What we are going to discuss

1.1 Information and Systems

1.1.1 Purpose of Information Systems

1.1.2 Types of Information Systems

1.2 How EIS Differs From Conventional Packages

1.3 EIS Is An Integrated Application

1.4 Concept Of EIS

1.4.1 EIS Features

1.4.2 Customers Expectation In EIS Packages

1.5 EIS Characteristics

1.6 EIS Research
Wikipedia definition

♦ Enterprise Information Systems provide a technology platform that enables organizations to integrate and coordinate their business processes.

♦ They provide a single system that is central to the organization and ensure that information can be shared across all functional levels and management hierarchies.
Types of Information Systems

- Transaction processing systems
- Management Information systems (MIS)
- Decision-support systems (DSS)
- Knowledge work systems (KWS)
- Executive support systems (ESS)
Integrated EIS

- Create value through integrating activities across organization
- Implementation of best practices
- Standardization of processes
- One-source data
- On-line access to information
**EIS Features**

- **Best Business Practices:**
  - Compilation of the worldwide best practices
- **Beyond The Enterprise:**
  - Capable of application across supply chain applications
- **Comprehensive:**
  - Able to sustain a variety of enterprise functions
  - Suitable for a wide range of business enterprises.
- **Flexibility:**
- **Modular & Open:**
Role in Business

ERP began with SAP in early 1970s
- Accounting basis
- US products – some extension of MRP
- Combine business computing
  → Unified system sharing one set of data
  → Advantages in efficiency, accuracy

Best Practices
→ Apply the best process for each function
Historical Growth

♦ 1970s & 1980s – more development than growth
♦ 1990s – became widely adopted by large firms
♦ Late 1990s – growth exploded with fears of Y2K problems
♦ Post-2000 – growth slowed
  → Saturated market, economy dipped
  → Seeking to
    → Fill in gaps with larger firms
    → Make products useful for smaller firms
    → Emphasize Internet
Why Study EIS?

**Technical:**
- Integration of computer systems foster consistency, efficiency

**Financial:**
- Integrating applications saves money

**Organizational:**
- All members of organization use same system
Conception vs. Reality

✧ Integrated System

✧ In fact, vendors usually sell modules
  □ Would like to sell full system
  □ Buyers reduce cost, risk, by starting smaller scale
    → Risk of converting entire system
    → Complex cost impact
A key to original product

Davenport [1998]:
- Firm’s vary in what is best for them
- Business world dynamic
- Rigid approach has dangers
- If a firm develops a competitive advantage, they give it up by adopting “best practices”
Table 2: ERP Supported Functions

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<th>Ops &amp; Log</th>
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CPU Support

- Originally mainframe
  - SAP R/2 – 1974
- Client/Server architecture early 1990s
  - More flexible
  - SAP R/3
- Web Portals
Advantages & Disadvantages

* ◆ System Integration
  - Improved understanding across users
  - *Less flexibility*

* ◆ Data Integration
  - Greater accuracy
  - *Harder to correct*

* ◆ Better methods
  - More efficiency
  - *Less freedom & creativity*

* ◆ Expected lower costs
  - More efficient system planned
  - *Dynamic needs, training typically under budgeted, hidden implementation costs*
Summary

♦ EIS software has had a major impact on organizational computing
♦ Technological, financial, organizational benefits
♦ Also expensive, massive, inflexible
♦ Many hidden costs
♦ Complex system meriting study