



Week 7 Review

- Management Information Systems
- Group Support Systems
- Executive Support Systems



Management Information Systems (MINSYST) Week Eight



Objectives

- Understand how to analyze a business process
- Describe the importance of planning information systems
- Understand the importance of performance, tuning and capacity planning



Business Process Analysis

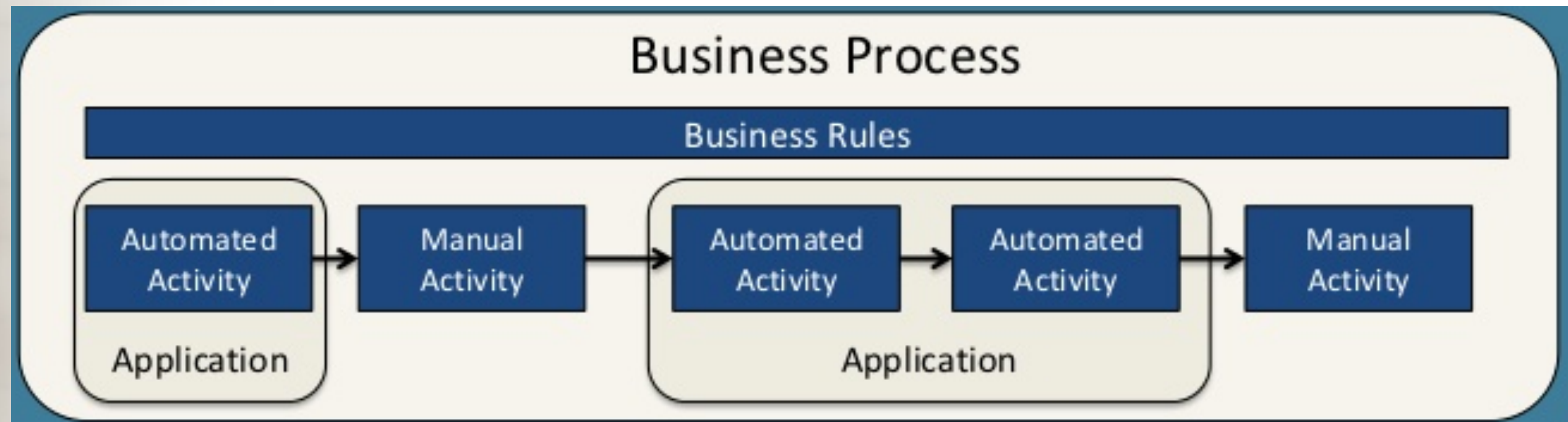
- Helps an organization improve how it conducts its functions and activities in order to:
 - Reduce overall costs
 - Provide more efficient use of (scarce) resources
 - Provide better support to customers



Business Process

- *Business process* is the set of steps a business performs to create value for customers
 - Three components: inputs, activities, outputs
- *Workflow* refers to the tasks, procedural steps, people involved, required input and output, tools needed for each step in the business process

Business Process



Reference: www.slideshare.net/EnfocusSolutions/business-process-analysis-11471310



Process Customers

- The people who require the products and services that are the result of the process or one phase of the process
 - External customers
 - Internal customers



Business Process Analysis

- Analyze the current process
 - Point at which process breaks down
 - Points where people experience frustration with the process
 - Parts of the process that consume inordinate amount of time
 - Parts of the process that leads to low quality outcomes
 - Parts of the process that incur unacceptable costs



Business Process Analysis

- Envision the new process
 - Things to do to exceed customer's expectations
 - Can accuracy, speed, and quality of processes be improved
 - How to improve process to make it easier for customers to do business
 - How to reduce costs, cycle times



Business Process Analysis

- Questions to understand the process

What

is there to do?
is being done?
should be done?
can be done?
constraints?

Where

is this job done?
should it be done?
can it be done?

Who

does this job?
should do this job?
knows how to do it?
should know how to do it?

When

is this job done?
should it be done?
can it be done?



Business Process Analysis

- Process analysis methods
 - Interviews
 - Observations
 - Process benchmarking
 - Process modeling and simulation
 - Value chain analysis
 - SWOT analysis
 - Information flow analysis
 - Discrete event simulation
 - Activity based costing
 - Cycle-time analysis
 - Decision analysis
 - Sensitivity analysis



Business Process Analysis

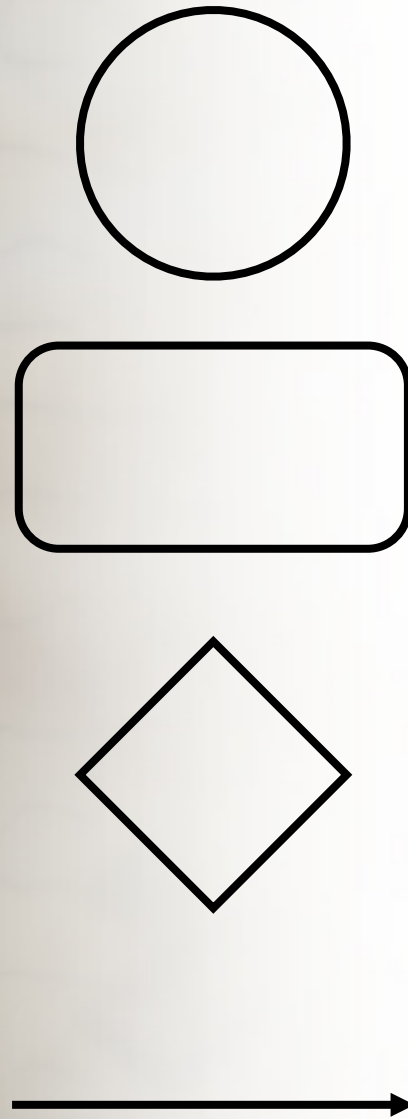
- Process analysis
 - Define the process boundaries
 - Construct a process flow diagram
 - Determine the capacity of each step in the process
 - Identify the step with the lowest capacity
 - Evaluate further limitations
 - Use the analysis to make decisions and improve the process



Process Flow Diagram

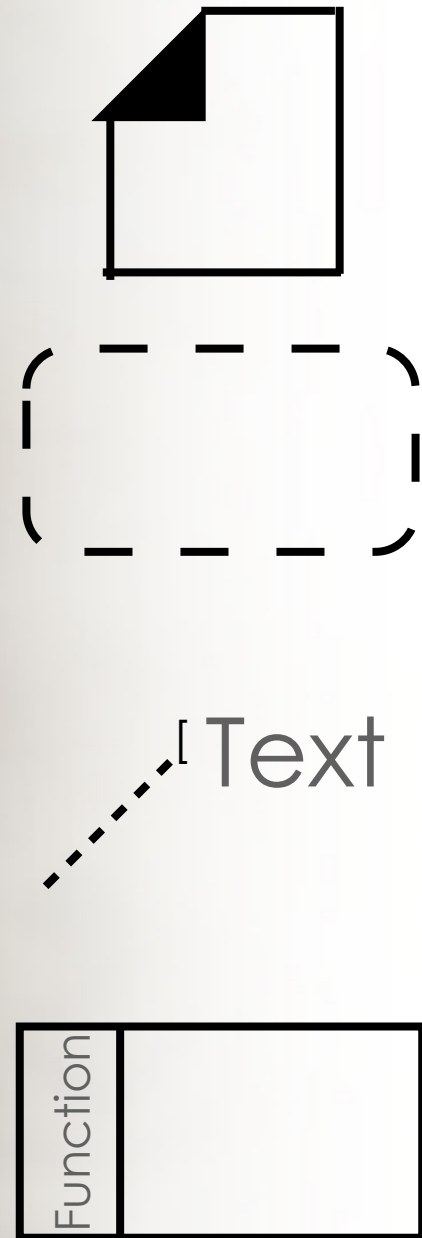
- A valuable tool for understanding the process using graphic elements to represent tasks, flows and storage
- Uses standard notations crafted by business analysts which are readily understandable by business stakeholders

Process Flow Diagram



- Represent start, intermediate, end events
- Represent tasks
- Represent decisions
- Represent flows

Process Flow Diagram



- Represent input data, output data
- Represent group of tasks
- Represent annotation
- Represent scope or role of a performer



Exercise

- Create the business process diagram of your chosen client's business process.
 - For individual submission, via APC LMS



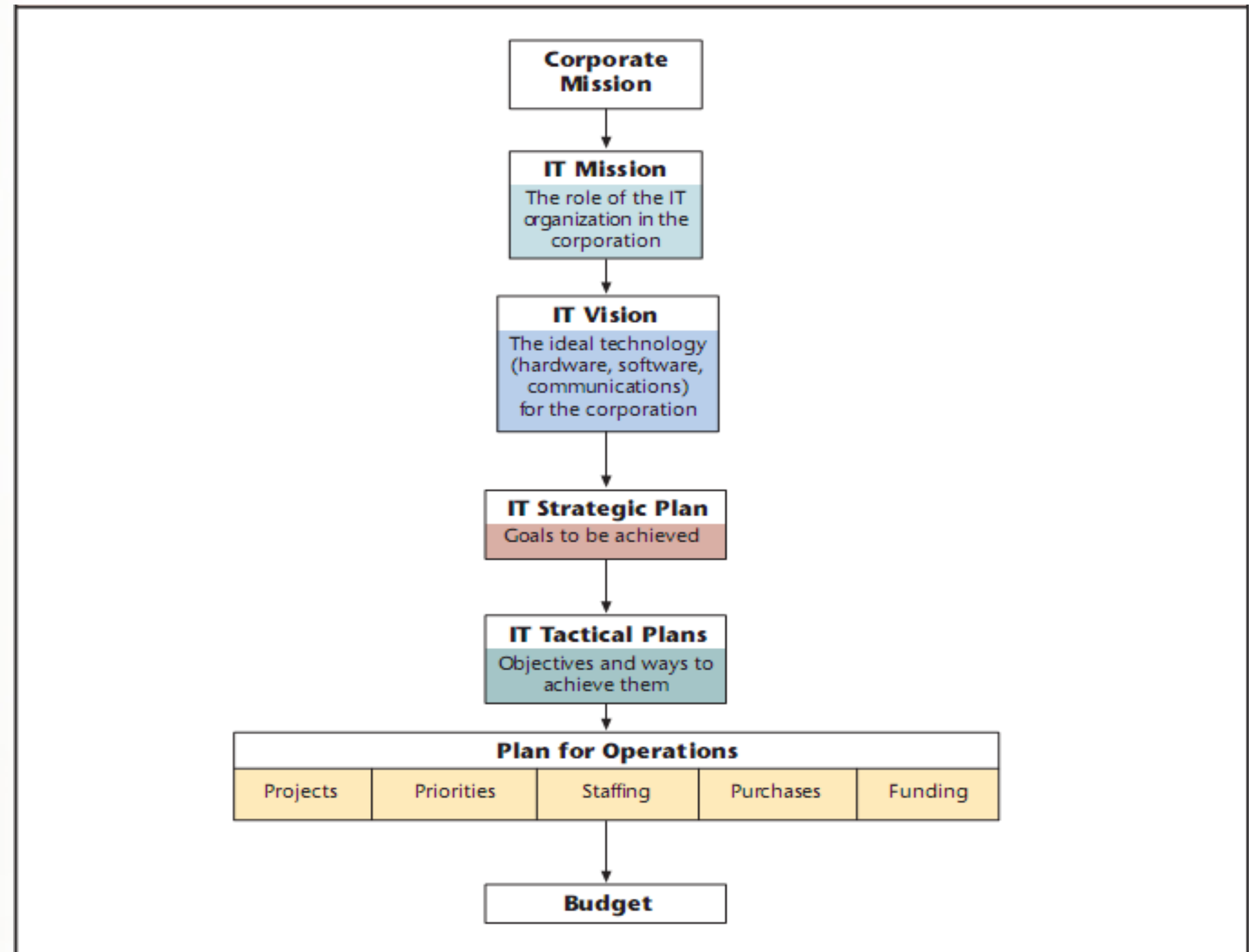
Planning Information Systems

- Enterprise ISs are gaining in popularity
 - Require a substantial investment
 - Carry a high risk in implementation
- Successful integration of the system is vital
- Careful planning of an IS implementation is necessary



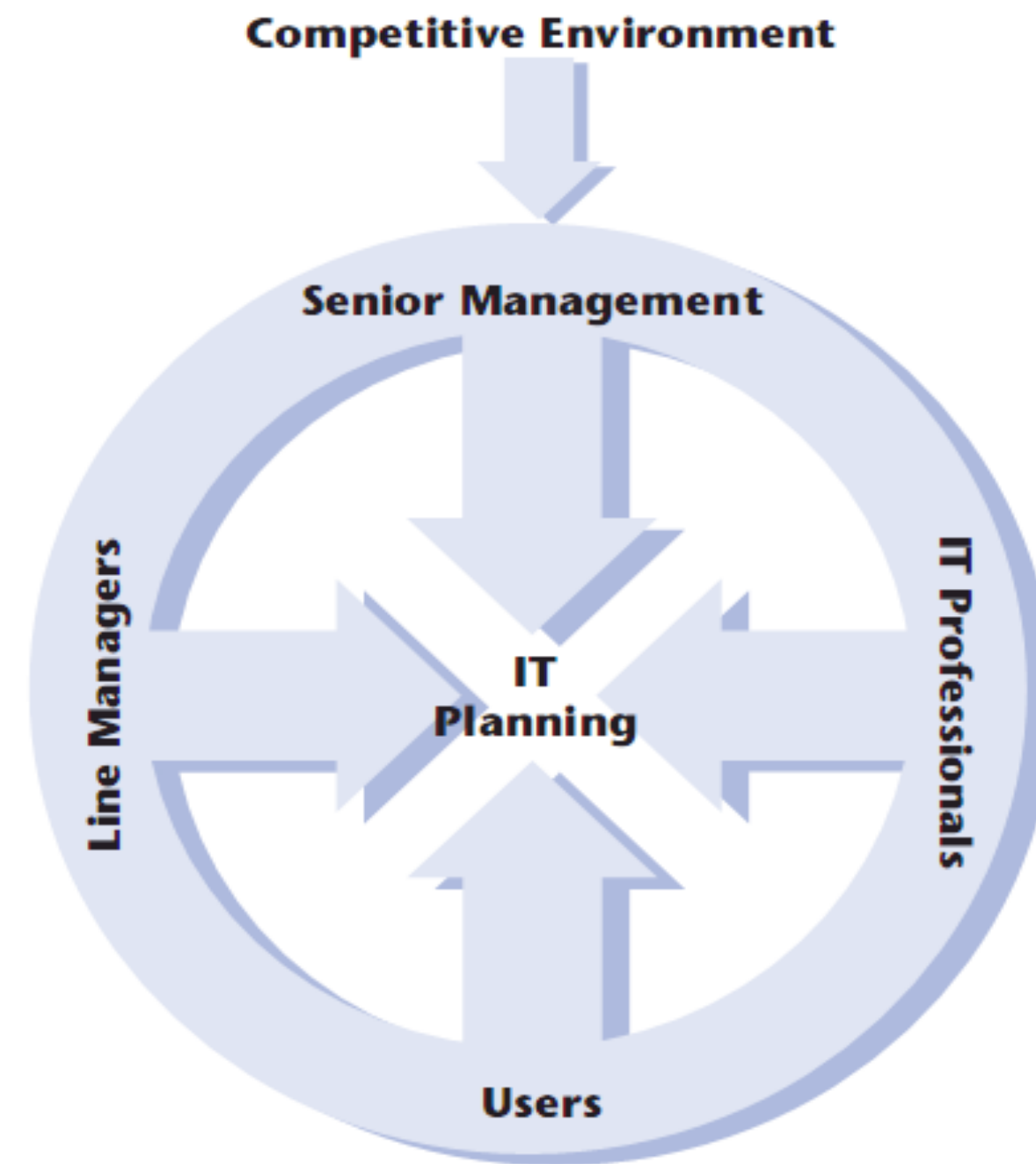
Steps in Planning Information Systems

- IT planning includes several key steps:
 - Create a corporate and IT mission statement
 - Articulate the vision for IT within the organization
 - Create IT strategic and tactical plans
 - Create a plan for operations to achieve the mission and vision
 - Create a budget to ensure that resources are available to achieve the mission and vision



Reference:

Oz, E. (2011). *Principles of Management Information Systems*. Cengage Learning.



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The Benefits of Standardization in Planning

- One major goal and advantage of planning is standardization
- Benefits include:
 - *Cost savings*: better bargaining power in purchasing and leasing hardware and software
 - *Efficient training*: a smaller variety of software reduces employee training needs
 - *Efficient support*: enables more staff specialization



From Planning to Development

- Approaches to systems development are the same for in-house or purchased systems
- Two general approaches:
 - Systems development life cycle (SDLC), the traditional approach
 - Nontraditional methods, including agile methods



Project Planning and Management Tools

- Tools encompass planning and managing the development
- Examples:
 - Rational Portfolio Manager
 - ProSight
 - eProject



Systems Integration

- Systems integration:
 - Examines the needs of entire organization
 - Produces a plan to combine disparate systems to allow data to flow between units
- Some service companies specialize in systems integration

Systems Integration

- Linking existing ISs to Web sites
- Linking databases to Web sites
- Interfacing legacy systems with new systems
- Linking legacy databases with enterprise applications
- Sharing information systems among organizations

Reference:

Oz, E. (2011). *Principles of Management Information Systems*. Cengage Learning.



Systems Integration

- Systems integrators must be skilled in hardware and software
- May be difficult to overcome hardware and software incompatibility issues between systems
- Systems integration may span several organizations, requiring integration using telecommunications



Ethical & Societal Issues

- What is the company's business?
- What are the issues encountered?
- What was the solution implemented?
- Was it a successful implementation?