

Lec 3

DS

Modern DS

Date

No

1980 → Start using computers by  
People, customers and end  
users of business organizations.

Modern DS

- ① Office Automation Systems (OAS)
- ② E-commerce systems
- ③ Decision Support systems
- ④ Enterprise systems
- ⑤ Process control systems
- ⑥ Cloud based systems
- ⑦ IoT systems
- ⑧ BI (Business Intelligence) systems



Date \_\_\_\_\_ No \_\_\_\_\_

## ① Office Automation Systems (OAS)

- Manage the administrative functions
- Often critical to service-based industries.

> **Groupware** - Assists teams of people working together through facilities such as email & teleconferencing within & between companies

ex: MS Office 365  
Salesforce  
Atlassian  
Google Workspace  
Zoho

> **Document Imaging Process (DIP)** } - Documents → Digital format

ex: MS Lense  
CamScanner  
FileNet  
Alfreco  
Kotax Capture

> **Workflow management systems (WFMS)** } - SIQA by Atlassian, Wrike, Notion, Asana, Monday.com

Automate business process by providing structured framework



## ② Process control systems

> CAD / CAM - Computer aided design, Computer aided manufacturing

Provides a graphics program which allows the design (CAD) and automated manufacture (CAM) of components.

## ③ Expert systems

emulates the decision-making ability of human expert.

> MYCIN : Medical diagnosis

## ④ Enterprise Systems

Support the business processes of an organization across any functional boundaries that exist within that organisation.



> **ERP** : Enterprise Resource Planning (ERP)

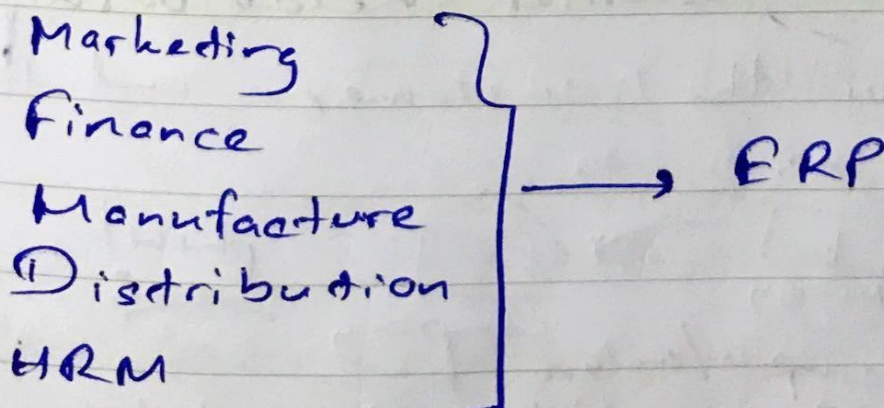
> ERP provides a single integrated solution from a single supplier for major business functions, such as marketing, finance, etc.

> **Advantage** at ERP is it removes "information islands" (different parts in different softwares)

> **Disadvantages** at ERP

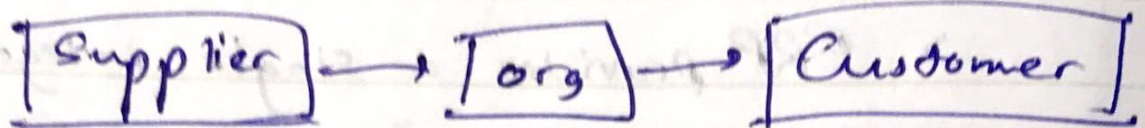
- High cost

- Major change required for implementation





## > Supply Chain Management (SCM)



- ~~the~~ warehouse management

- Logistic management

- Transportation management

- Demand forecasting

- Sales forecasting

- Manufacturing planning / controlling

- Marketing

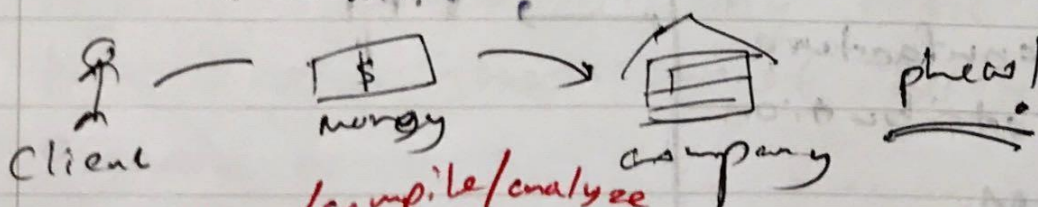
- Quality Planning

- Financial planning

ex: Quickbase, SAP SCM, Infor SCM

## > CRM - Customer Relationship Mng.

Follow the customer and fish them.



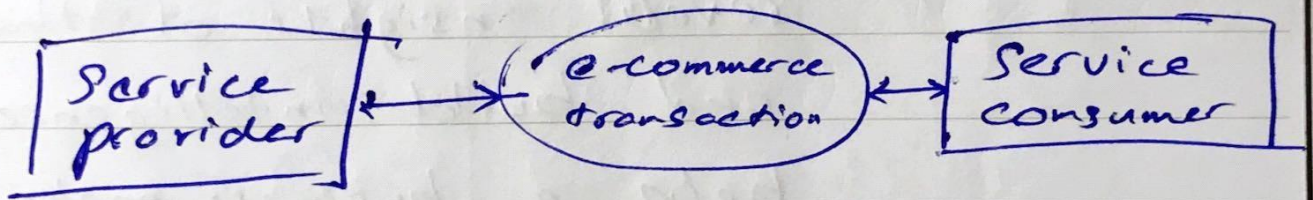
- > Track/compile/analyze purchase history, personal data and etc.
- > Helps to know your customer well and treats individually.



## > Supplier Relationship Management (SRM)

These system refer to all the activities involved with obtaining items from a supplier, including procurement, transportation and warehousing.

## ⑤ E-Commerce Systems



## ⑥ Cloud based systems

### > Cloud computing

↳ All the Entire computing infrastructure over the internet  
 ↓  
 users purchase computing capacity (on-demand)

### > Cloud based systems

ex: MS Office 365



⑦ **IoT** - This concept is connecting any device with an on and off switch to the internet.

⑧ **BI** - Business Intelligence

➤ BI systems analyze/mine organization raw data and information to reveal insights of the business and build intelligence to help a business make faster and more accurate decisions.

ex: Yellowfin

SAP BI

Oracle BI

Qlik Sense