FEASIBILITY STUDY

Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed, which determines whether the solution considered to accomplish the requirements is practical and workable in the software. Information such as resource availability, cost estimation for software development, benefits of the software to the organization after it is developed and cost to be incurred on its maintenance are considered during the feasibility study. A feasibility study is carried out to select the best system that meets performance requirements.

The feasibility study provides management with enough information that helps to decide whether the project can be done or not. Feasibility studies are almost always conducted where large sums are at stake, also called feasibility analysis. The contents and recommendations of such study will be used as a sound basis for deciding whether to proceed, postpone or cancel the project.

OBJECTIVES OF FEASIBILITY STUDY

1. To identify the responsible user.
2. To identify whether the system is worth implementing.
3. To identify the problem in the current system.
4. To identify the goal of the proposed system.
5. To describe the nature and complexity of the project.
6. To acquire a sense of its scope.
7. To check viability of project.

ECONOMIC FEASIBILITY

Economic feasibility analysis also referred to as cost/benefit analysis. In economic feasibility, cost benefit analysis is done in which expected costs and benefits are evaluated. It is the most frequently used method for evaluating the effectiveness of a new system.

Economic feasibility determines whether the required software is capable of generating financial gains for an organization. If benefits outweigh costs, then the decision is made to design and implement the system

Possible questions raised in economic analysis are:

- Is the system cost effective?
- Do benefits outweigh costs?
- The cost of doing full system study
- Estimated cost of hardware
- Estimated cost of software/software development
- Is the project possible, given the resource constraints?
- What are the savings that will result from the system?

TECHNICAL FEASIBILITY

Technical feasibility analysis determines whether the proposed system can be developed using existing technologies or whether new technologies are required. The analyst must find out whether current technical resources can be upgraded or added to in a manner that fulfills the request under consideration.

Technical feasibility also performs the following tasks.

• Analyzes the technical skills and capabilities of the software development team members.

• Determines whether the relevant technology is stable and established.

• Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

The essential questions that help in testing the technical feasibility of a system include the following:

- Is the project feasible within the limits of current technology?
- Does the technology exist at all?
- Is it available within given resource constraints?
- Is it a practical proposition?
- Manpower- programmers, testers & debuggers
- Are the current technical resources sufficient for the new system?

- Can they be upgraded to provide to provide the level of technology necessary for the new system?
- Do we possess the necessary technical expertise, and is the schedule reasonable?

OPERATIONAL FEASIBILITY

Operational feasibility analysis determines whether there will be any problem in implementing the system in its operational environment, issue such as integrating the new system with existing systems.

Operational feasibility involves projecting whether the system will be used if it is developed and implemented. Whether there will be resistance from users that will affect the possible application benefits?

Operational feasibility is a measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.

The essential questions that help in testing the operational feasibility of a system include the following:

- Does management support the project?
- Does current mode provide end users and managers with timely, pertinent, accurate and useful formatted information?
- Will the proposed system really benefit the organization?
- Could there be a reduction in cost and or an increase in benefits?
- Does the overall response increase?
- Does current mode of operation make maximum use of available resources, including people, time, and flow of forms?
- Does current mode of operation provide reliable services
- Are the services flexible and expandable?
- Are the current work practices and procedures adequate to support the new system?
- If the system is developed, will it be used?