

# MIS: Information Technology Infrastructure

---

DTSL, S-3

NEENA PANDEY, IIMV

# What is IT Infrastructure?

---

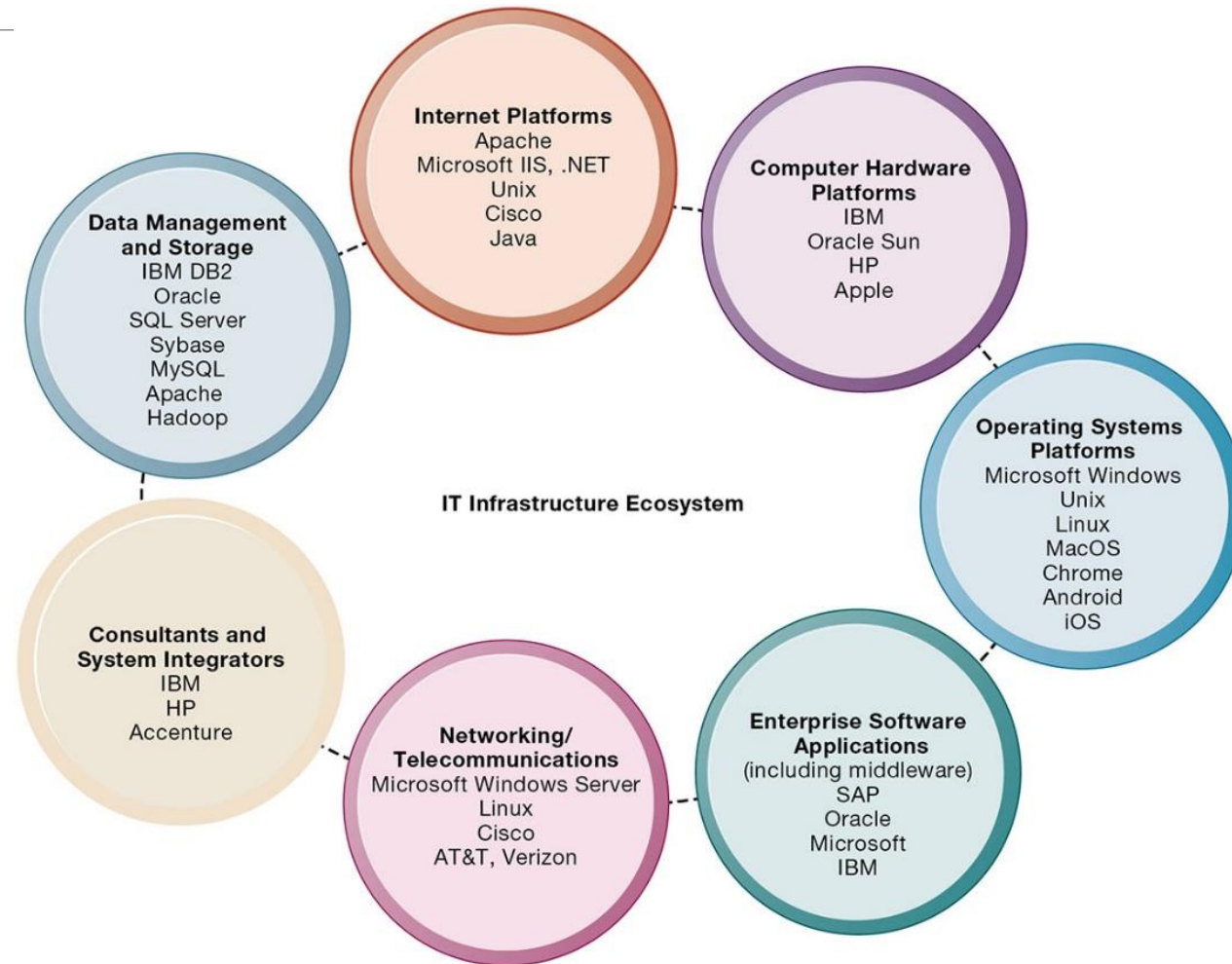
- Shared technology resources that provide the platform for the firm's specific information system application
  - Set of physical devices and software required to operate an enterprise
- Service platform perspective – easier to understand the business value provided by infrastructure investments
  - Computing platforms to provide computing services
  - Telecommunication services, Data management services
  - Application software services, IT management services
  - IT research and development services

# IT Infrastructure Decisions

---

- IT Infrastructure Questions: Business Needs
  - What business needs have to be met with the infrastructure components ?
  - How does the technology help the organization compete ?
  - Is the technology appropriate for the task ?
  - Is the technology the best in its class?
- IT Infrastructure Questions: Technology Issues
  - Is the technology scalable ?
  - Is the technology interoperable ?
  - What is the technology roadmap ?
  - What is the renewal cycle ?
  - Is there vendor support ?
  - What will be the nature of the technology lock in ?
  - Make or Buy ?

# The IT Infrastructure Ecosystem



# Current Trend in Computer H/w Platforms

---

- The Mobile Digital Platforms – Mobile, Tablets, Wearable
- Consumerization of IT – BYOD, Gmail, Facebook
- Quantum Computing
- Virtualization
  - One physical machine to multiple systems; multiple physical resources to one logical one (software define storage)
- Cloud Computing
- Edge computing; Green Computing

# Management Problems

---

- Dealing with Platform and Infrastructure change
  - Scalability
- Management & Governance
  - Who take decisions? Centralized/Decentralized? Business units?
- Making wise infrastructure investments – Rent/Buy
- Total Cost of Ownership (TCO)

# TCO of Technology Assets

---

- Hardware acquisition cost
- Software acquisition
- Installation
- Training
- Support
- Maintenance (Upgrades, if any)
- Downtime
- Space & Energy