

Management Information System (MINSYST)

Week One

Introduction

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Objectives

- To be acquainted with the course outline, requirements and house rules
- Describe the components of Information Systems (IS) in business
- Explain why IS is necessary in business
- Describe the role of IS in business functions

Introduction

- **Course Requirements**
 - Course syllabus
 - Text book and references
 - Case studies, long quizzes, term project
 - Class participation



Introduction

- **Course Requirements**
 - APC Learning Management System
 - **MINSYST CSIT01 3T SY 2016-2017**
 - Check regularly; at least after each class
 - Academic Integrity
 - Cite references following APA standard
 - Avoid ‘copy-paste’ of materials

Introduction

- **Grading System**

– Class Participation/Recitation	10%
– Long Quizzes	30%
– Case Studies	30%
– Project	30%

Total	100%
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Passing Mark	70%
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Introduction

- **Course assessment**
 - Complete the assigned readings
 - Long quizzes
 - Attend classes and participate in discussions
 - Complete all case analysis and submit reports on time
 - Contribute positively in assigned group work

Introduction

- **House Rules**
 - Punctuality and attendance
 - Restroom breaks
 - Days & venue:
Tuesday & Friday, room 304
 - Time:
7:30am – 9:30am

Introduction

- **House Rules**

- English zone
no code-switching
- Mobile phones, tablets, computers, etc.
not allowed during class, unless specified
- Seating arrangement



Introduction

- **House Rules** - *Proper use of resources & facilities*
 - Use computers for purposes relating to study and/or research only.
 - Keep your area neat at all times.
 - Handle equipment with care.
 - Avoid disconnecting cables, peripherals, etc.



Introduction

- **House Rules** - *Proper use of resources & facilities*
 - Log-out of websites or accounts opened.
 - Shut down computers before leaving.
 - Do not change the system settings of computers.
 - Do not download and install software without the permission of ITRO.



Expectations?



Subject Overview

Purpose of the course is to make students prudent consumers of information and IT services

Reference:

Oz, E. (2011). *Principles of Management Information Systems. Philippine Edition*. Cengage Learning Asia Pte.




Purpose of Information Systems

- Businesses use information systems to
 - make sound decisions
 - solve problems
- *Problem* - any undesirable situation
- *Decision* - arises when more than one solution to a problem exists



Purpose of Information Systems

- Problem solving and decision making require INFORMATION
- Information systems (IS)
 - aid in problem solving and decision making
 - support daily operations



Why should you be well-versed on
information systems?

A background image showing a close-up of several interlocking puzzle pieces. The pieces are in shades of tan and light brown, with one piece on the left being a darker blue color. The puzzle is partially assembled, with some pieces missing or being placed.

Data vs Information

- *Data* - a given or fact (number, statement, picture)
- *Information* - facts or conclusions that have meaning or context
- *Process* - manipulation of data with the goal of producing information or additional data

Information





Information

- Characteristics of useful information
 - Relevant
 - Complete
 - Accurate
 - Current
 - Obtained in a cost-effective manner



Systems and Subsystems

- System
 - array of components that work together to achieve goals
 - accepts input, process it, produce output (in an organized manner)

A background image showing a close-up of several interlocking puzzle pieces. The pieces are in shades of tan, beige, and a small portion of dark blue. The focus is sharp on the pieces in the foreground, with a slight blur towards the background.

Systems and Subsystems

- *Subsystems* - components of a larger system
- *Closed System* - stands alone, no connection to another system
- *Open System* - interfaces and interacts with other systems

The background of the slide features a close-up of interlocking puzzle pieces. On the left side, there is a vertical strip of blue puzzle pieces, while the rest of the background is composed of light-colored, tan or beige puzzle pieces.

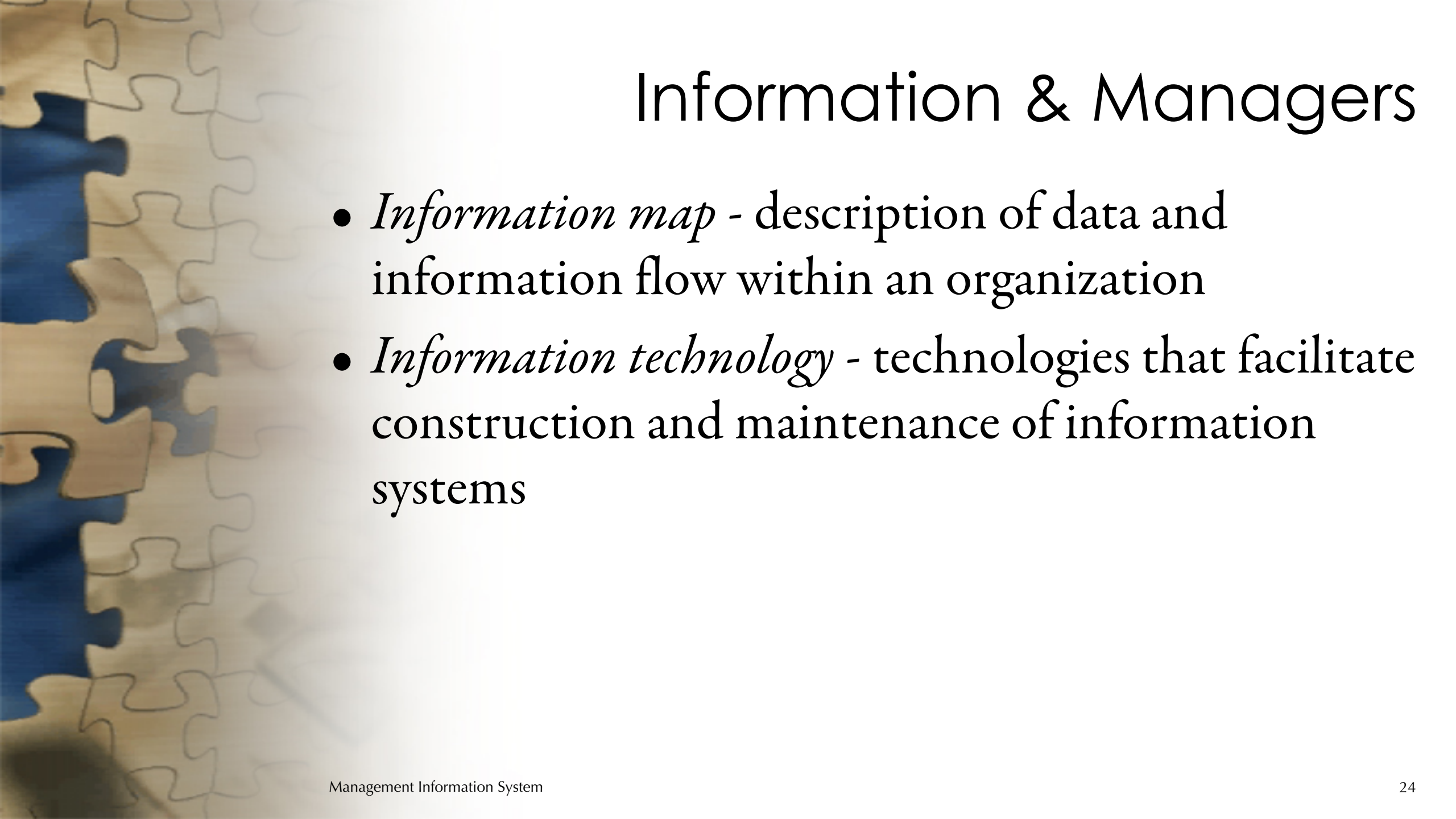
Information Systems

- Consists of components that work together to process data and produce information
- Automate information exchange between subsystems

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Information & Managers

- *Systems thinking* - thinking of an organization in terms of its subsystems
 - creates a framework for problem solving and decision making
 - helps managers focus on overall goals

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Information & Managers

- *Information map* - description of data and information flow within an organization
- *Information technology* - technologies that facilitate construction and maintenance of information systems



Human-Computer Synergy

- Humans can think, make decisions, accumulate expertise
- Computers can perform programmed operations rapidly and accurately

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IS in Organizations

- Consist of data, hardware, software, telecommunications, people, and procedures
- Computer-based IS has one or more computers at center



IS in Organizations

- IS important in business
 - Growing power and decreasing cost of computers
 - Growing capacity and decreasing costs of data storage devices
 - Increasing variety and ingenuity of computer programs

A background image showing a close-up of several interlocking puzzle pieces. The pieces are in shades of tan and light brown, with one piece on the left being a darker blue color. The puzzle is partially assembled, with some pieces missing or slightly offset.

IS in Organizations

- IS important in business
 - Available, reliable, affordable, and fast communications links to the Internet
 - Growth of the Internet
 - Increasing computer literacy of the workforce



Four Stages of Processing

- Input
- Data Processing
- Output
- Storage



Computer Equipment for IS

- **Input devices, computers, output devices, storage devices**
- **Networking devices and communication lines**
- **Telecommunications**

A background image showing a close-up of interlocking puzzle pieces. Some pieces are light brown, while others are dark blue. The pieces are arranged in a way that suggests a larger picture is being assembled.

Management Information Systems

- System that supports
 - planning
 - control
 - making decisions



Types of IS

- **Transaction processing system** - system that records data collected at point where organization transacts business with other parties
- **Supply chain management system** - also known as enterprise resource planning system



Types of IS

- **Customer relationship management system** - system for managing relations with customers
- **Business intelligence system** - system that glean relationships and trends from raw data to help organization compete



Types of IS

- **Decision support systems** - systems that support decision making
- **Expert systems** - systems that support knowledge-intensive decision making
- **Geographic information system** - system that ties data to physical locations

JEOPARDY! The IBM Challenge



On February 14, 2011, IBM Watson changed history, introducing a system that rivaled a human's ability to answer questions posed in natural language with speed, accuracy, and confidence.

- Watson Wins!
- Largest Jeopardy! in 5 years
 - 34.5M Jeopardy! Viewers
 - 1.3B+ Impressions
- Over 10,000 Media Stories
- 11,000 attend watch events
- 2.5M+ Videos Views (top 10 only) 
- 12,582 Twitter 
- 25,763 Facebook Fans 
- Most recently: Emmy Award for Watson show of Jeopardy!



February 2011 Watson beats Jeopardy Champions Ken Jennings and Brad Rutter

What Watson does:



Interprets and understands language, in context

Understands ambiguous and imprecise questions using sophisticated natural language algorithms

Analyzes large volumes of data

Can handle large amounts of unstructured data

Generates and evaluates hypotheses and quantifies confidence in answers

Identifies many answers to questions with evidence to "explain" rationale for answers

Adapts and learns to improve results over time

Learns from additional evidence, additional questions and mistakes to improve accuracy over time



IS in Business Functions

- Accounting
- Finance
- Marketing
- Human resource management
- E-commerce



Careers in IS

- Network administrator, system administrator, system analyst, software engineer, data communications analyst, database administrator, Help Desk technician, Webmaster
- Chief Security Officer, Chief Information Officer, Chief Technology Officer



Ethical & Societal Issues

- Consumer Privacy
- Employee Privacy
- Freedom of Speech
- Online Annoyances
- Phishing and Identity Theft
- IT Professionalism