



Lesson 2

Chapter 1 & 2

**The Importance of MIS and
Understanding Business Processes**

Study Questions

Q1: Why is Introduction to MIS the most important class in the business school?

Q2: What is an information system?

Q3: What is MIS?

Q4: Why is the difference between information technology and information systems important to you?

Q5: What are business processes and why do MIS professionals need to understand them?

Q6: What is information and where is the information in business processes?

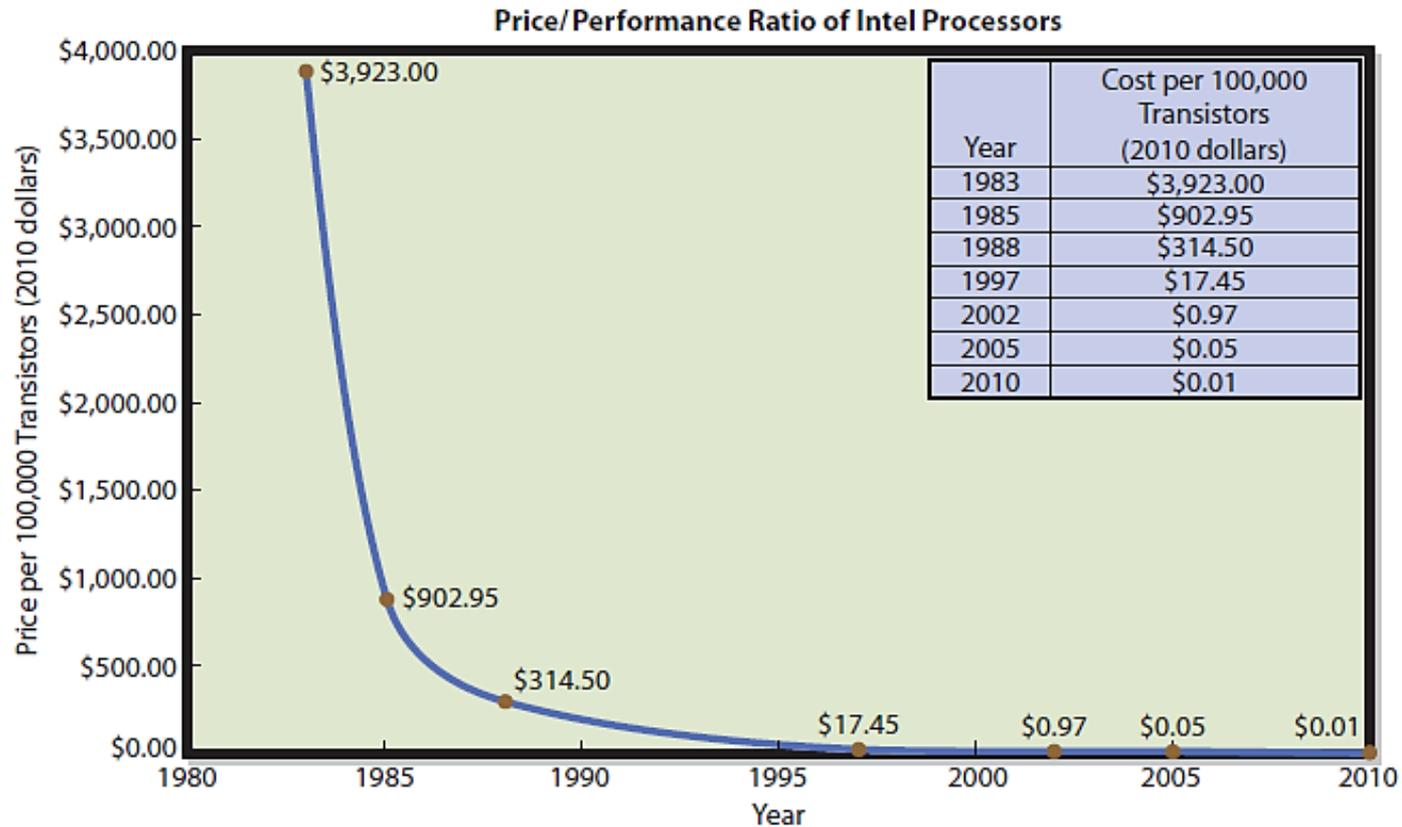
Q1: Why Is Introduction to MIS the Most Important Class in the Business School?

Moore's Law—cost of data communications and data storage is essentially zero

Number of *transistors* per square inch on an integrated chip doubles every 18 months

- Speed of computer chip increases in proportion to density of transistors
- Price/performance ratio of computers falls dramatically

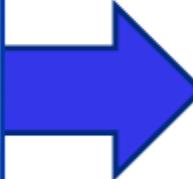
Moore's Law (cont'd)



Moore's Law: [See Thomas Moore Video Podcast](#)

Here are some consequences

Cost of data communications and data storage is essentially zero



- YouTube
- iPhone
- Facebook
- Second Life
- Pandora
- Twitter
- LinkedIn

Why MIS Is Most Important Business Class



Future business professionals need to be able to assess, evaluate, and apply emerging information technology to business



Knowledge gained in this course will help you attain that skill



Your only job security is a marketable skill and courage to use it

How Can I Attain Job Security?

Rapid technological change and increased international competition spotlight non-routine cognitive skills and ability to adapt to changing technology and shifting demand

Organizations favor those with strong non-routine cognitive skills

This Could Happen to You: “You’re Fired”

Jennifer lacks skills
FlexTime needs

Scenario
Video

Abstract reasoning
skills

Systems thinking skills

Collaboration skills

Experimentation skills

Why Jennifer Lost Her Job

Skill	Example	Jennifer's Problem
Abstract Reasoning	Construct a model or representation.	Inability to model the customer life-cycle.
Systems Thinking	Model system components and show how components inputs and outputs relate to one another.	Confusion about when/how customers contact accounts payable.
Collaboration	Develop ideas and plans with others. Provide and receive critical feedback.	Unwilling to work with others with work-in-progress.
Ability to Experiment	Create and test promising new alternatives, consistent with available resources.	Fear of failure prohibited discussion of new ideas.

How Can Intro to MIS Help You Learn Non-Routine Skills?

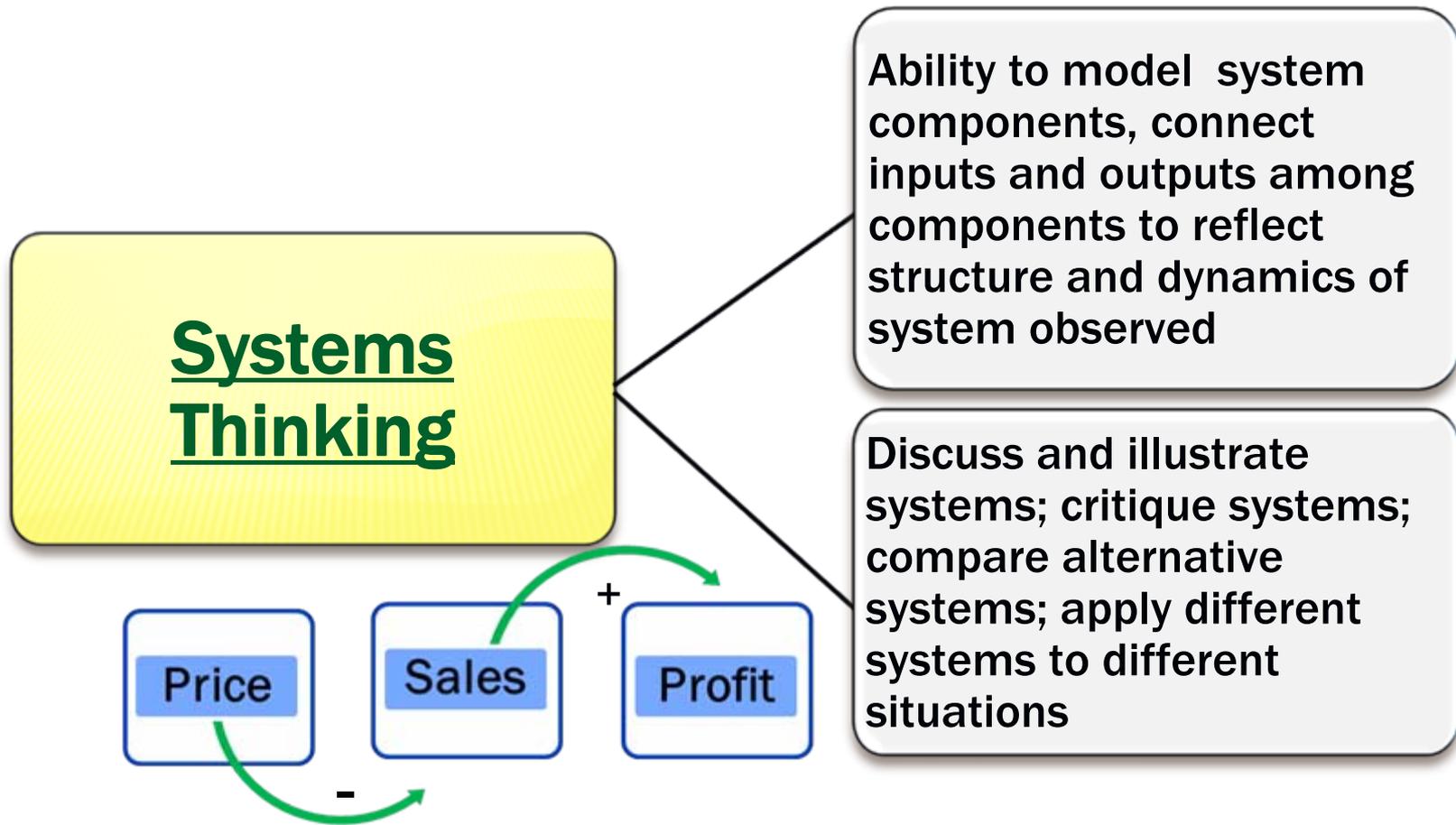
Abstract Reasoning



Chapter 1: Learn model of five components of an information system.

Chapter 2: Describes how to use model to assess scope of any new information system project; other chapters build upon this model

How Can Intro to MIS Help You Learn Non-Routine Skills? (cont'd)



How Can Intro to MIS Help You Learn Non-Routine Skills? (cont'd)



Activity of two or more people working together to achieve a common goal, result, or work product

Chapter Extensions 2A and 2B will teach you collaboration skills and illustrate several sample collaboration information systems

How Can Intro to MIS Help You Learn Non-Routine Skills? (cont'd)

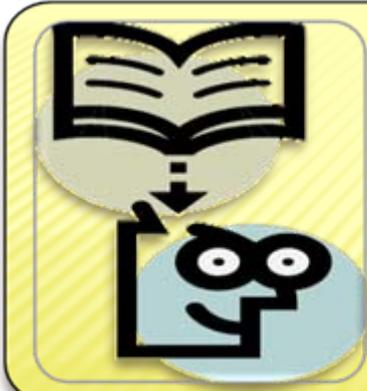


Ability to Experiment

Make reasoned analysis of an opportunity; developing and evaluating possible solutions

Use features and functions of Microsoft Excel, Access you've not used before. Collaborating using Microsoft SharePoint, Google Docs and Spreadsheets, or other collaboration tools

Summary: Why Is Introduction to MIS Most Important Business Class?



It will give you background you need to assess, evaluate, and apply emerging information systems technology to business.

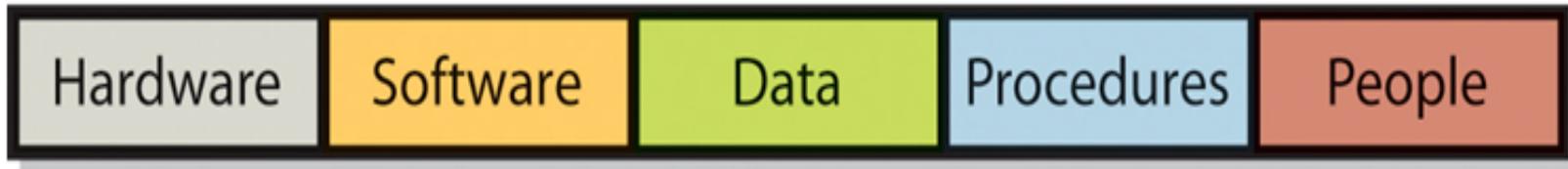


It can give you ultimate in job security—marketable skills—by helping you learn abstraction, systems thinking, collaboration, and experimentation.

Q2: What Is an Information System?

A group of components that interact to produce information.

Five-Component Framework



Q3: What Is MIS?



Management Information Systems

- Development and use of information systems
- Achieving business goals and objectives

Goal of MIS

Aligning the IS to achieve business goals and objectives

Development and Use of Information Systems

Business professionals need to:

Take an active role in IS to ensure that systems meet their needs

Understand how IT systems are constructed

Consider users' needs during development

Learn how to use IT systems

Take into account ancillary IT functions (security, backups)



Achieving Business Goals and Objectives

**MIS empowers
users to achieve
business
objectives**

- Information systems exist to assist business *people* (a.k.a. “users”)
- Information systems exist to achieve business goals and objectives



Q4: Why Is the Difference Between Information Technology and Information Systems Important to You?

Information technology

1. Products
 2. Methods
 3. Inventions
 4. Standards
- IT = hardware + software + data

➤ **Information system (IS) = IT plus *procedures*, and *people* that produces information**

Why Is the Difference Between Information Technology and Information Systems Important to You? (cont'd)

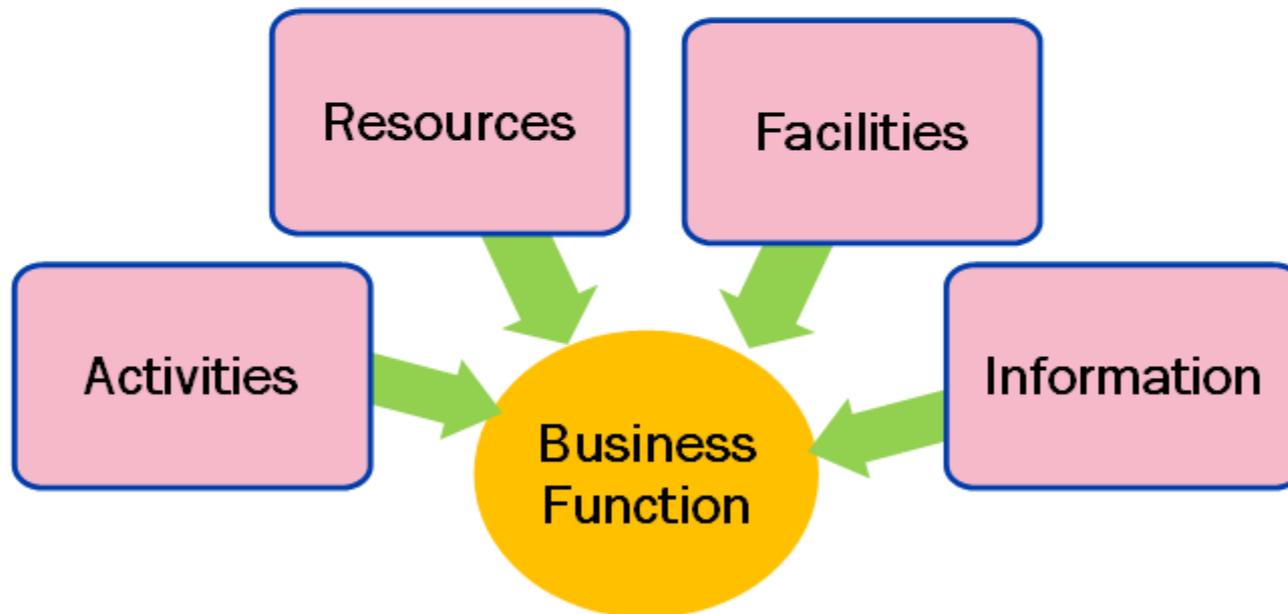
Avoid a common mistake: Do not try to buy an IS; you cannot do it.

You can buy IT: Buy or lease hardware, license programs and databases, even obtain predesigned procedures. Ultimately, people execute those procedures to employ that new IT.

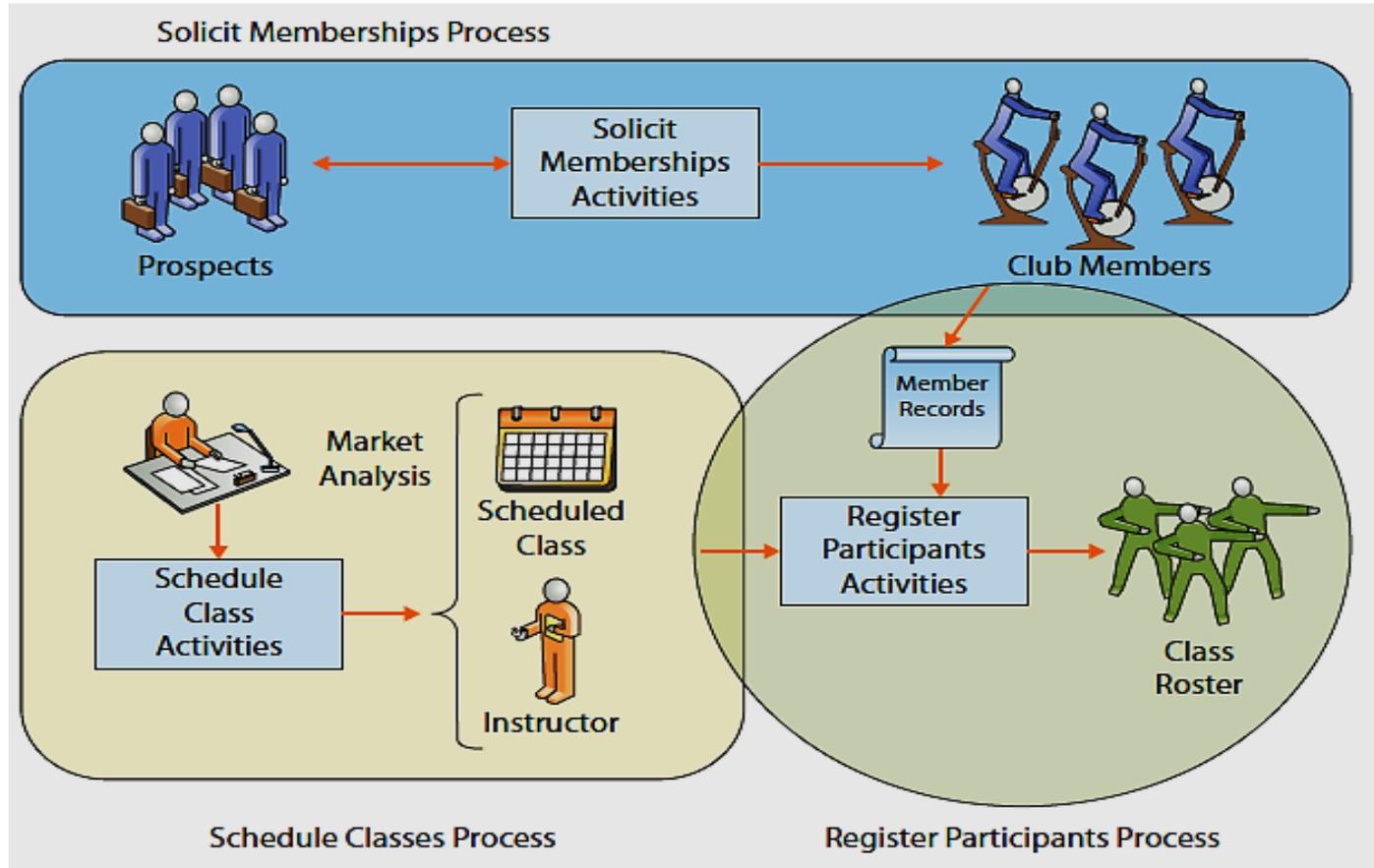
Any new system requires training tasks, overcoming employees' resistance to change, and managing employees as they utilize new system.

Q5: What Is a Business Process?

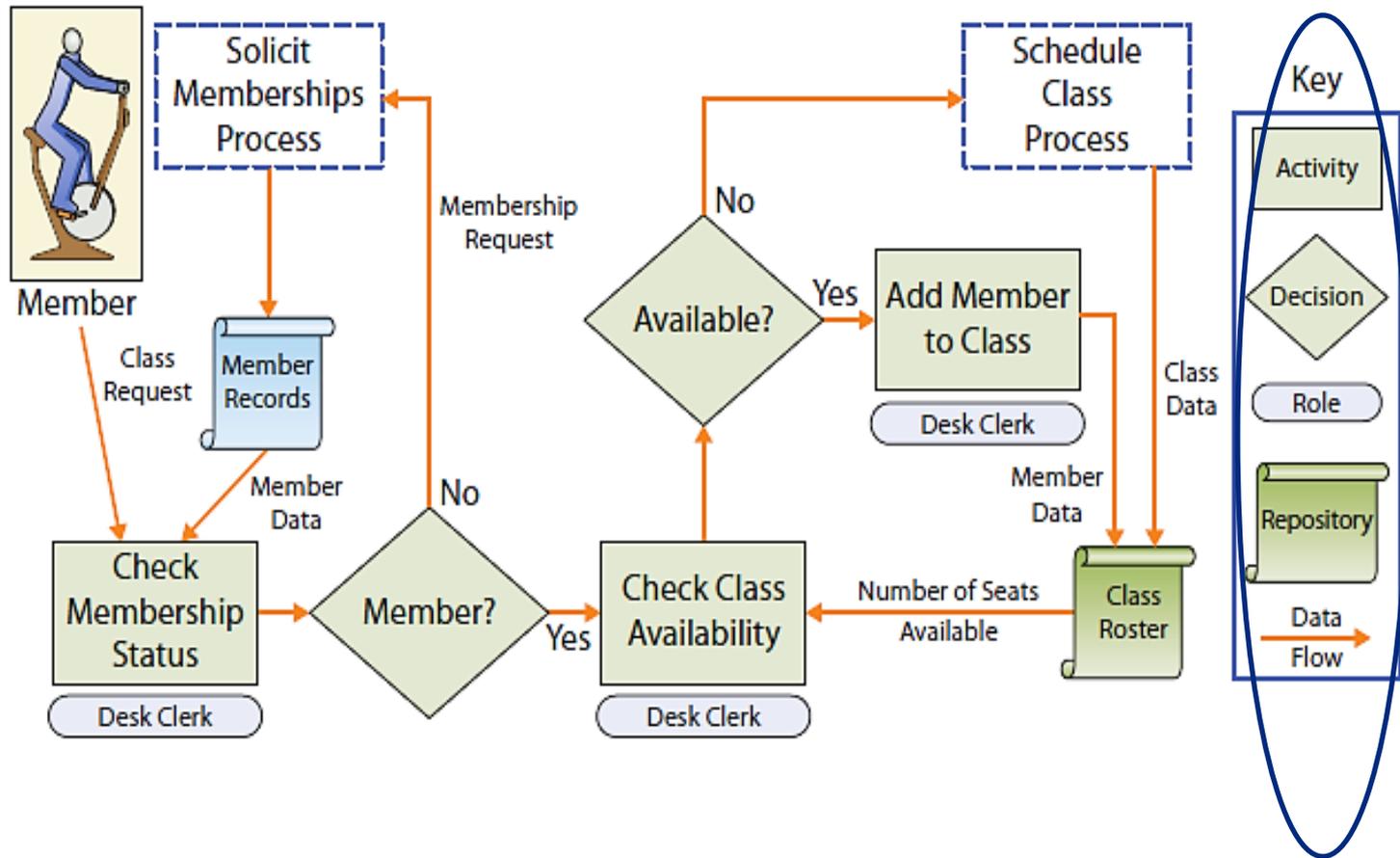
A network of activities, resources, facilities, and information that interact to achieve some business function.



Example: FlexTime's Three Business Processes



Register Participants Process

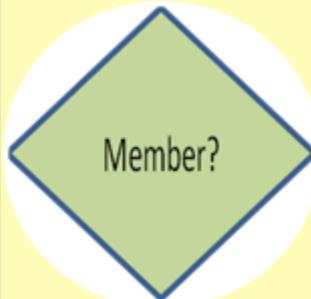


Components of a Business Process



Activities—

Transform resources and information of one type into another type



Decisions—

A question that can be answered Yes or No



Roles—

Sets of procedures



Resources—

People, or facilities, or computer programs that are assigned to roles



Repository—

Collection of business records



Q5: Why Do MIS Professionals Need to Understand Business Processes?

Scenario Video FlexTime

FlexTime team needs to have better collaboration processes

Establish objective and rules on meeting times

Need better resources for sharing work product

How will that team know where and how to save costs?

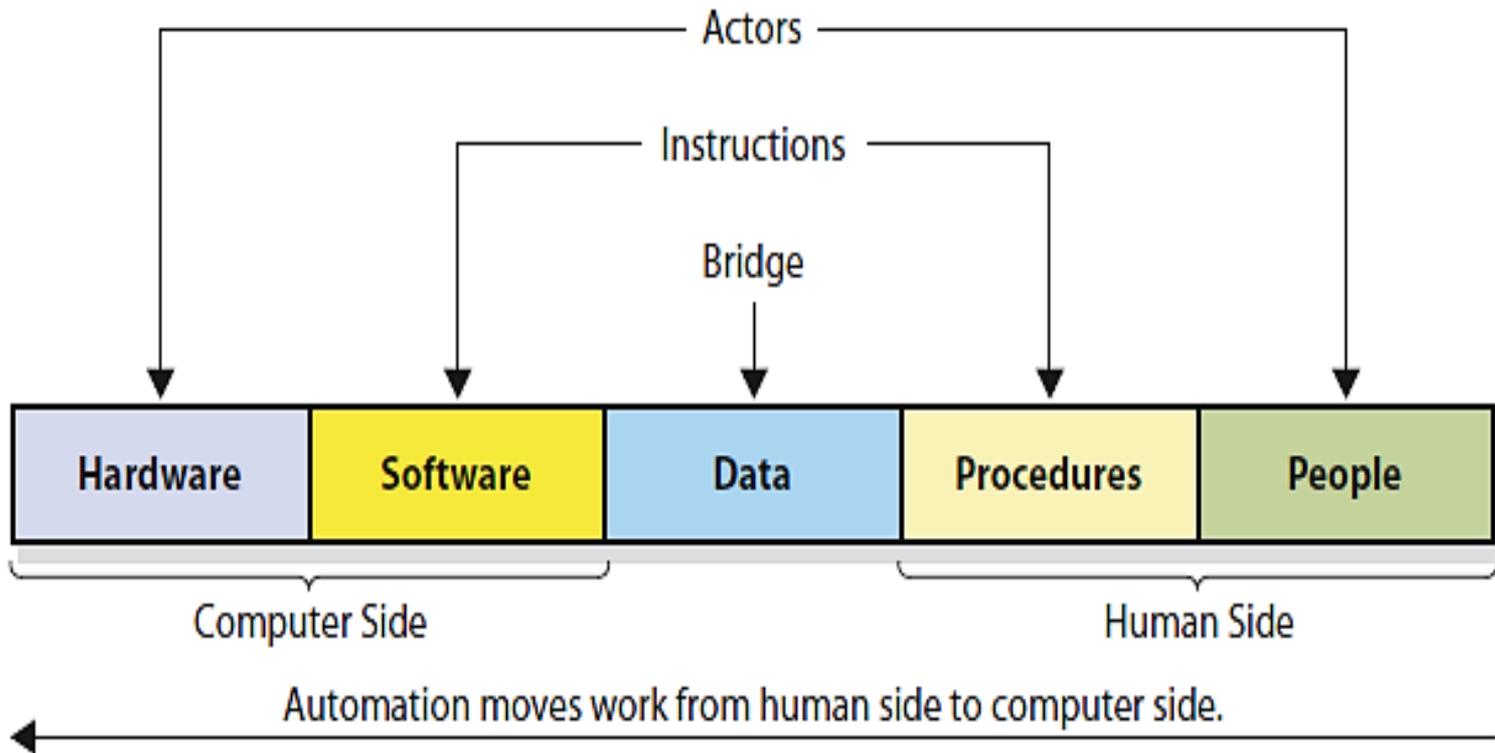
Study Processes and Look for Inefficiencies

Can any processes be simplified?

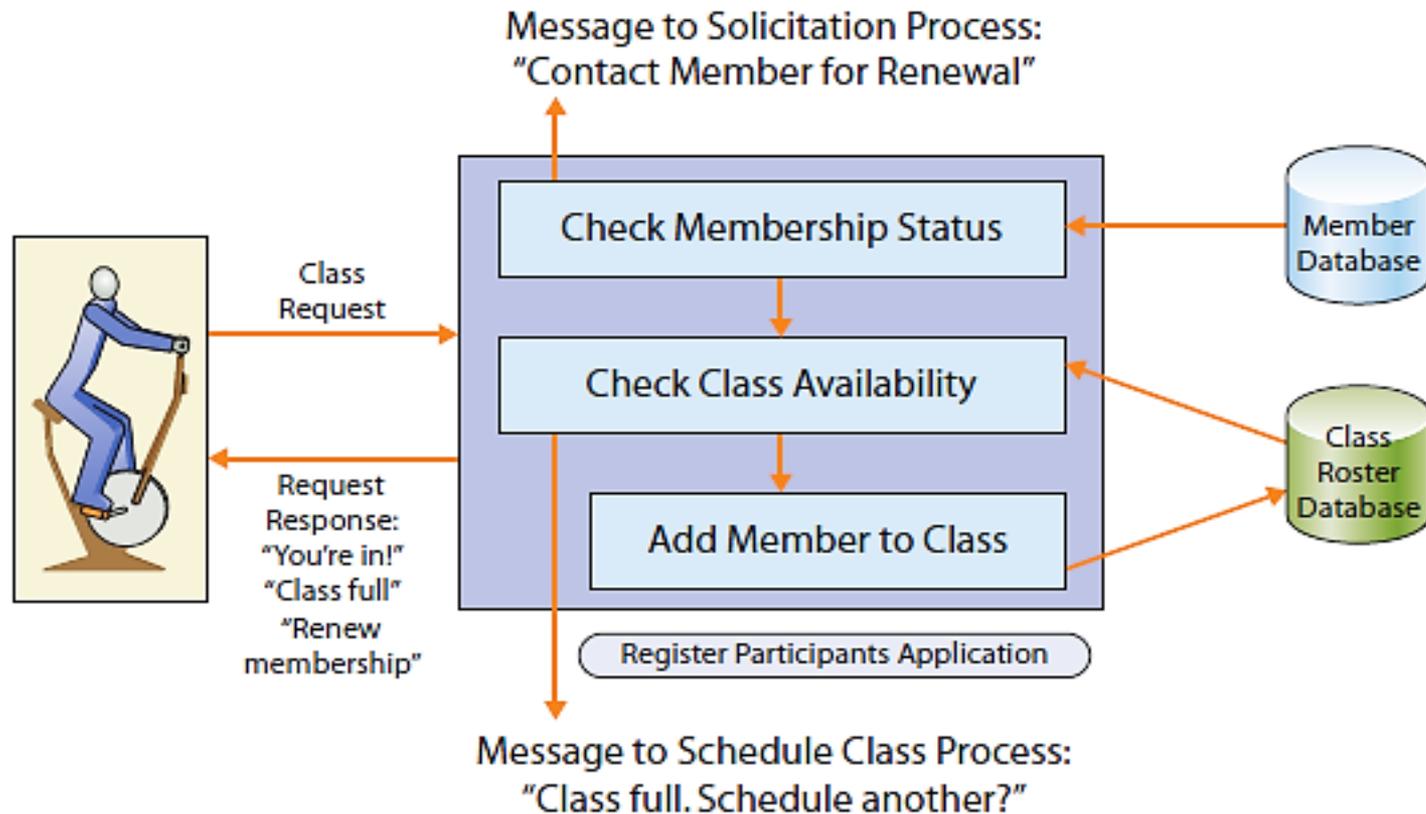
Can tasks be re-ordered or re-organized to eliminate tasks and save labor hours?

Can process costs be reduced by applying information technology?

How Do Information Systems Support Business Processes?



Register Participants Process



Q6: What Is Information?



Knowledge derived from data (recorded facts or figures)

Data that is presented in a meaningful context

Data processed by summing, ordering, averaging, grouping, comparing, or other similar operations

A difference that makes a difference

Characteristics of Good Information

1. Accurate

- Correct and complete
- Crucial for management
- Cross-check information to ensure accuracy

2. Timely

- Produced in time for intended use

3. Relevant to both:

- Context
- Subject

Characteristics of Good Information (cont'd)

4. Just barely sufficient

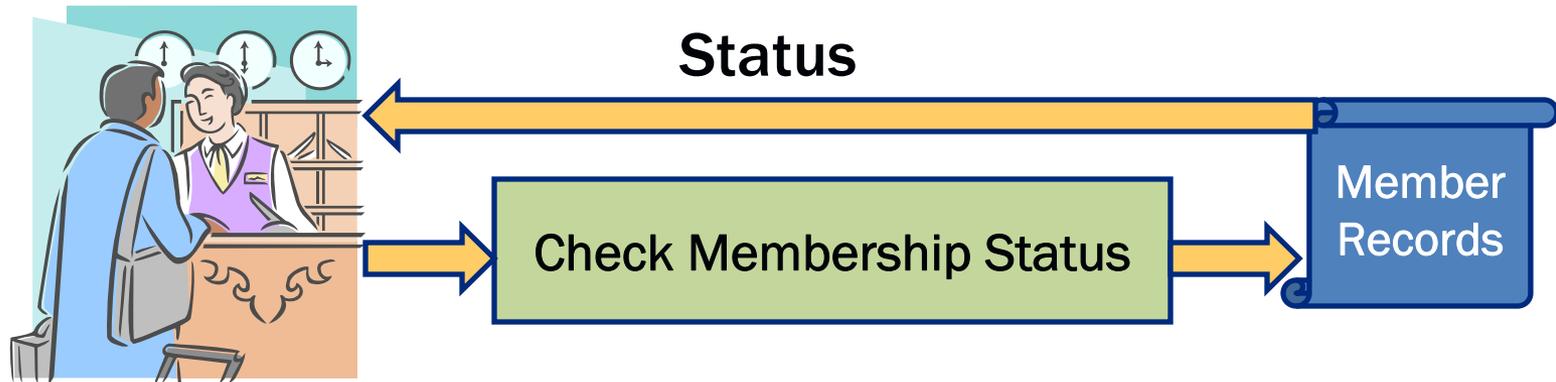
- Sufficient for purpose it is generated
- Avoid too much or extraneous information

5. Worth its cost

- Relationship between cost and value
- Information systems cost money to develop, maintain, and use
- Must be worth that cost

Q6 Where Is the Information in Business Processes?

Information Stored in Repositories



Customer data: Name, Email, Address, Phone(s), DateOfBirth

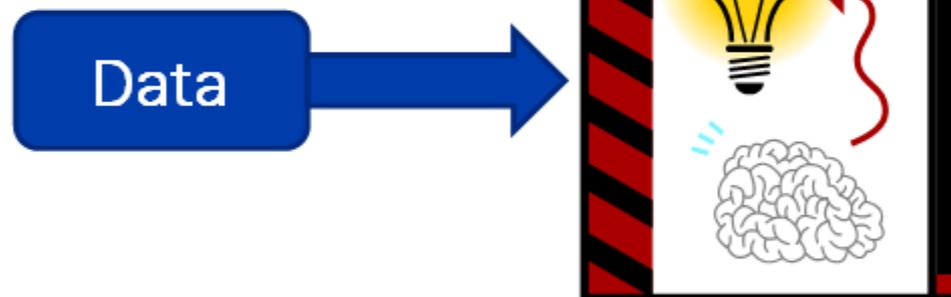
Membership data: DateOfMembership, MembershipType, FeePaid, ExpirationDate

Course data: Name, Description, StandardFee, PromotionalTerms

Class data: CourseName, StartDate, EndDate, Instructor, AvailableSeats

Information for Unstructured Processes

Quality of information determined by people and procedures used to interpret that data



Data is a stimulus that causes *you* to create information ...in your mind

Your mind and your thinking are most important part of an information system

How Does the Knowledge in Chapter 2 Help FlexTime and You?

Learn to model important business processes and identify processes to simplify or reduce resources or processes to partly or fully automate.

Consider costs from a process-perspective helps team/you understand how changes in one activity (or process) impacts other activities and processes.

Provide a guiding framework for conversations, discussions, and decisions.



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