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 IS 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 IS technology options
- Ability to match appropriate IS 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 IS relate?

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

None would be possible without IT

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)