Feasibility Study

A careful analysis of the technical, economic, operational and behavioral factors of the system to make sure that the system can successfully be developed.

A feasibility study is conducted to select the best system that meets performance requirements. This entails an identification description, an evaluation of candidate systems, and the selection of the best system for the job.
Three key considerations are involved in the feasibility analysis.

a) Technical Feasibility
b) Operational Feasibility
c) Economic Feasibility
d) Behavioral Feasibility
e) Legal Feasibility
f) Schedule Feasibility

Technical Feasibility
An evaluation to determine whether a project can be technically built. This evaluation determines whether the technology needed for the proposed system is available or not and how it can be integrated within the system.
Centers around the existing computer system (Hardware, Software etc) and to what extent it can support the proposed addition.

Operational Feasibility
An evaluation to determine whether a project is operationally acceptable.
Determines how the proposed system will fit in with the current operation and what if any job restructuring and retaining may be needed to implement the system.

Economic Feasibility
An evaluation to determine whether a project is economically acceptable.
This evaluation looks at the financial aspects of the project. It determines whether the project's goal can be achieved within the resource limits allocated to it.

Behavioral Feasibility
Determines how much effort will go into educating, selling, and training the user staffs on a candidate system.

Legal Feasibility
An evaluation to determine whether a project is legally acceptable.

Schedule Feasibility
An evaluation to determine whether a project can be developed within an estimated time frame.

Go through the figure drawn in the classroom.

Steps in Feasibility Analysis

1. Form a project team and appoint a project leader

2. prepare system flowcharts
3. Enumerate potential candidate system
4. Describe and identify characteristics of candidate system
5. Determine and evaluate performance and cost effectiveness of each candidate system
6. weight system performance and cost data
7. select best candidate system
8. prepare and report final project directive to management

Form a project team and appoint a project leader

- Team consists of analysts and user staff and also the outside consultant and an information specialist too.
- Senior system analyst is generally appointed as project leader.

Prepare system flowcharts

- Generalized system flowcharts for the system are prepared.
- Information oriented charts and DFDs prepared in initial investigation are received.

Enumerate potential candidate system

- This step identifies the candidate system that are capable of producing the o/p included in the generalized flowcharts.
- Consideration of hardware that can handle the total system requirements

Describe and Identify characteristics of candidate system

- Technical knowledge and expertise in the hardware/software area are critical for determining what each candidate system can and cannot do.

Determine and evaluate performance and cost effectiveness of each candidate system

- Each candidate system's performance is evaluated against the system performance requirements
- The cost encompasses both designing and installing the system. It includes user training, updating the physical facilities, and documenting.
- Costs are more easily determined when the benifits of systems are tangible and measurable.

Weight system performance and cost data

- The performance and cost data for each candidate system show which system is the best choice.
- weight the importance of each criterion by applying a rating figure.
- Then the candidate system with the highest total score is selected.

Select the best candidate system

- System with highest total score is judged the best system

Prepare and report final project directive to management

- It evaluate the impact of proposed changes on the areas in question
- Report is a formal document for management use, brief enough and sufficiently nontechnical to be under stable.

Reports contain following sections

i. Cover letter
ii. Table of Contents
iii. Overview
iv. Detailed finding outline
v. Economic Justification
vi. Recommendations and Conclusions
vii. Appendixes