

CHAPTER 18

Information Technology
and Control

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Business Environment

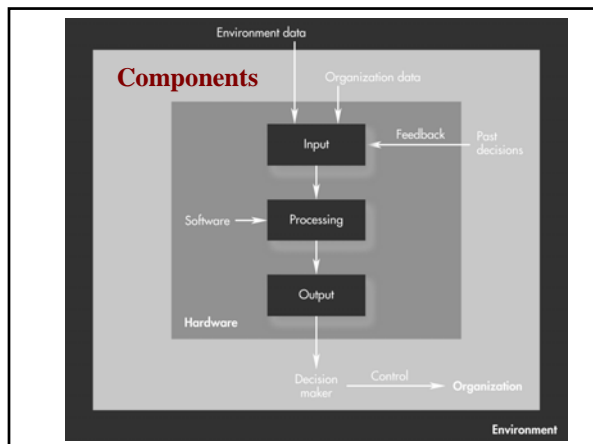
- Global economy
- Information-based service economies
- Internet

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Information Systems

... is a set of interrelated components that collects (or retrieves), processes, stores and distributes information to support the activities of an organization.

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Types of Information Systems

- **Operational-level**
- **Knowledge-level**
- **Management-level**
- **Strategic-level**

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Operational-Level Information Systems

- **Sales/marketing systems**
- **Manufacturing/production systems**
- **Finance/accounting systems**
- **Human resource systems**
- **Industry specific systems**

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Knowledge-Level Information Systems

- Processes
- Procedures
- Patents
- Reference works
- Formulas
- Best practices
- Forecasts
- Fixes

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Management-Level Systems

... provide managers with periodic report
that summarize the organization's
performance.

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Executive-Support Systems

- Filter and track critical information
- Provides an up-to-date status report.
- Access internal and external data.
- Tools for personal productivity.

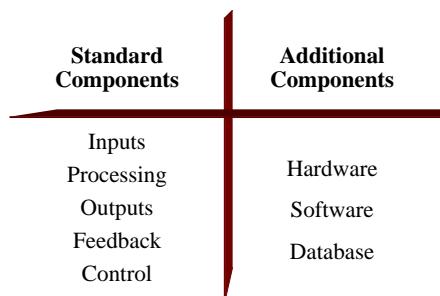
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Enterprise Resource Planning (ERP)

- Integrates
- Time consuming
- Extremely costly
- Technologically difficult

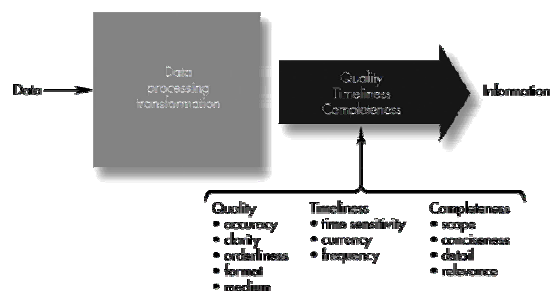
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Computer-based Information System



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The Process: Data into Information

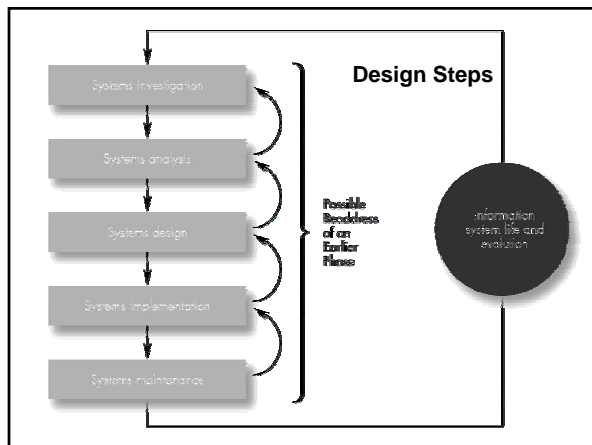


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Characteristics

- **Quality**
- **Timeliness**
- **Completeness**

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Successful System Attributes

**A system's ability to meet
the needs and
expectations of its users.**

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Feasibility

- **Organizational feasibility**
- **Economic feasibility**
- **Technical feasibility**
- **Operational feasibility**

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Telecommunications and Networking

- **The transmission of information in any form from one location to another using electronic or optical means.**
 - **Local-area network (LAN)**
 - **Wide-area network (WAN)**

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Telecommunication Activities

- **Electronic Data Interchange (EDI)**
- *Electronic Funds Transfer (EFT)*
- **Telecommuting**
- *E-mail*
- **Electronic Commerce**
- *Artificial Intelligence – Expert system*
- **Artificial Intelligence - Robotics**

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