



Chapter -5

Planning for IS

Information System (*CT 751*)

BCT IV/II

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Outline

- **Planning for IS**
 - Strategic information system
 - Tactical information system
 - Operational information system

What Is Planning?

Developing a view of the future that guides decision making today...

❖ Impossible to tell the future...

Therefore a more strategic focus is taken – Where do we want to end up?

3 Types of Planning:

- Strategic
- Tactical
- Operational

IS Planning — A Critical Issue for Organizations

- **IS planning** is the organized planning of the IS infrastructure and applications portfolios for all levels of the organization.
- Corporate IS planning determines the IS infrastructure which in turn determines what applications end users can deploy.
- Aligning the goals of the organization and the ability of IS to contribute to those goals can deliver great gains in productivity to the organization.

IS Planning — A Critical Issue for Organizations

A **four-stage model** of IS planning that consists of four major activities.

- **Strategic IT planning:** Establishes the relationship between the overall organizational plan and the IT plan.
- **Information requirements analysis:** Identifies broad, organizational information requirements to establish a strategic information architecture that can be used to direct specific application development.
- **Resource allocation:** Allocates both IT application development resources and operational resources.
- **Project planning:** Develops a plan that outlines schedules and resource requirements for specific IS projects.

What is Information System Planning

- Information system planning is a formal process that develops plan for developing and managing information systems that will support goals of an organization.
- Information System plan includes:
 - Activities planner believes will help achieve goals.
 - Program for monitoring real-world progress.
 - Means for implementing changes in the plan.

What Is an Information Systems Plan?

- Information systems planning should be an integral part of business planning
 - Business planning – the process of identifying the firm's goals, objectives, and priorities + developing action plans for accomplishing them.
 - Information systems planning – the part of business planning concerned with developing the firm's information systems resources

Challenges in Business Planning

- Foreseeing and assessing opportunities
- Assuring consistency with organizational plans and objectives
- Building systems
- Maintaining information system performance
- Collaborating with IT professionals



Principles for IS Planning

- Support the firm's business strategy with appropriate technical architecture
- Evaluate technology as a component of a larger system
- Recognize life cycle costs, not just acquisition costs
- Design information systems to be maintainable
- Recognize the human side of technology use
- Support and control the technical system

Why Plan?

- To obtain resources
 - Financial
 - Facilities – “Capacity planning”
 - Staff
- To align Information System with the business
- To identify needed applications
- To establish goal, schedule, and milestone in order to track progress
- To provide an opportunity for communication with top management and user management

IS Planning Approaches

- **Business-led approach:** The IT investment plan is defined on the basis of the current business strategy.
- **Method-driven approach:** The IS needs are identified with the use of techniques and tools.
- **Technological approach:** Analytical modeling and other tools are used to execute the IT plans.
- **Administrative approach:** The IT plan is established by a steering committee.
- **Organizational approach:** The IT investment plan is derived from a business-consensus view of all stakeholders in the organization

Approaches to Planning

- Top-down Planning
 - **Focuses on organizational goals first**, then on the needs of business units
- Bottom-up Planning
 - **Focuses on needs of business units first**, then on organizational goals

Information System Planning Process

- a) Establish a mission statement
- b) Assess the environment
- c) Set goals and objectives
- d) Derive strategies and policies
- e) Develop long-, medium-, and short-range plans implement plans and monitor results

Establish a Mission Statement

- These are services that you are responsible for; it is your place in the organization.
- It is not what you are supposed to achieve, it is who you are and what you do in the company.

Goals and Objectives

- Set goals – what do you want to achieve?
- Set objectives – what are your specific, measurable targets?

Derive strategies and policies

- Strategies for
 - Technology focus
 - Personnel and career development
 - Aligning with the company
 - Funding criteria; how much to spend on IT?
- Policies for
 - Funding criteria; how much to spend on IT?
 - Allocation criteria; priority setting
 - Organizational arrangements
 - Use of outside IT services, outsourcing
 - Selling IT services to outside organizations

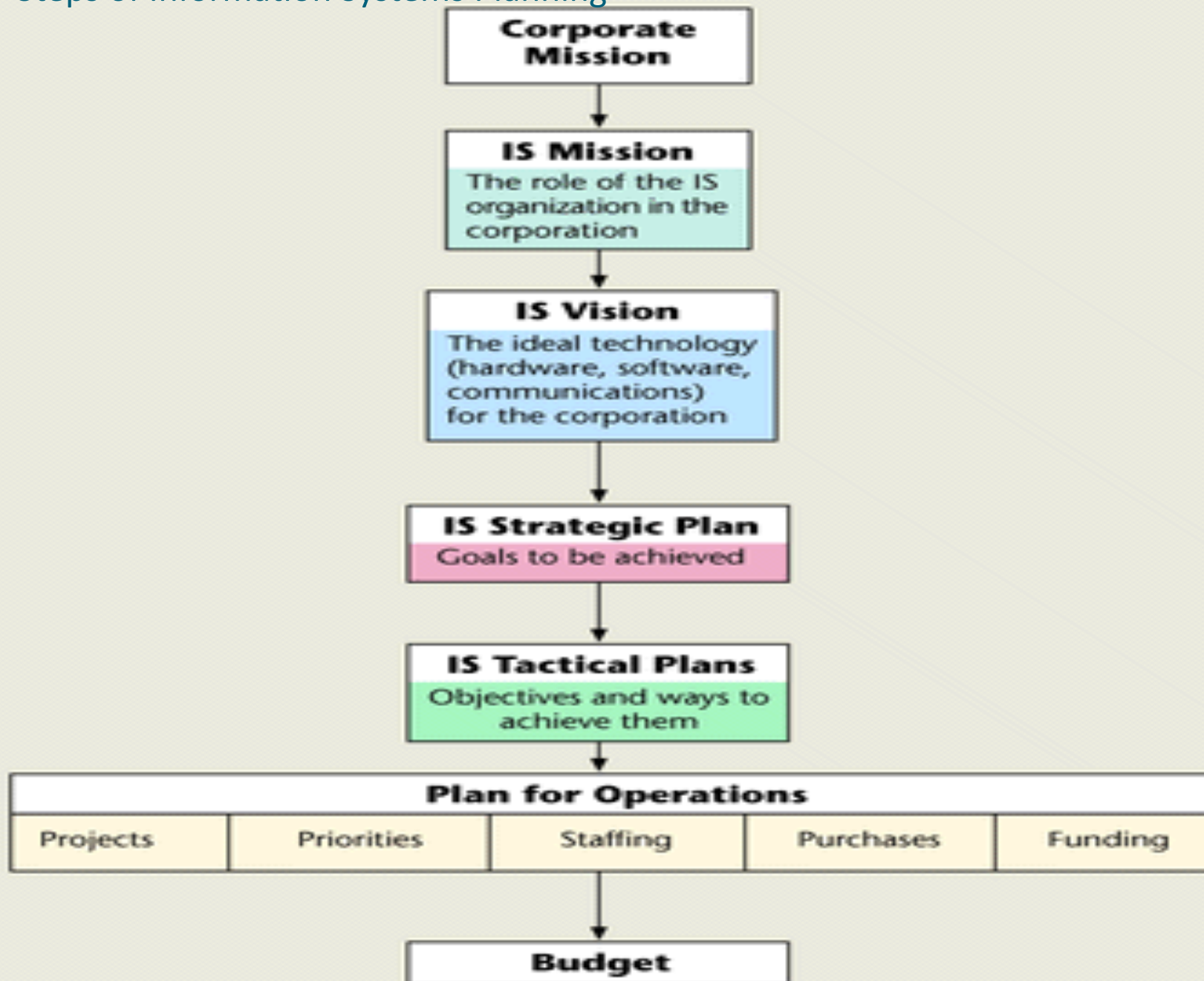
Develop long-, medium-, and short-range plans

- Short-Range – the next year, the next budget period; developing and operating current systems
- Medium-Range – committing to development efforts for applications that will take more than one year to complete; meeting management's current information needs, projected into the future for as many years as needed to complete them. This is what most organizations call "Long-Range Planning."
- Long-Range planning – preparing for management's future information needs. These are not application specific; they are investments in infrastructure ; it is creating an information architecture.

What are Key Elements of IS Planning

- Key elements of an IS Plan are
 - Corporate mission statement
 - Vision for IT within organization
 - IS strategic and tactical plans
 - Operations plan to achieve mission and vision
 - Budget to ensure resources are available

Steps of Information Systems Planning



Information Systems Planning

- The IT Vision
 - Wish list of what IS managers would like to see in terms of hardware, software, and communications, to contribute to goals of the organization.

Strategic Information System

- Strategic Information System is a system that helps companies alter their business strategy.
- It is used to accelerate the reaction time to environmental changes and aid the company in achieving a competitive advantage over its competitors.
- They help in producing low cost quality products.
- The strategic role of IS involves using IT to develop products, services, and capabilities that give company major advantages over the competitive forces it faces in the global marketplace.

Information Systems Planning

- Strategic IS Planning

- IS Strategic plan details what is to be achieved
- Strategic plans are designed with the entire organization in mind and begin with an organization's mission.
- Essentially, strategic plans look ahead to where the organization wants to be in three, five, even ten years.
- Strategic plans, provided by **top-level managers**, serve as the framework for lower-level planning.

Typical Strategic-Level Job Titles

- Top-level Managers
- CEOs or Presidents
- General Manager
- Corporate Boards
- Steering Committee
- Board of Directors
 - will design and execute strategic plans to paint a picture of the desired future and long-term goals of the organization.

Tactical IS Planning

- IS Tactical plan describes how goals will be met and by when.
- Tactical IS Plan performed by **middle managers** responsible for acquisition and allocation of resources for projects according to tactical plans, set out for one or two years.
- Tactical IS Planning is **evaluates current and projected information needs** of the organization, prioritizes IS development projects, and develops allocation plans for financial and technology resources.

What are important factors in IS tactical planning

- Important Factors in IS Tactical Planning
 - Flexibility
 - Compatibility
 - Connectivity
 - Scalability
 - Standardization
 - Total Cost of Ownership

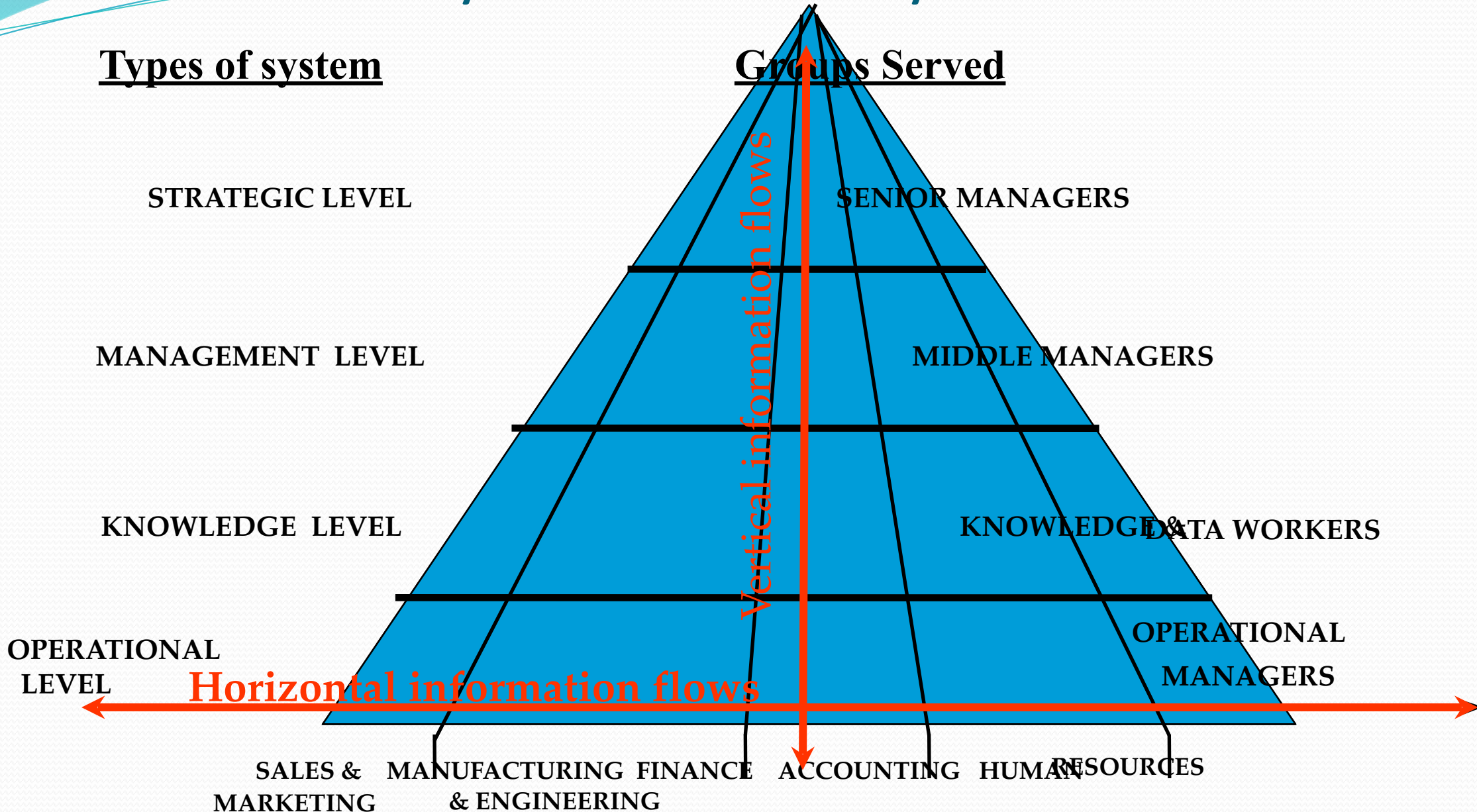
Typical Tactical-Level Job Titles

- Advertising manager
- Personnel manager
- Creative director
- Manager of information systems
- Communications director
- Chief Financial Officer(CFO)

Operational IS Planning

- Operational Plan prepared by a component of an organization that clearly defines actions it will take to support the strategic objectives and plans of upper management.
- Operational IS Planning develops plans such as annual operating budgets and individual IS project plans.
- Operations IS Planning **performed by supervisors** of smaller work units *concerned with planning and control of short-term (typically, a week or six months) budgets and schedules.*

Information System: Hierarchy



Three levels of planning

Type of Plan	Created By	Scope	Includes	Level of Detail
Strategic Plan	Top Management	Entire organization	Mission of the company, future goals and ambitions	Very broad and general
Tactical Plan	Mid-level Management	Single area of the business as a whole (e.g. a division of the company)	Specific actions to support or work towards the Strategic Plan	Specific actions and ideas, but not very detailed
Operational Plan	Low-level Management	A unit within a single area of the business (e.g. a department within a division)	Specific plans for low level and day-to-day activities and processes that will support and enable the Tactical Plan	Extremely detailed (who, what, where and when)

Guideline for Effective IS Planning

1. Early clarification of the purpose of the planning process is essential .
2. The information resources planning effort should be viewed as an iterative effort.
3. The plan should reflect realistic expectations.
4. A unified approach to delivering IT services should be used.
5. An effective IS plan will also take into consideration potential barriers.



Thank you

Next Class:

Chapter-6: Implementation of information systems