

Development of long range plans for organization by using Management Information System

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ABSTRACT

In This paper, developing a long-range plan for organization in with help of MIS. Developing strategic plans is a necessary part of a business. Many types of business plans exist, and two common types of plans include a tactical plan and an operational plan. Information system architecture is a formal definition of the business processes and rules, systems structure, technical framework, and product technologies for a business or organizational information system.

Keywords: MIS, Range, System, Design, Operation, Business, Framework, Planning, Goal, Decision.

1. Introduction

The plan for development and its implementation is a basic necessity for MIS. In MIS the information is recognized as a major resource like capital, time and capacity. If information resource is to be managed well, it calls upon the management to plan for it and control it for the appropriate use in the organization. With the advancement of IT, it is possible to recognize information as a valuable resource like money and capacity. It is necessary to link its acquisition, storage, use and disposal as per the business needs for meeting the business objectives. So we need MIS flexible enough to deal with the changing information needs of the organization [1]. It should be open system. The designing of such an open system is a complex task. It can be achieved if MIS is planned, keeping in view, the plan of the business management of the organization.

2. Strategy for the plan achievement for organization

Developing strategic plans is a necessary part of a business. Many types of business plans exist, and two common types of plans include a tactical plan and an operational plan. Tactical and operational plans both work to implement a firm's strategy. Although some similarities exist between tactical and operational planning, there are clear differences. Understanding the elements of tactical and operational planning helps you develop and implement your strategic goals. Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment [2]. It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future. Effective strategic planning articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful.

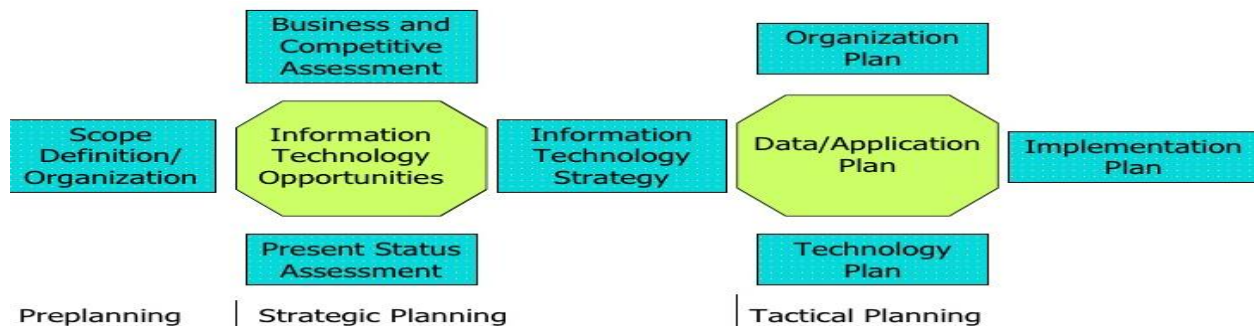


Figure 1: Strategy for the plan achievement in an organization

3. Tactical Planning

Tactical planning is an extension of strategic planning, and tactical plans are created for all levels of an organization. It establishes the specific steps needed to implement a company's strategic plan. Tactical plans are typically short-term in nature and describe what a company needs to do, the order of the steps needed to accomplish those tasks and the

personnel and tools needed to meet the organization's strategic goals [3]. A firm's tactical plan can include the input of many of its departments. After completing and implementing your company's tactical plan, you should visit the plan on a regular basis to verify that your company is sticking to the outlined steps.

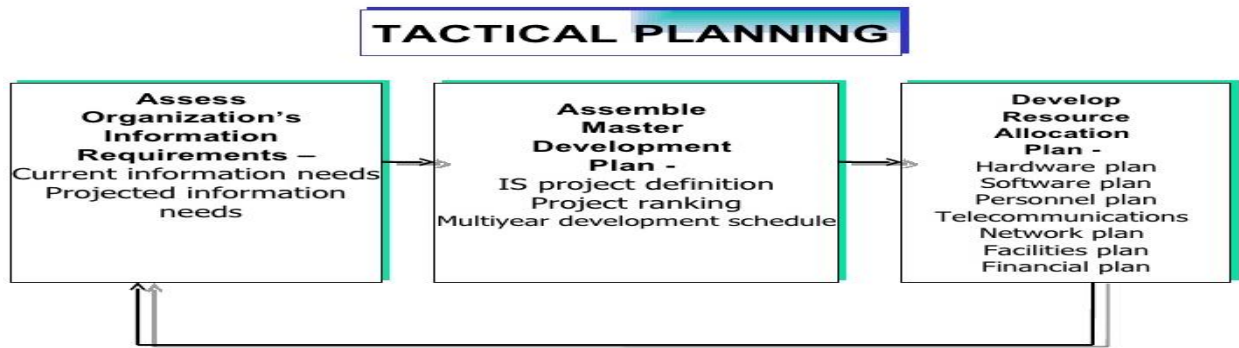


Figure 2: Tactical Planning

4. Development strategy for organization

In MIS, the information is recognized as a major resource like capital and time. If this resource has to be managed well, it calls upon the management to plan for it and control it, so that the information becomes a vital resource for the system [4].

- The management information system needs good planning.
- This system should deal with the management information not with data processing alone.
- It should provide support for the management planning, decision-making and action.
- It should provide support to the changing needs of business management.

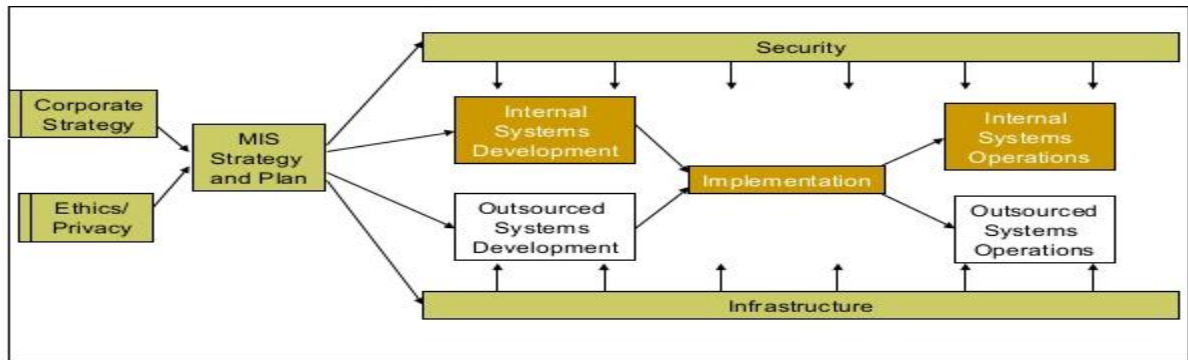


Figure 3: Development strategy for organization

5. System development strategy with SDLC

At this stage, system is put into production to be used by the end users. Sometime, we put system into a Beta stage where users' feedback is received and based on the feedback, the system is corrected or improved before a final release or official release of the system. Maintenance is necessary to eliminate the errors in the working system during its working life and to tune the system to any variation in its working environment [6]. Often small system deficiencies are found, as system is brought into operation and changes are made to remove them. System planner must always plan for resources availability to carry on these maintenance functions.

In order to develop a system successfully, it is managed by breaking the total development process into smaller basic activities or phases. Any system development process, in general, is understood to have the following phases.

- Systems Planning
- Systems Analysis
- Systems Design
- Systems Implementation
- Systems Operation and Support



Figure 4: System development strategy with SDLC

6. The Architecture of the MIS

Information system architecture is a formal definition of the business processes and rules, systems structure, technical framework, and product technologies for a business or organizational information system [7]. Information system architecture usually consists of four layers: business process architecture, systems architecture, technical architecture, and product delivery architecture.

The architecture of an information system encompasses the hardware and software used to deliver the solution to the final consumer of services [8]. The architecture is a description of the design and contents of a computerized system. If documented, the architecture may include information such as a detailed inventory of current hardware, software and networking capabilities; a description of long-range plans and priorities for future purchases, and a plan for upgrading and/or replacing dated equipment and software.

The system architecture has been designed to manage silos of data in different forms and time-stamps. Also the Corporate MIS software has been developed on a standards-based, unified platform for data capture at source, data updating, processing, dissemination and presentation, in an objective manner, via the Internet. The Corporate MIS is accessed by the bona-fide users and decision-makers via Internet, through browser-based client PC on real-time basis. The Corporate MIS database also serves as an archive of historical data for analysis, planning and forecasting. The system architecture is represented in the figure 5 below:



Figure 5: Architecture of the MIS

7. The system development with System Design

In this stage, the define of the system are elaborated. In this stage, the logical design is elaborated and a physical design documents is prepared [9]. This design document contains all implementation details of the system, like hardware details, database structures, data structures, network and communication details, application software details and interface details.

Details about data sources input and output files, processing, testing and information flow is part of the design. In this stage the entire system is put on papers and explained in diagrammatic terms. A lot of diagrammatic tools are used at this stage to create the design [10]. These tools need some getting used to as they are technical tools which mean specific activities for each symbol. This is required as not everything can be explained in plain English. Rather a design diagram indicating the physical data flow or a use case indicating the objects and their inter-relationships give a better idea to the

developer who is the intended user for the design document.

System Design

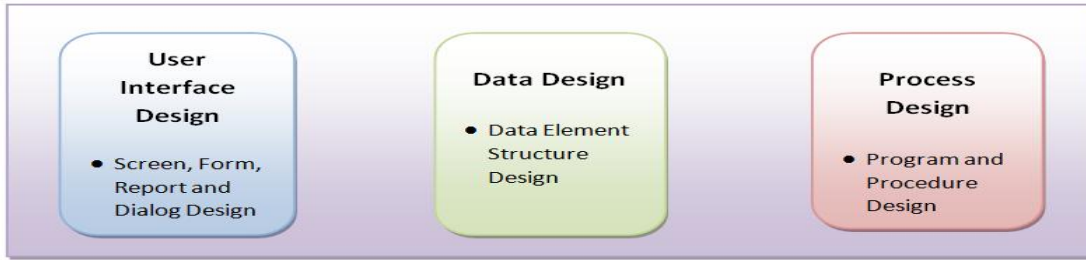


Figure 6: System Design

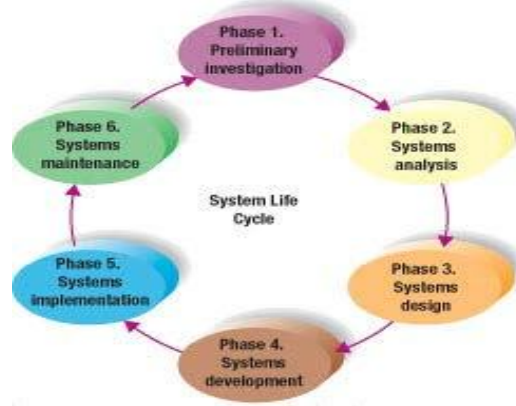


Figure 7: Software Design Life Cycle (SDLC)

System analysis and design follows the typical System/Software Design Life Cycle (SDLC) as discussed in the previous chapter. It generally passes through the following phases:

- Problem Definition
- Feasibility Study
- Systems Analysis
- System Design
- Detailed System Design
- Implementation
- Maintenance

In the analysis phase, the following techniques are commonly used:

- Data flow diagrams (DFD)
- Logic Modeling
- Data Modeling
- Rapid Application Development (RAD)
- Object Oriented Analysis (OOA)

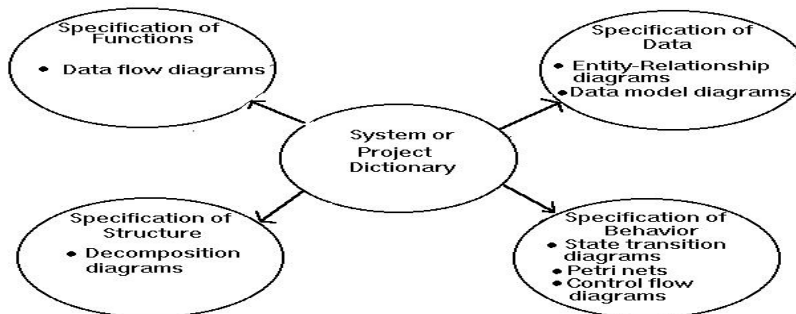


Figure 8: The flow chart for system development

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