

IS 300 — Lecture 1

- ◆ What is an information system?
- ◆ How is IS literacy different from computer literacy?
- ◆ How are information systems classified (and why classify them)?
- ◆ What are the fundamental justifications for business use of information technology?

◆ What is an information system?

Functional orientation

Interrelated components that collect, process, store, and disseminate information to support

- decision making
- control
- analysis, and
- visualization

within an organization.

Process orientation

An information system is an organizational and managerial solution, based on information technology, to a challenge posed by the environment.

◆ How is I S literacy different from computer literacy?

Computer literacy

- Able to use computer technology and understand how computers work.

Information Systems literacy

- Understand the nature of business problems
- Understand I S technology options
- Ability to match appropriate I S options with specific business problems to generate effective and efficient solutions

◆ How are information systems classified (and why classify them)?

Classifications

Management Support

- Executive Information Systems (EIS)
- Decision Support Systems (DSS)
- Management Information Systems (MIS)

Operational Support

- Transaction Processing Systems (TPS)
- Office Automation Systems (OAS)

Details

- MIS** – Serve functions of planning, controlling, and decision making by providing routine summary and exception reports (structured decision making). Examples include sales management, inventory control, and annual budgeting.
- DSS** – Systems that combine data and models (analytical) to support semistructured and unstructured decision making. Examples include production scheduling and pricing/profitability analysis.
- EIS** – Combine functions of MIS and DSS except with a strategic, long-term focus. Examples include 5-year operating plan and long-range product mix.
- TPS** – Day-to-day routine business systems. Examples include payroll, order processing, and accounts payable.
- OAS** – Basic office functions. Includes word processing, imaging, calendar management.

Why? Answer this question.

◆ What are the fundamental justifications for business use of information technology?

“Doing things the right way”

“Doing the right things”

Efficiency (productivity): $\text{Output} \div \text{Inputs}$

Effectiveness: a measure of how well an organization's products and services meet customer needs.

Questions:

- Which is more important?
- Can we do one and not the other?
- How do I S relate?

Video – **Mass Customization** – what do examples have in common?

None would be possible without I T

Levis Example

- Set up electronic manufacturing originally to gain **efficiency** (doing things the right way)
- Now using system to be **more effective** (doing the right things)