Unit 14
Business Intelligence
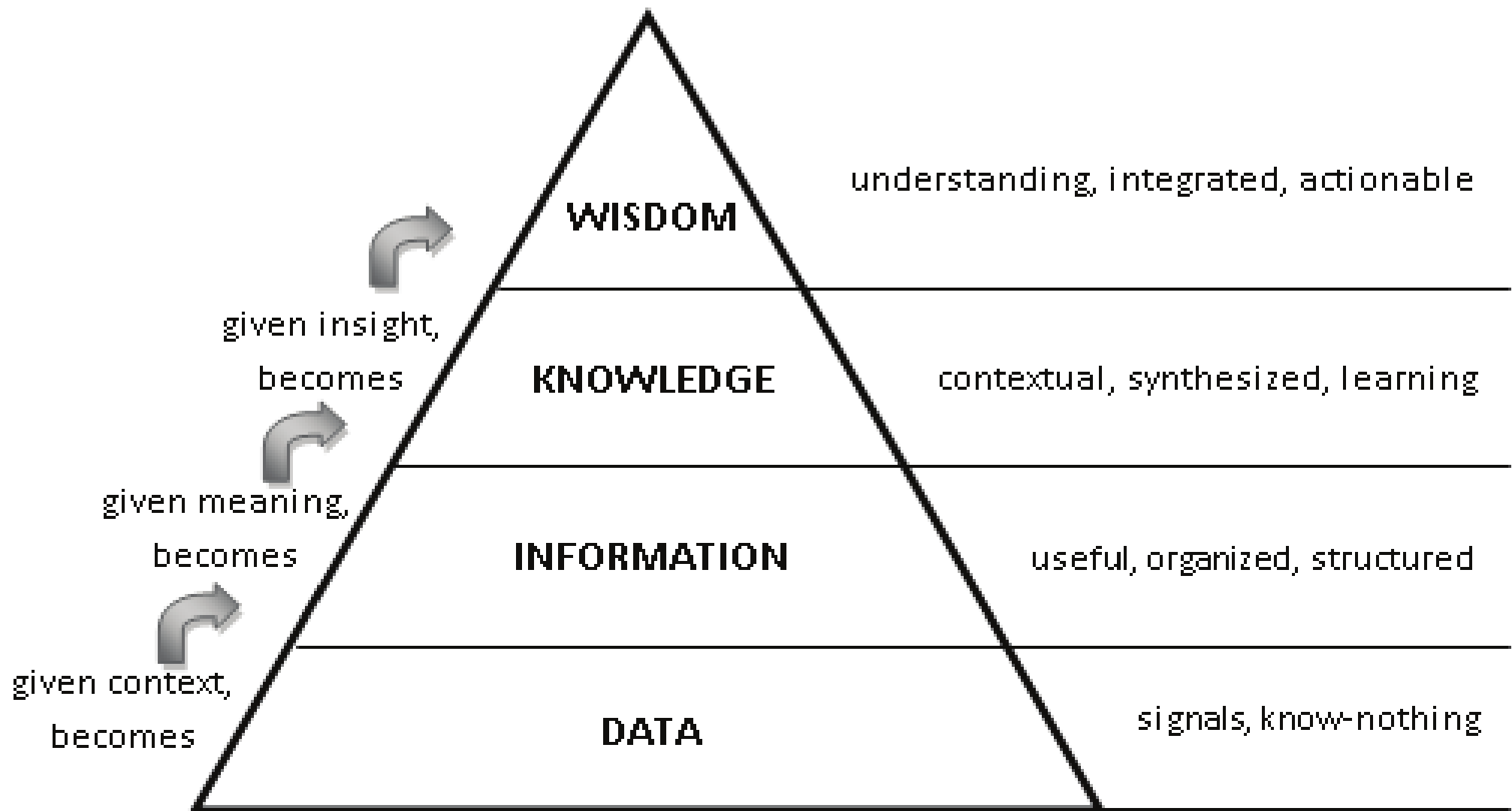
WHAT IS BUSINESS INTELLIGENCE?

Outline

- ➢ Recap
- ➢ Data
- ➢ Data types

Source: ResearchGate

Fitness Tracking

Wisdom: Understanding these patterns lets you make informed decisions about adjusting your exercise routine, sleep habits, and other lifestyle factors to improve your health and fitness.

⇧

Knowledge: Analyzing and interpreting the information may reveal patterns, such as increased step count leading to improved sleep quality or a correlation between heart rate and workout intensity.

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Information: The smartwatch app organizes and structures the data, displaying it in a comprehensible format, such as daily step count, average heart rate, and hours of sleep per night.
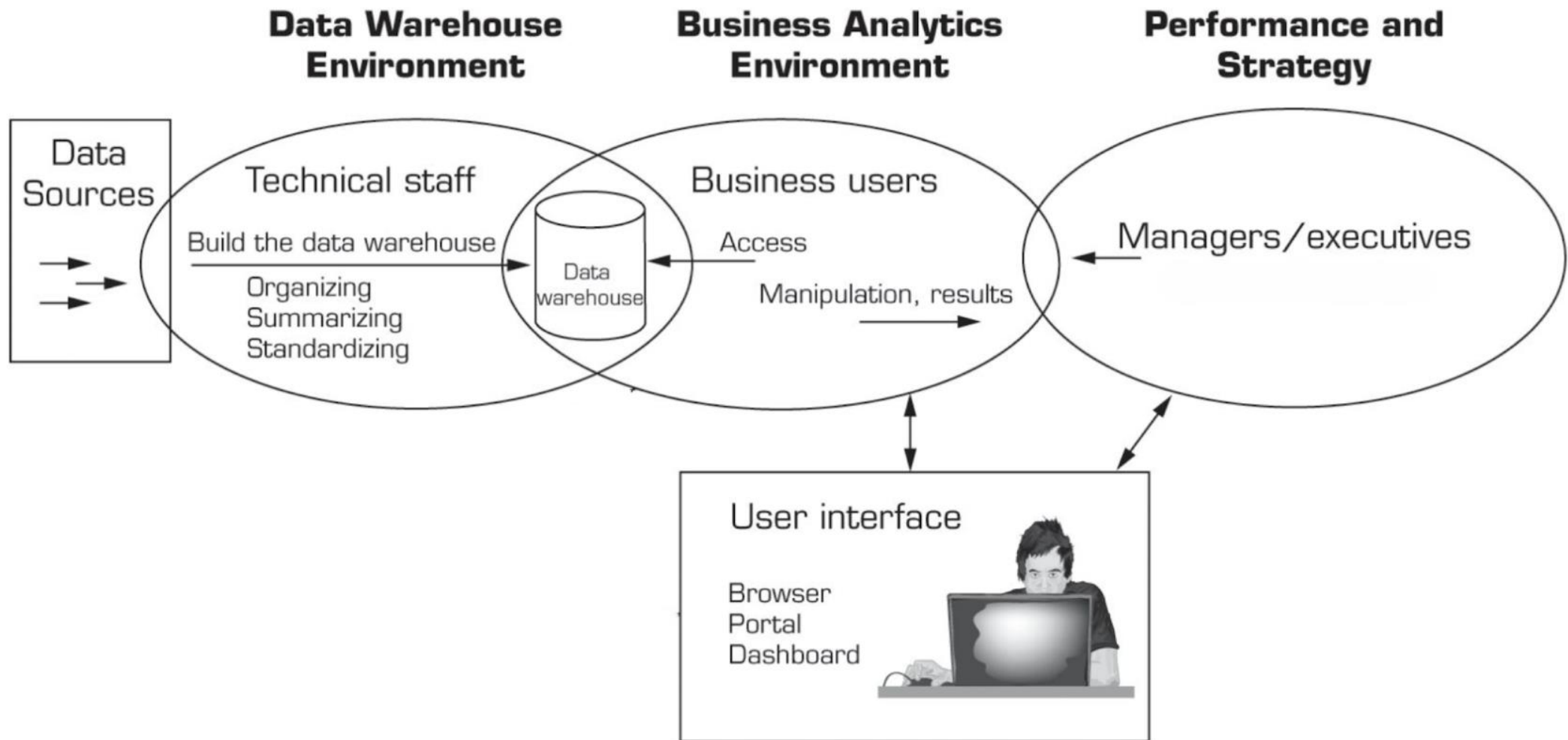
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Data: The smartwatch collects raw data such as the number of steps taken, heart rate, and sleep duration.

Business Intelligence

What is Business Intelligence?

◦ Started in 1970 with simple 2-dimensional reports.

◦ An **infrastructure** that contains an **assortment of processes and tools** all with the **goal** of providing businesses with **complete and actionable data** to aid in their **decision-making processes**.

◦ Some of the things included in BI are:

  ◦ data visualization

  ◦ data infrastructure and tools

  ◦ preparation

  ◦ benchmarking

  ◦ statistical analysis"

Data Warehouse Environment

Business Analytics Environment

Performance and Strategy

Data Sources

Technical staff

Build the data warehouse

Organizing
Summarizing
Standardizing

Data warehouse

Business users

Access

Manipulation, results

Managers/executives

User interface

Browser
Portal
Dashboard

How business intelligence works

THE MODERN ANALYTICS WORKFLOW

Develop business intelligence strategy

1. Choose a sponsor & set goals.

2. Choose your BI platform.

3. Identify the key stakeholders and get them involved.

4. Assemble your BI team.

5. Define the scope of BI.

6. Prepare your data infrastructure.

7. Develop a business intelligence roadmap.

What Is a Stakeholder?

"A stakeholder is a party that has an interest in a company and can either affect or be affected by the business. The primary stakeholders in a typical corporation are its investors, employees, customers, and suppliers."

However, with the increasing attention on corporate social responsibility, the concept has been extended to include communities, governments, and trade associations.

https://www.investopedia.com/terms/s/stakeholder.asp

Exercise

Identify the stakeholders in the following scenarios:

Scenario 1:

A hospital is implementing a new business intelligence system to analyze patient data, improve operational efficiency, and enhance patient care. The system will integrate data from electronic health records (EHRs), billing systems, and patient satisfaction surveys to provide insights for better decision-making.

Solution

- Healthcare providers.
- Hospital administrators.
- Patients.
- IT department.
- Finance department.
- Insurance providers.
- Government.

Exercise

Identify the stakeholders in the following scenarios:

Scenario 2:

A retail chain is deploying a business intelligence solution to optimize sales forecasting and inventory management across its stores. The system will analyze sales data, customer demographics, and supplier information to reduce stockouts, improve product availability, and enhance customer satisfaction.

Solution

- Retail store managers.
- Marketing team.
- IT department.
- Finance department.
- Customers.
- Suppliers.