MANAGEMENT INFORMATION SYSTEM MIS

Chapter Two
IT INFRASTRUCTURE AND EMERGING TECHNOLOGIES

Mr. Mustafa Alsaigh

assist. Lecturer- Cihan University

Mustafa_alsaigh@cihanuni-sul.com

CHAPTER QUESTIONS

1. List the technologies dimension of information systems.

2. What are the services that must be provided to MIS?

3. Define; Internet, Intranet and Extranet.

4. There are four main actors of MIS, what are they?

5. Define IT infrastructure and describe its components.

6. Name five services that must be provided to MIS

7. Draw connection between the firms, IT infrastructure and business capabilities

8. Describe the eras of evolution of IT infrastructure

TECHNOLOGY DIMENSION OF INFORMATION SYSTEMS

- Computer hardware and software
- Data management technology
- Networking and telecommunications technology
  - Networks, the Internet, intranets and extranets, World Wide Web
- IT infrastructure: provides platform that system is built on

- Internet: a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.

- Intranet: a local or restricted communications network, especially a private network created using World Wide Web software.

- Extranet: an intranet that can be partially accessed by authorized outside users, enabling businesses to exchange information over the Internet in a secure way.

Management Information Systems

Combines computer science, management science, operations research and practical orientation with behavioral issues

Four main actors

1. Suppliers of hardware and software
2. Business firms
3. Managers and employees
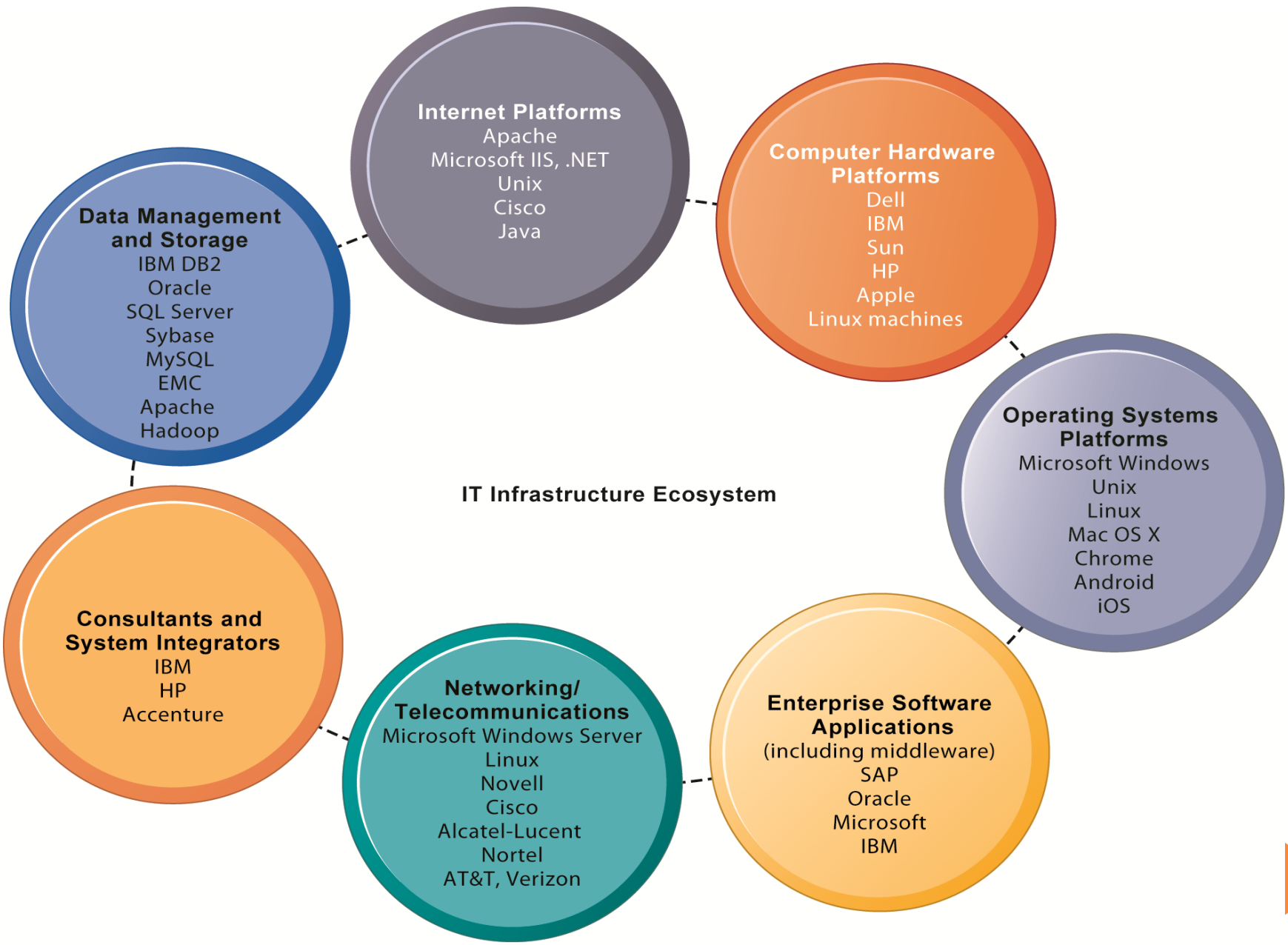4. Firm's environment (legal, social, cultural context)

IT INFRASTRUCTURE:
Set of physical devices and software required to operate enterprise

IT INFRASTRUCTURE HAS SEVEN MAIN COMPONENTS

1. Computer hardware platforms
2. Operating system platforms
3. Enterprise software applications
4. Data management and storage
5. Networking/telecommunications platforms
6. Internet platforms
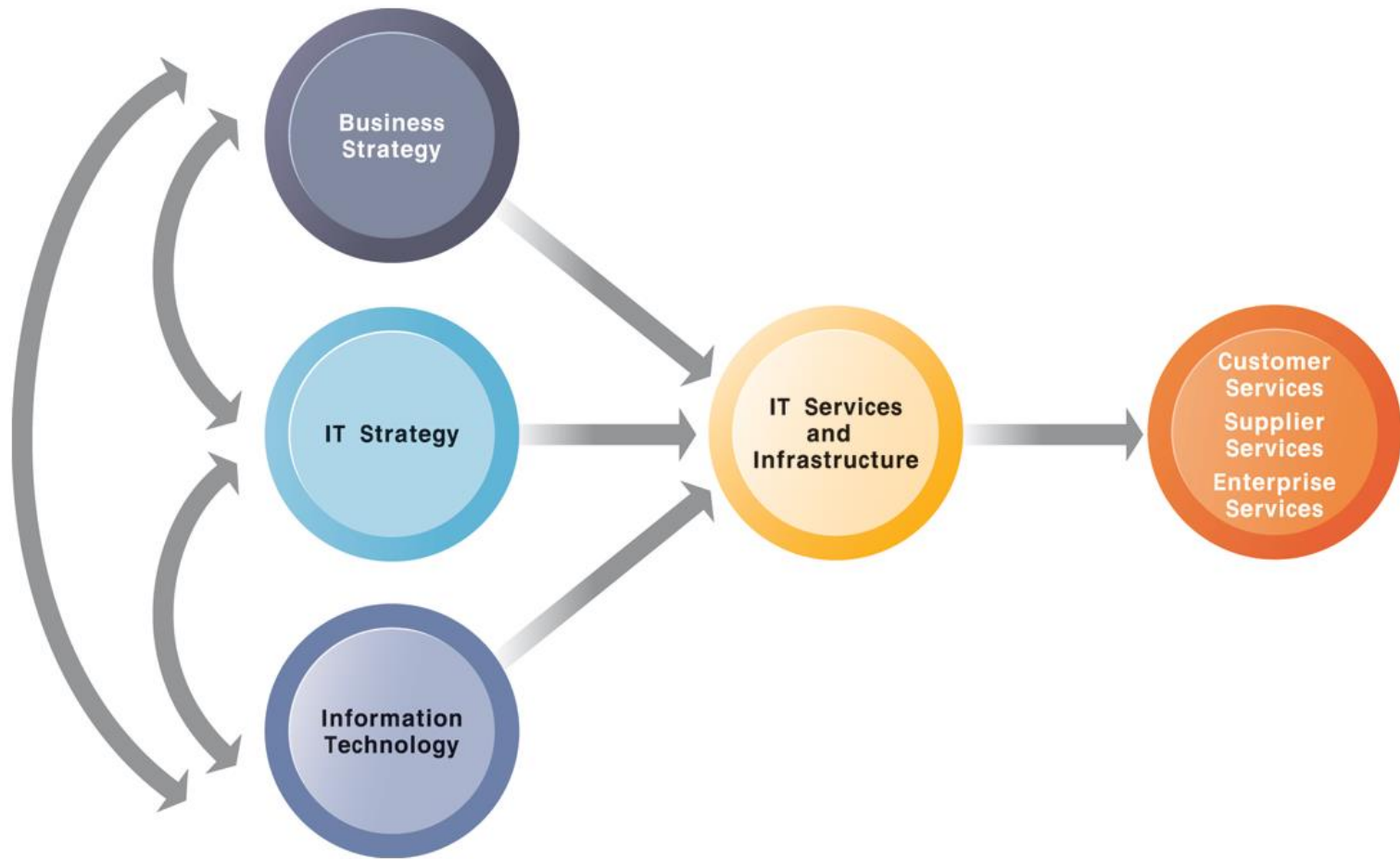7. Consulting system integration services

Internet Platforms
Apache
Microsoft IIS, .NET
Unix
Cisco
Java

Computer Hardware Platforms
Dell
IBM
Sun
HP
Apple
Linux machines

Data Management and Storage
IBM DB2
Oracle
SQL Server
Sybase
MySQL
EMC
Apache
Hadoop

Operating Systems Platforms
Microsoft Windows
Unix
Linux
Mac OS X
Chrome
Android
iOS

IT Infrastructure Ecosystem

Consultants and System Integrators
IBM
HP
Accenture

Networking/ Telecommunications
Microsoft Windows Server
Linux
Novell
Cisco
Alcatel-Lucent
Nortel
AT&T, Verizon

Enterprise Software Applications
(including middleware)
SAP
Oracle
Microsoft
IBM

Set of firm wide services including:

- Computing platforms providing computing services
- Telecommunications services
- Data management services
- Application software services
- Physical facilities management services
- IT management, education, and other services

CONNECTION BETWEEN THE FIRM, IT INFRASTRUCTURE, AND BUSINESS CAPABILITIES
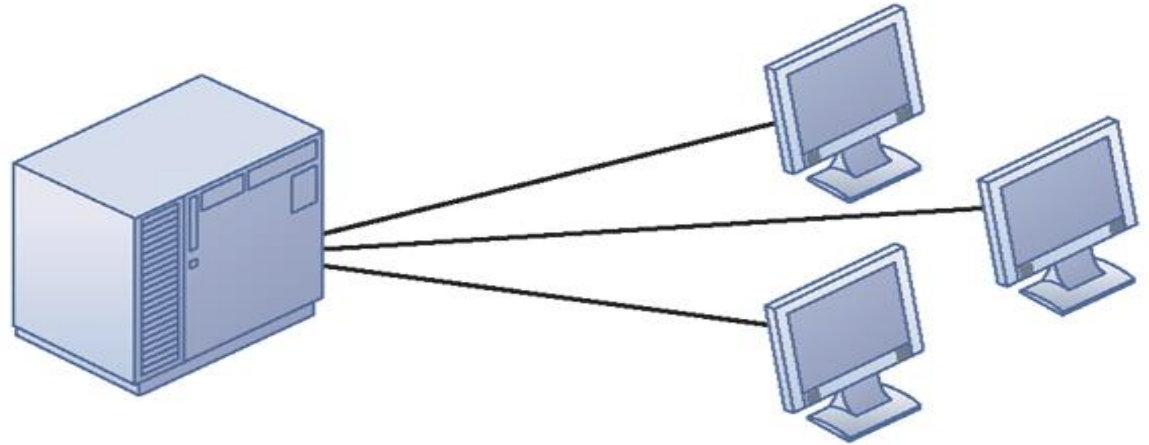
Evolution of IT infrastructure

1. General-purpose mainframe and minicomputer era: 1959 to present
2. Personal computer era: 1981 to present
3. Client/server era: 1983 to present
4. Enterprise computing era: 1992 to present
    - Move toward integrating disparate networks, applications using Internet standards and enterprise applications
5. Cloud and mobile computing: 2000 to present
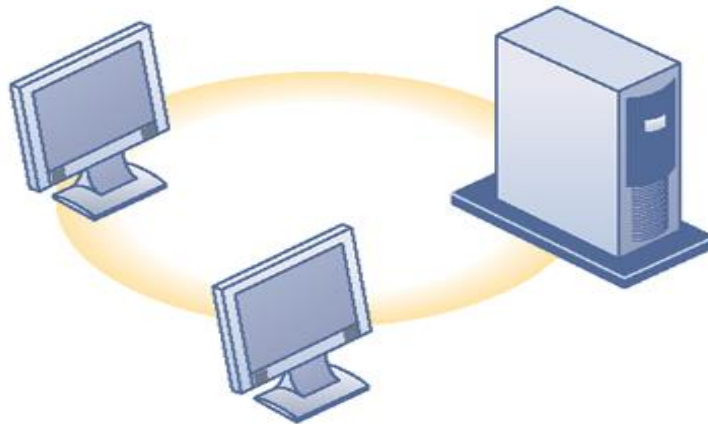   - Cloud computing: computing power and software applications supplied over the Internet or other network

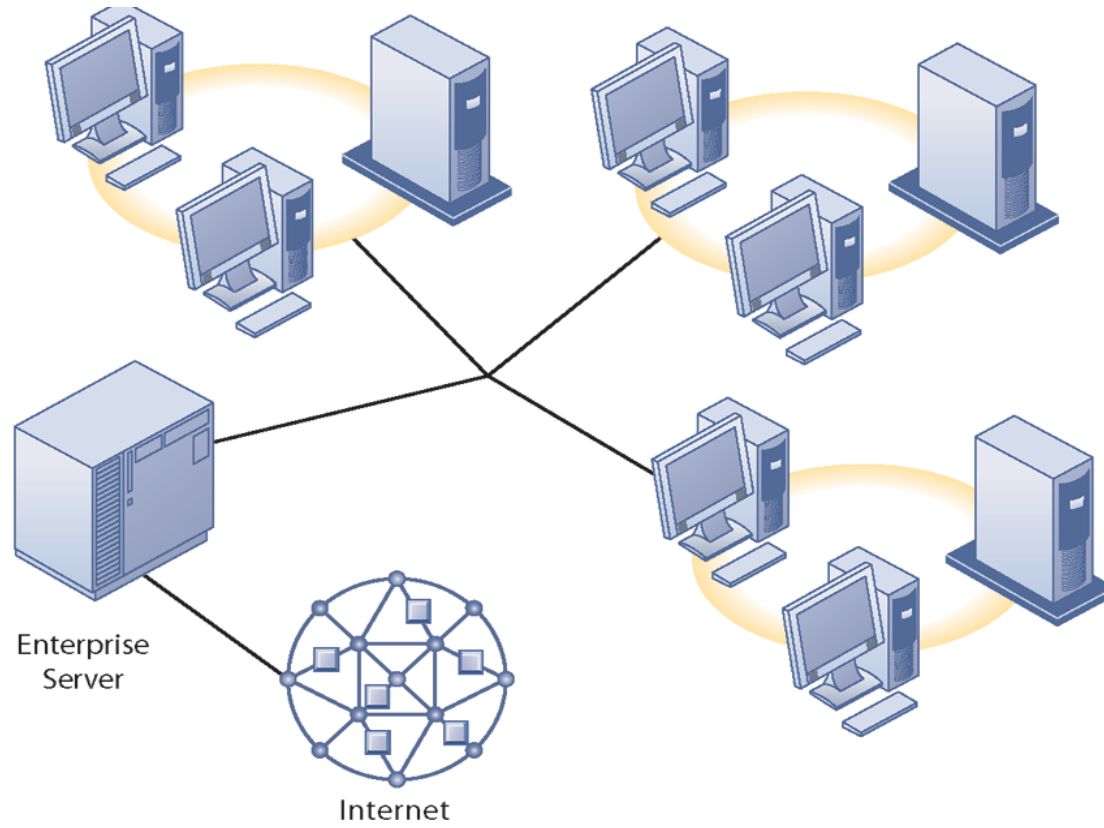Mainframe/
Minicomputer
(1959–present)
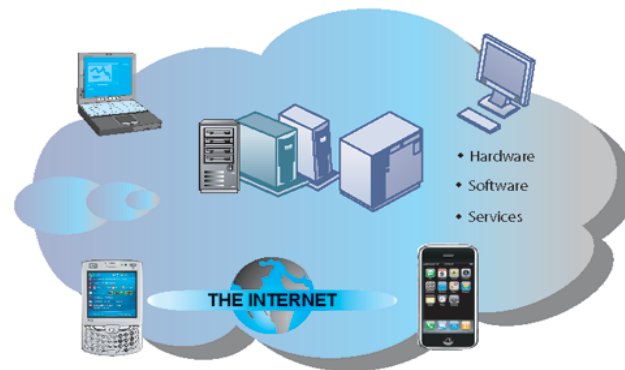
Personal
Computer
(1981–present)

Client/Server
(1983–present)

Enterprise
Computing
1992–present)

Enterprise
Server

Internet

Cloud and Mobile
Computing
(2000–present)

- Hardware
- Software
- Services

THE INTERNET

THE END
GOOD LUCK