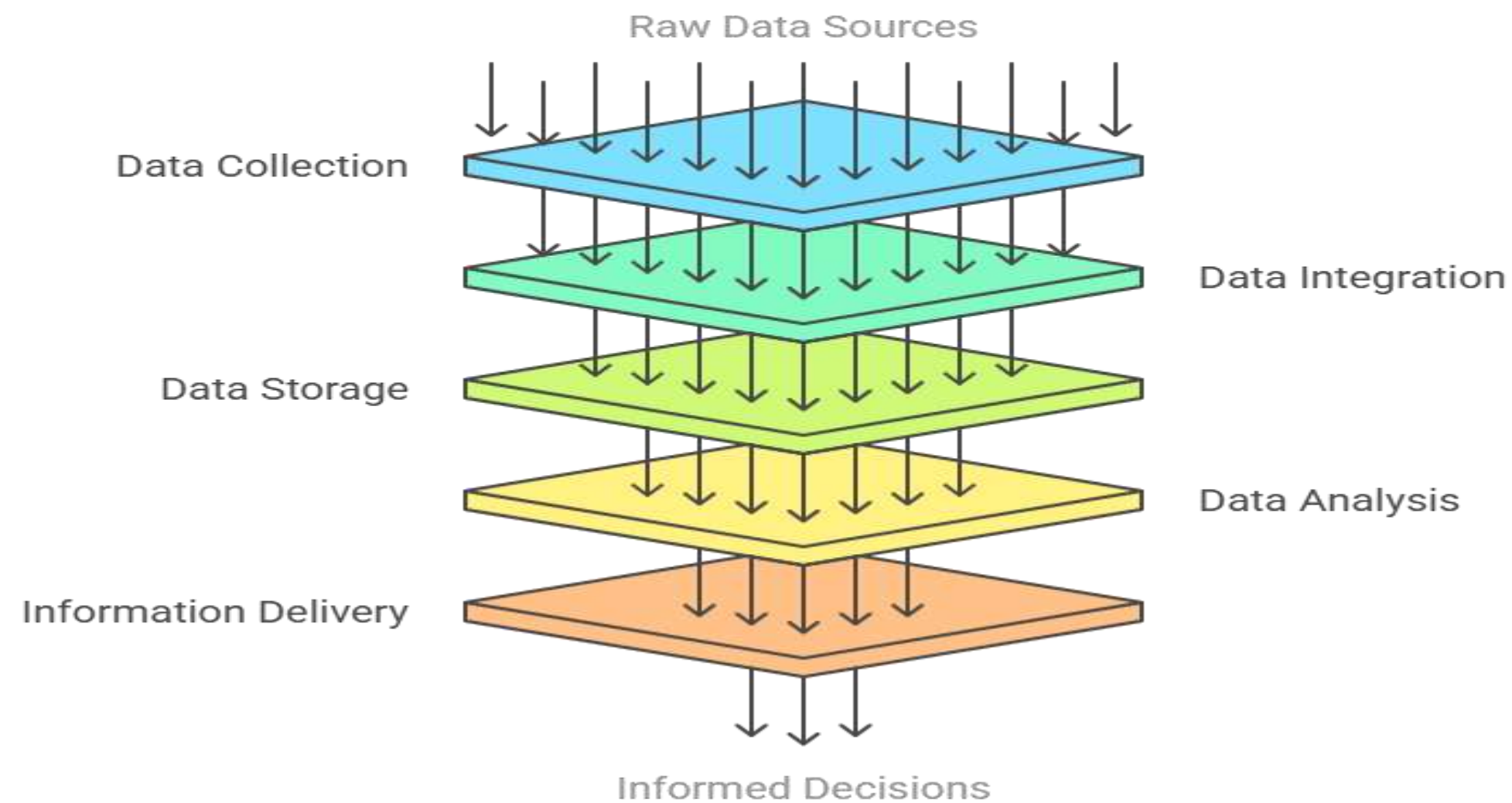
Unit 3

Stages of Information Flow in BI

Stages of Information Flow in BI:

The information flow in a Business Intelligence (BI) system describes how data travels from its source to become actionable insights for decision-makers. Each stage plays a critical role in transforming raw data into useful business knowledge.

Transforming Data into Actionable Insights



1. Data Collection

This is the first stage where raw data is gathered from multiple sources, including internal systems (e.g., ERP, CRM), external databases, social media, IoT devices, and transactional systems. The accuracy and completeness of data collected here directly impact the effectiveness of BI.

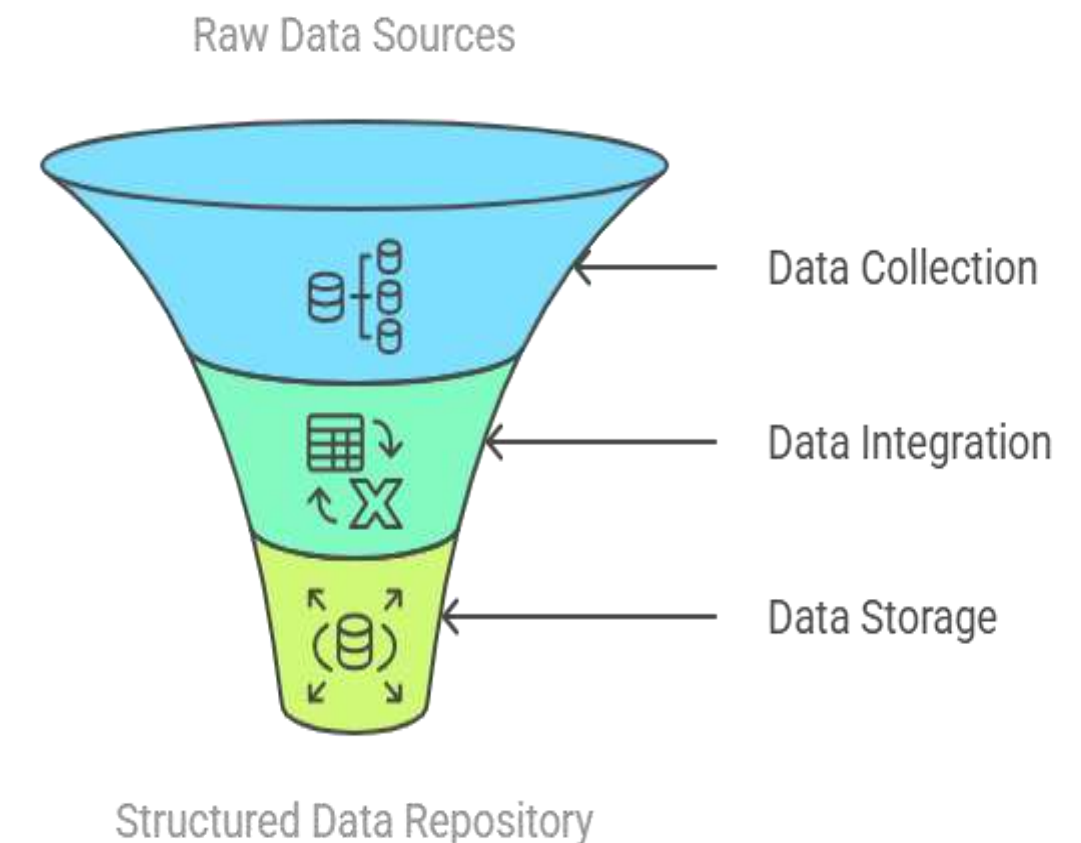
2. Data Integration (ETL – Extract, Transform, Load)

In this stage, data from various sources is extracted, transformed into a consistent format, and loaded into a centralized repository like a data warehouse. This process ensures that data is cleansed, deduplicated, and formatted correctly for analysis.

3. Data Storage

After integration, data is stored in structured formats using data warehouses, data marts, or data lakes. These repositories provide fast and secure access to large volumes of historical and real-time data, enabling efficient querying and reporting.

Data Processing Funnel for Business Intelligence



4. Data Analysis

At this stage, BI tools and analytical engines process the stored data to uncover patterns, trends, and correlations. This includes OLAP (Online Analytical Processing), data mining, predictive analytics, and machine learning to support strategic decisions.

5. Information Delivery

Insights generated during analysis are delivered to decision-makers through dashboards, scorecards, visualizations, reports, and alerts. These tools help users interpret data and monitor key performance indicators (KPIs) in real-time.

6. Decision-Making and Action

In the final stage, business users (e.g., managers, analysts, executives) use the presented insights to make informed decisions. Actions based on these decisions could range from operational adjustments to strategic changes, driving overall business success.

Data-Driven Decision-Making Pyramid

