

# INTRODUCTION TO ERP

PREPARED BY: LUIS MEING

## OBJECTIVES:

01

**Definition**

02

**Components**

03

**ERP Systems Vendor**

04

**ERP Modules**



## 1.1 Definition

# ERP



- Enterprise resource planning (ERP) systems are the specific kind of enterprise systems to integrate data across and be comprehensive in supporting all the major functions of the organization

## 1.1 Definition

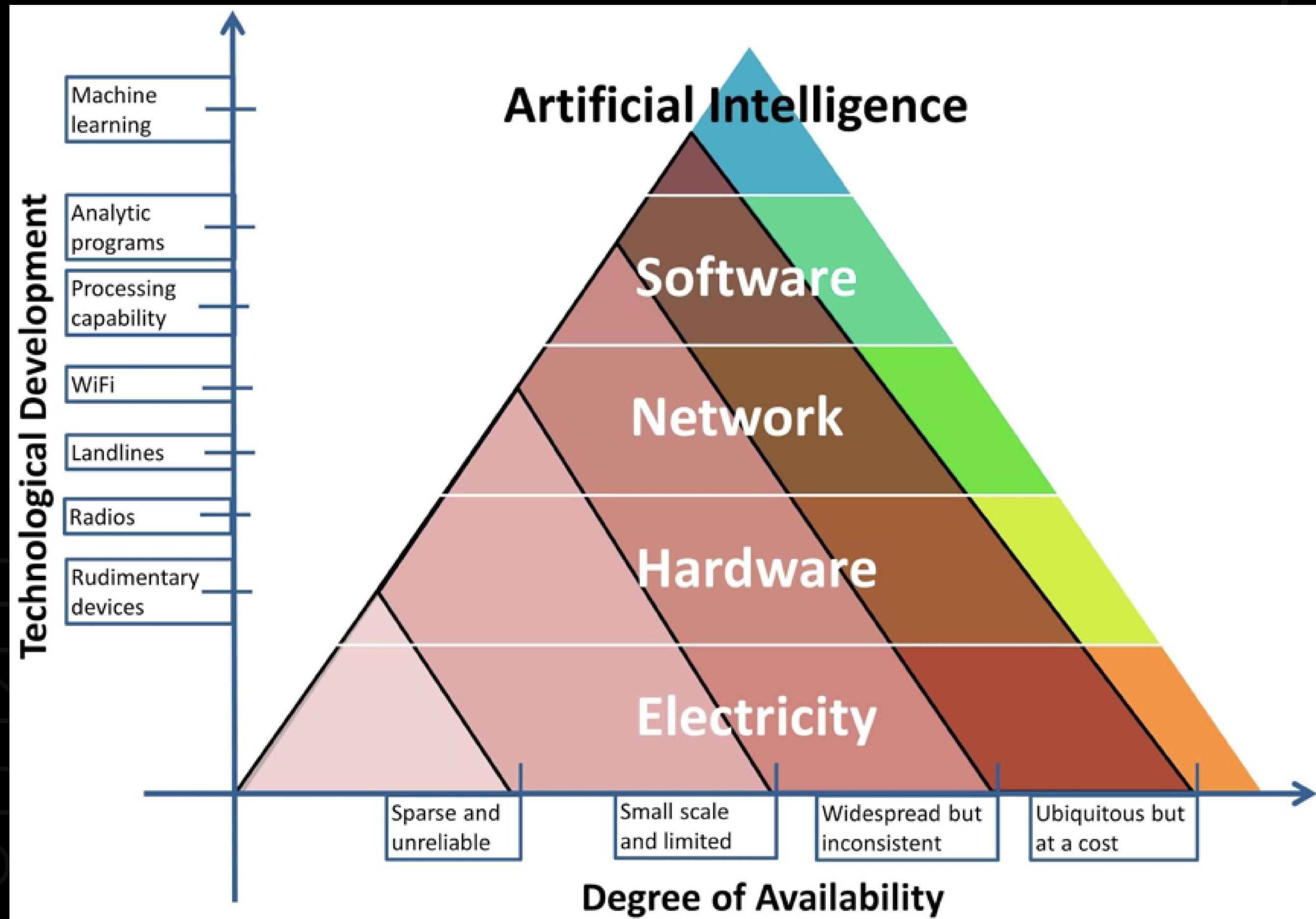
# ERP



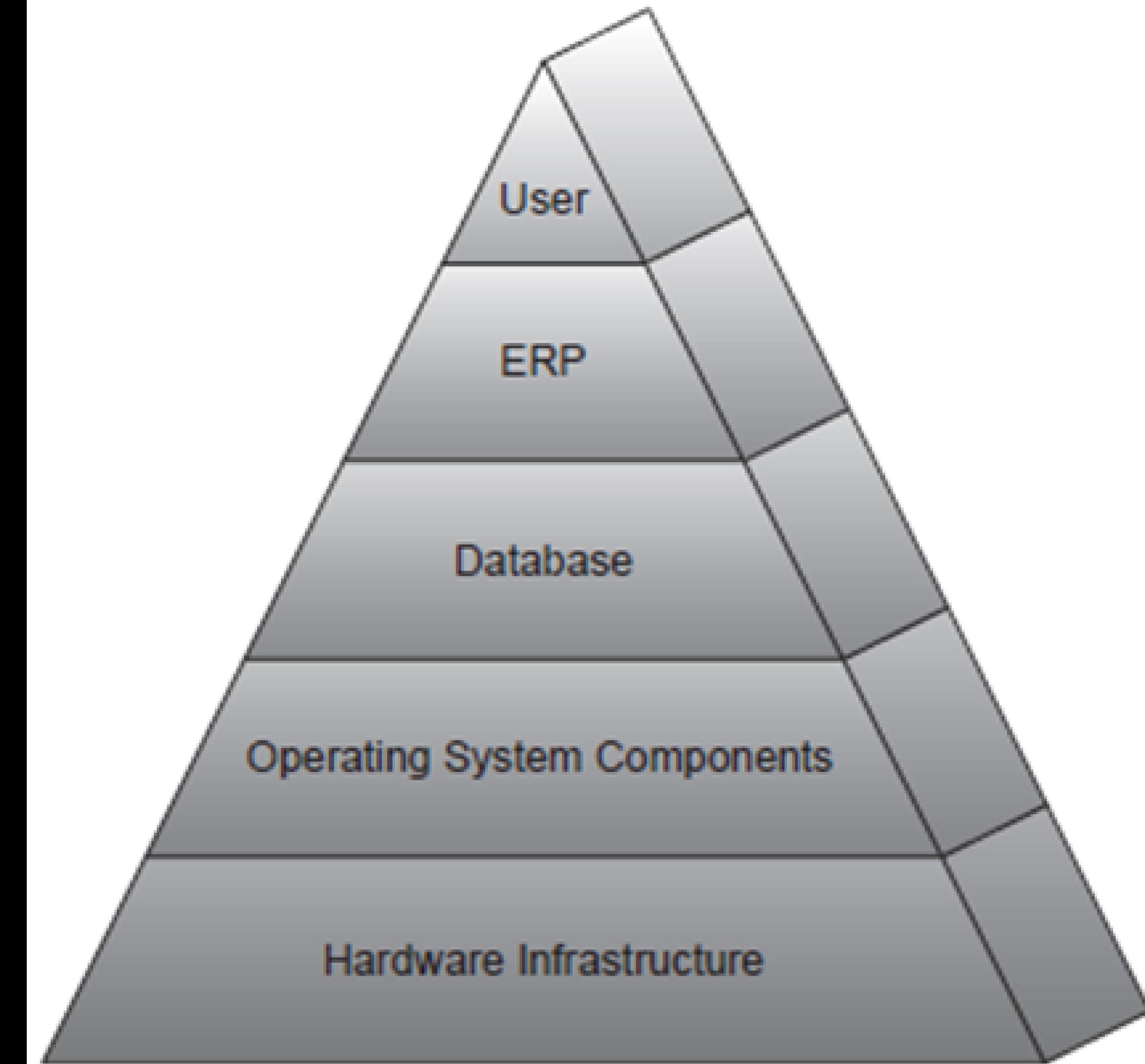
- ERP is the use of shared computer systems across the business



## 2.1 Components



## 2.1 Components



# Client-Server Architecture

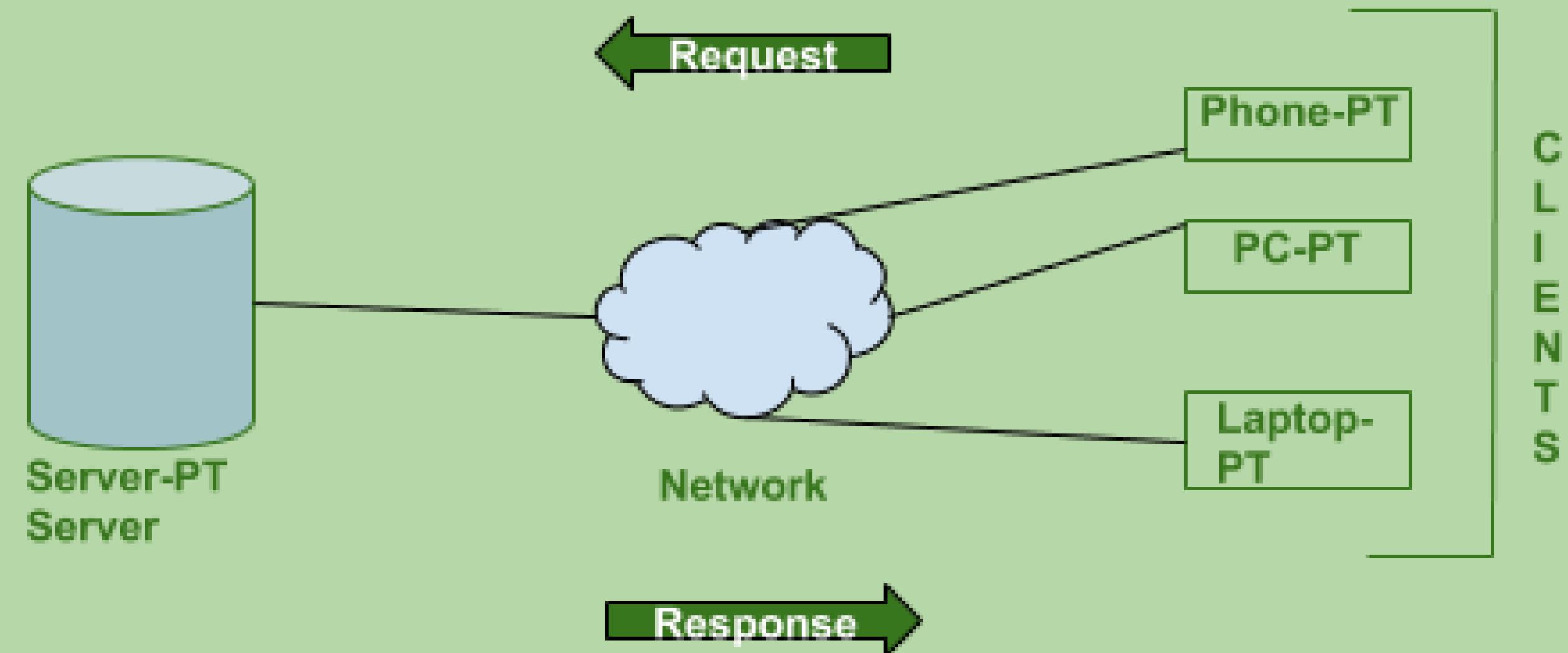
- architecture of a computer network in which many clients (remote processors) request and receive service from a centralized server (host computer)

# Client-Server Architecture

- it explains how computers talk to each other when they need something from the other

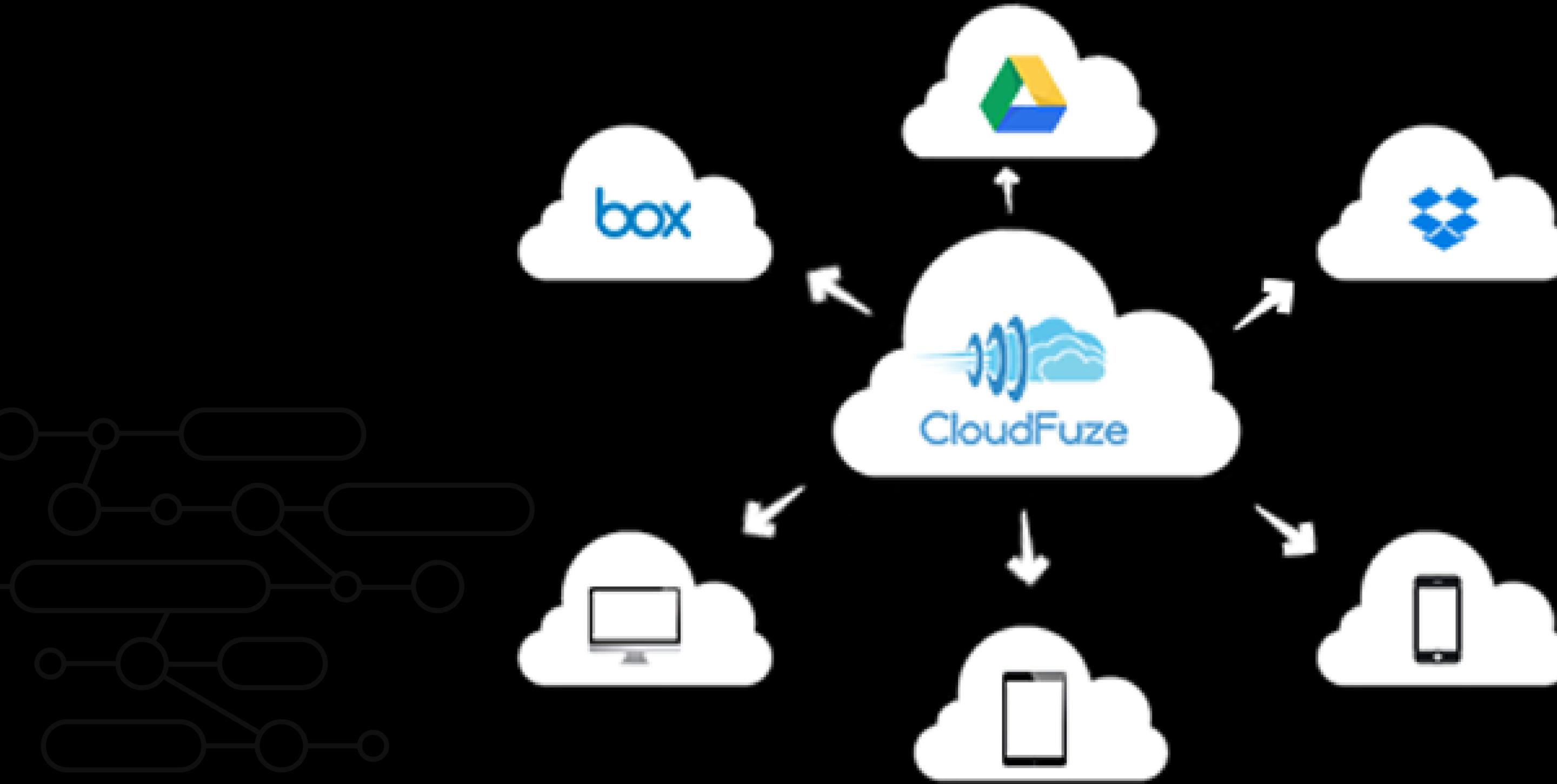
## 2.2 Client-Server Architecture

# Client-Server Architecture



## 2.2 Client-Server Architecture

# Client-Server Architecture



## 2.2 Client-Server Architecture

# Client-Server Architecture



## 2.3 Hardware

# Hardware

- the physical parts of a computer

## 2.3 Hardware

# Hardware: A Computer

- a machine that can store and process information

## 2.4 Software

# Software



- instructions that tell a computer what to do

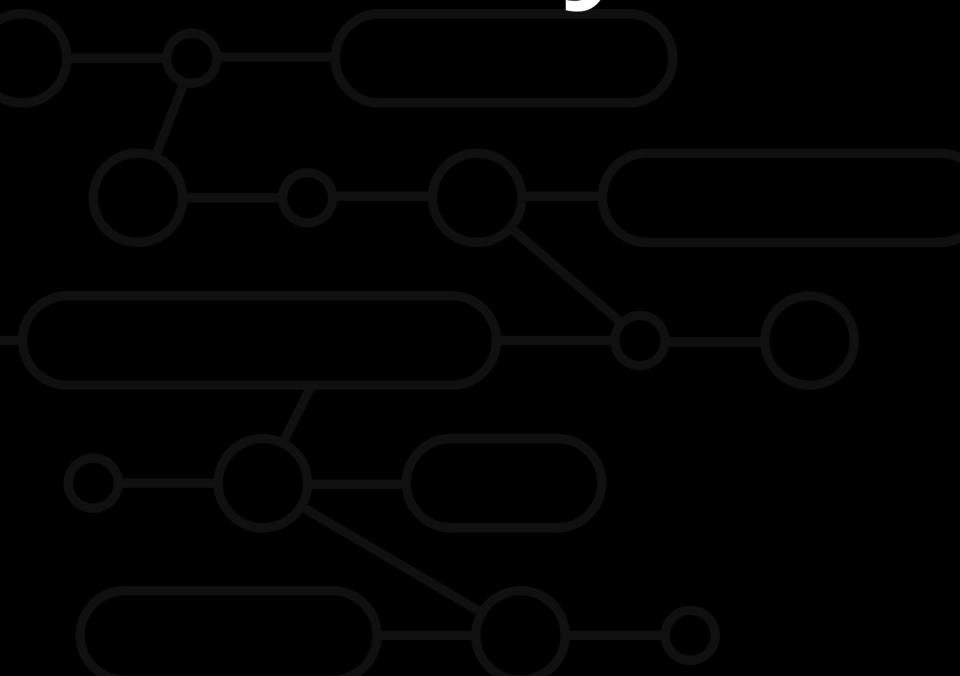


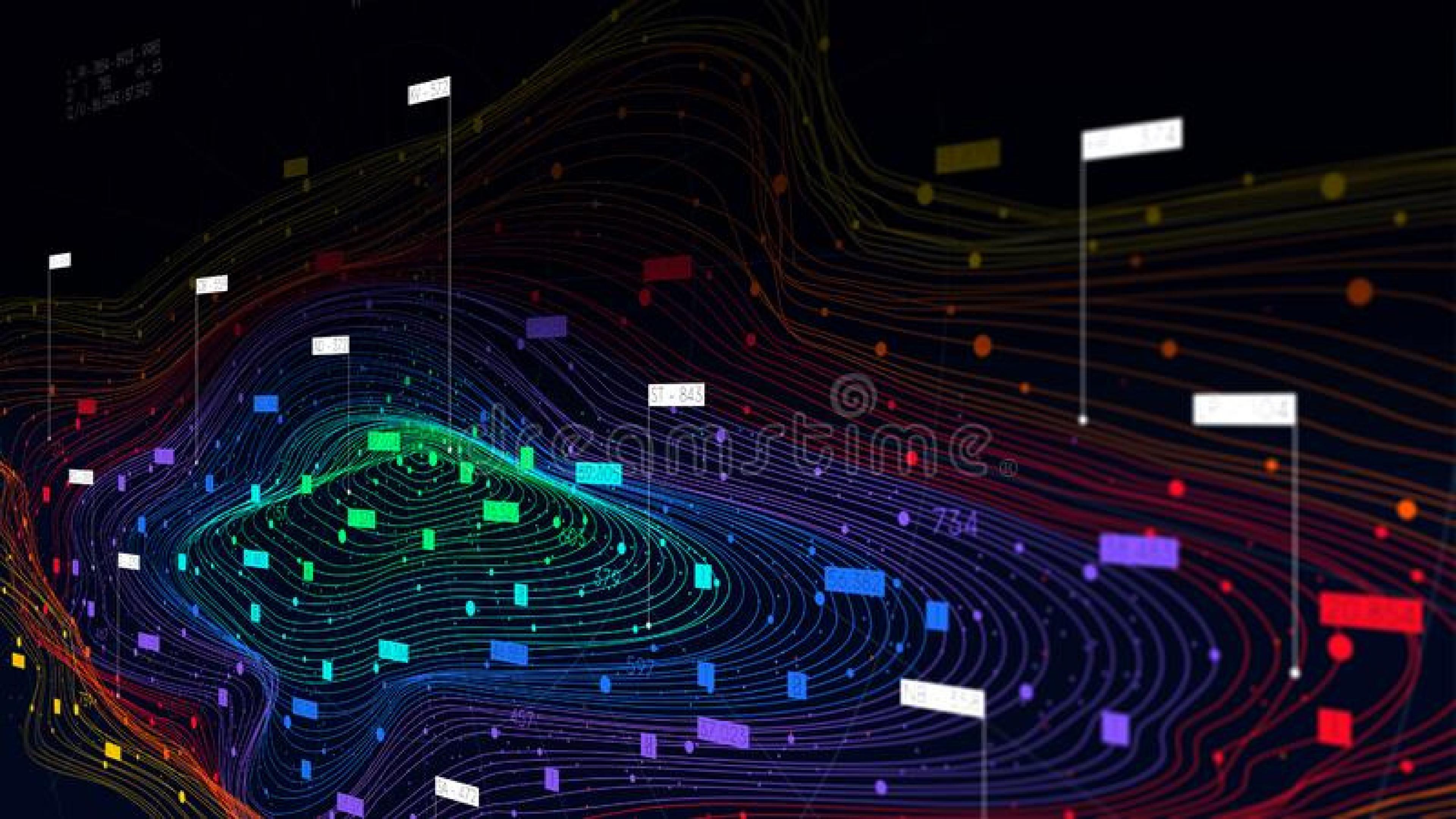
## 2.5 Peopleware

# Peopleware



- the 'human' component of a computer system





### 3.1 ERP Systems Vendor

# Microsoft

- Dynamics 365



### 3.1 ERP Systems Vendor

# Oracle/PeopleSoft

- Fusion Cloud ERP



### 3.1 ERP Systems Vendor

## SAP

- SAP ERP



**TABLE 1** ERP Modules from Three Vendors

Function	SAP Modules	Oracle/PeopleSoft Enterprise Modules	Microsoft Dynamics Modules
Sales	Sales and distribution, sales opportunity	Marketing and sales, supply chain management	Retail POS, field service management
Procurement	Purchasing, supplier relationship management	Procurement and supplier relationship management	Supply chain management
Production	MRP, product life cycle management	Manufacturing	Manufacturing
Accounting	Financial accounting	Financial management	Financial management
Distribution	Warehouse management	Supply chain management	Distribution management
Customer services	CRM	CRM	CRM
Corporate performance and governance	Governance, risk, and compliance management	Corporate performance management	Analytics
Human resources	Human capital management,	Human capital management	HR management
Miscellaneous	Banking	Campus solutions	e-Commerce, portals

Source: Adapted from Web sites of SAP Global, Oracle Applications, and Microsoft Dynamics. [www.sapfans.com/sapfans/sapfmod.htm](http://www.sapfans.com/sapfans/sapfmod.htm); [www.oracle.com/applications/home.html](http://www.oracle.com/applications/home.html); [www.microsoft.com/en/us/default.aspx](http://www.microsoft.com/en/us/default.aspx) (accessed January 15, 2007).

### 3.2 SAP

# SAP

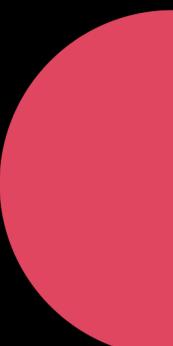


- Is the industry leader in ERP systems
- has over 40 years of enterprise resource planning experience across industries and business sizes

# SAP



- SAP: Systemanalyse  
Programmentwicklung
- founded in 1972
- Is modernly known today as SAP SE



# Specialization

vs

# Generalization

(in software engineering)

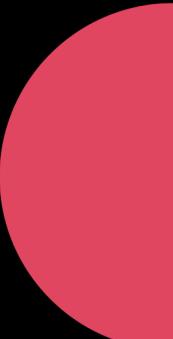


# Proprietary

VS

# Open Source

(in software engineering)

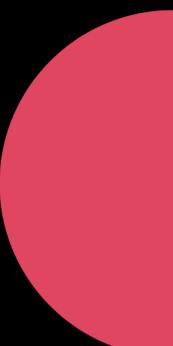


### 3.3 SAP S/4HANA Cloud

# SAP ERP



- SAP ERP is an enterprise resource planning software developed by the German company SAP SE



### 3.3 SAP S/4HANA Cloud

# SAP S/4HANA Cloud

- a future-ready enterprise resource planning (ERP) system with built-in intelligent technologies, including AI, machine learning, and advanced analytics

### 3.3 SAP S/4HANA Cloud

# SAP S/4HANA Cloud

- this version of SAP uses Cloud Technology and Data Analytics coupled with Low Code Environment

# Production Module



- helps in planning and optimizing the manufacturing capacity, parts, components, and material resources using historical production data and sales forecasting

# Purchasing Module

- streamlines the procurement process of required raw materials and other supplies

# Inventory Management Module

- facilitates the processes of maintaining the appropriate level of stock in a warehouse

# Sales and Marketing Module

- implements functions of order placement, order scheduling, shipping, and invoicing

# Finance Module



- is the core of many ERP software systems
- gather financial data from various functional departments and generate valuable financial reports
  - (e.g., budgets, balance sheet, general ledger, trial balance, and quarterly financial statements)

## 4.1 ERP Modules

# Human Resource Module

- streamlines the management of human resources and human capital

# Miscellaneous Modules

- business intelligence
- self-service
- project management
- e-commerce