

## 1- Project Selection

Usually, system analysts do not start working on any projects they desire. They receive a lot of request from the management for starting different type of the projects.

When projects are formally requested, the systems analysts, under the management's direction, conduct a preliminary investigation to analyze the reasons for the request and collect various facts to respond to the request in a systematic way. Some projects are *feasible*, while others may *not be feasible* for various reasons.

The introduction of a new system includes:

- Purchase of new hardware and software.
- Appointment of skilled persons and/or training of existing staff for using the new system and changes in management and organization.

So, developing a new system requires redesigning the organization.

As an organization always has many projects (concerned with MIS or other business functions) to do, the management must decide the priority of a system development in order to simplify the business.

### 1.1. Reasons for Developing New Systems Project

System projects are initiated for different reasons. The most important reasons are:

1. **Capability:** Business activities are influenced by an organization's ability to process transactions quickly and efficiently. Information systems add capability in three ways:
  - (i) *Improved Processing Speed:* The inherent speed with which computers process data is one reason why organization seek the development of systems projects.
  - (ii) *Increased Volume:* Provide capacity to process a greater amount of data, perhaps to take advantage of new business opportunities.
  - (iii) *Faster Retrieval of Information:* Locating and retrieving information from storage. The ability in conducting complex searches.

2. **Control:**

- (i) *Greater Accuracy and Consistency*: Carrying out computing steps, including arithmetic, correctly and consistently.
- (ii) *Better Security*: Safeguarding sensitive and important data in a form that is accessible only to authorized personnel.

### **3. Communication:**

- (i) *Enhanced Communication*: Speeding the flow of information and messages between remote locations as well as within offices. This includes the transmission of documents within offices.
- (ii) *Integration of Business Areas*: Coordinating business activities taking place in separate areas of an organization, through capture and distribution of information.

### **4. Cost:**

- (i) *Monitor Costs*: Tracking the costs of labor, goods and overhead is essential to determine whether a firm is performing a line with expectations-within budget.
- (ii) *Reduce Costs*: Using computing capability to process data at a lower cost than possible with other methods, while maintaining accuracy and performance levels.

### **5. Competitiveness:**

- (i) *Lock in Customers*: Changing the relationship with and services provided to customers in such a way that they will not think of changing suppliers.
- (ii) *Lock out Competitors*: Reducing the chances of entering the competitors in the same market because of good information systems being used in the organization.
- (iii) *Improve Arrangements with Suppliers*: Changing the pricing, service or delivery arrangements, or relationship between suppliers and the organization to benefit the firm.
- (iv) *New Product Development*: Introducing new products with characteristics that use or are influenced by information technology.

## **1.2. Sources of Projects Requests**

There are mainly four primary sources of project requests. The requesters inside the organization are:

- Department Managers.

- Senior Executives.
- System Analysts.
- Outside Groups.

In addition, government agencies outside the organization may also ask for information systems projects.

### **1.2.1. Requests from Department Managers**

Frequently, department managers who deal with *day-to-day business activities*, are looking for assistance with their departments. They are often not satisfied with the amount of time that the staff takes to complete the job. Sometimes, they feel that the staff members are involved in duplication of work also. In this case, the manager will discuss this problem with other administrators regarding their clerical as well as processing work and persuade higher authority to approve the development of a computer based system for office administration.

### **1.2.2. Requests from Senior Executives**

Seniors executives like *Presidents, Vice-Presidents* usually have more information about the organization as compared to department managers. Since these executives manage the entire organization, so naturally they have broader responsibilities.

### **1.2.3. Requests from System Analysts**

Sometimes systems analysts finalize areas where it is possible to develop projects. In such cases, they may prefer either writing systems proposal themselves or encouraging a manager to allow the writing of a proposal on their behalf.

*Example:* For example, in an organization, an analyst sees that the library information system takes more time in processing and is inefficient, may prepare a project proposal for a new library information system. But the direction of the analyst, who is fully aware about the new technology that improves the existing library information system, the librarian may initiate the development of information system to the higher authority for approval.

#### **1.2.4. Requests from Outside Groups**

Developments outside the organization also lead to project requests.

*Example:* Government contractors are required to use special cost accounting systems with government stipulated features.

Generally, it has been observed that new demands from external groups bring about project requests, either for new systems or changes in current ones. Project requests originated from this source are also quite important.

#### **1.3. Managing Project Review and Selection**

It is true that a number of requests for systems development are generated in the organization. Someone in the organization must decide which requests to *pursue* and which to *reject*.

The management decides the priority of a system development by reviewing the answers of the following questions:

- When should the organization go for computerization, if it is still using manual systems?
- Are the users satisfied with the performance of existing systems (manual/computerized)? If not, what are the reasons?
- What are the major problems of the existing systems? Do they effect the normal working of the organization? If yes, how long can the organization tolerate such problems?
- What are the major projects that the organization has to do? Which one of these is the most important?

The criteria to accept or reject a request can be decided in a number of ways. One of the suitable methods commonly in use is by committee. Mainly three committee's formats are commonly used:

#### **1.4. Steering Committee Method**

This is one of the most common methods of *reviewing and selecting projects for development*. Such a committee, consisting of key managers from various departments of the organization as well as members of information systems group, *is responsible for supervising the review of project proposals*. This

committee receives requests for proposal and evaluates them. The main responsibility of the committee is to take decision, which often requires more information than the proposal provides. It is, therefore, desired to have preliminary investigation to gather more details. The steering committee approach is generally favored because systems projects are considered as business investments. Management, not systems analysts or designers, selects projects for development. Decisions are made on the basis of the cost of the project, its benefits to the organization and the feasibility of accomplishing the development within the limits of information systems technology.

### **1.5. Information Systems Committee Method**

In some organization, the responsibility for reviewing project requests is *entrusted to a committee of managers and analysts in the information systems department*. Under this method, all requests for service and development are submitted directly to a review committee within the information systems department.

This committee is responsible for following activities::

- *Approves* or *disapproves* projects.
- *Sets priorities*, indicating *which projects are most important and should receive immediate attention*.

This method can be used when many requests are for routine services or maintenance of existing applications. When major equipment decisions are required or when long-term development commitments are needed to undertake a project, the decision authority decided whether a project should proceed or not.

So, the major functions of this committee are:

- (i) To review the systems plan and approve/disapprove them.
- (ii) To integrate the systems that share the input data.
- (iii) To provide alternatives to the project.

### **1.6. User Group Committee Method**

In some organization, the responsibility for project decisions is *entrusted* to the users themselves. Individual departments hire their own analysts and designers who handle project selection and carry out development.

Although the practice of having user committees for both choose and develop systems does take some of the burden from the systems development group it can have disadvantages for the users. Some users' groups may find themselves with defective or poorly designed systems that require additional time and effort to undo any damage caused by the misinformation that such systems could generate.

### **1.7. Project Request Contents**

The project proposals submitted by the users or the analysts to the Project Selection Committee is a critical element in launching the systems study. There is a general agreement that a project request form should contain the following:

- What is the problem?
- What are the details of the problem?
- How significant is the problem?
- What does user feel is the solution?
- How will the information systems help?
- Who else knows about this and could be contacted?

The project selection committee is responsible to review the proposals carefully and finally selects those projects which are most beneficial to the organization. Therefore, a preliminary investigation is often requested to gather details which are asked in the project request-forms.