

Chapter: 12

FEASIBILITY STUDY & INPUT/ OUTPUT FORM DESIGN

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ABSTRACTS

This study encompasses a multifaceted evaluation of factors including financial, technical, operational, legal, and scheduling considerations. Its purpose is to provide decision-makers with a solid foundation for assessing the project's potential success and identifying any potential challenges or risks. A well-executed feasibility study is an indispensable tool for stakeholders as it aids in making informed decisions about whether to proceed with a project or investment, thus minimizing costly errors and ensuring the efficient allocation of resources.

Keywords: *Technical feasibility, Time feasibility, Operational feasibility, Economic feasibility*

INTRODUCTION

Feasibility study is the test of proposal as per its functionality that impact on the organization, ability meet the user needs and effective use of the resources. It depends on the initial investigation. It focuses on the three major questions.

- What are the demonstrable needs of the user and in which ways a candidate system meets them?
- What type of resources are available for the given candidate system? Is the problem worth solving?
- What are the possible impacts of the given candidate system?

Each of these questions must be answered carefully. Its main objective is not to solve the problem but to acquire a sense of its scope. During the study the problem definition is crystallize and aspects of the problem to be included in the system are determined. The result of the feasibility study is a formal proposal, which summaries what is known and what is going to be done. It consists of the following: -

STATEMENT OF THE PROBLEM

A carefully worded statement of the problem that leads to analysis.

Summary of problem and recommendation: A list of major findings and recommendations of the study. It is ideal for the users require quick access to the analysis of the system understudy.

Details of Findings: An outline of the method and procedure undertaken by existing system followed by coverage of the objectives and procedure of the new system.

OBJECTIVES

The important objectives of doing feasibility study are:

- To identify the deficiencies of the current system.
- To determine the objective of the purposed system.
- To acquire a sense of the system.
- To identify the responsible user.
- To determine whether it is feasible to develop the new system.

TYPES OF FEASIBILITY STUDY

Feasibility studies are conducted to assess the practicality and viability of a proposed project or business endeavor. Various types of feasibility studies are performed depending on the specific nature and goals of the project. The most common types of feasibility studies include:

- Economic feasibility
 - Technical feasibility
 - Time Feasibility
 - Legal feasibility
 - Operational feasibility
 - Scheduling feasibility
- **Economic Feasibility:** it refers to the assessment of the financial viability and cost-effectiveness of ai-related projects, applications or initiatives. it involves assessing the costs and benefits associated with implementing ai solutions and finding out whether the potential financial returns validate the investment. according to the concept of economic feasibility our project is economically feasible for the project development of software for “soalr energy cenetr”, which will implement this package.
- **Technical Feasibility:** It assesses whether the proposed project is technologically feasible or not. It also evaluates the project's technical needs, existing technology, and possible issues related to the technology stack or infrastructure.

- **Time Feasibility:** Time feasibility involves the duration about the project has to complete. Since the existing website take very less time to achieve every task, so to save the time it must be made a candidate system. The existing system was manual form, so to see the faculty, infrastructure, history, output of the college etc., is very time consuming. The candidate system requires very less time.
- **Legal Feasibility:** It evaluates the project's compliance with legal and regulatory requirements. It assesses licenses, intellectual property issues, permits, and other legal considerations to make sure the project can be proceeded further without legal impediments.
- **Operational Feasibility:** It evaluates whether the project can be implemented effectively. It focuses at factors like personnel, workflow, organizational structure and processes. The purpose is to find out whether the project can be combined with the existing operations.
- **Scheduling Feasibility:** It examines the project's timeline and whether it can be completed within the specified time period. It includes factors such as resource availability, critical path analysis, and potential delays.

STEPS IN FEASIBILITY STUDY

Feasibility involves the following steps:

- Form a project team and appoint a project leader.
- Define the objectives and scope of the project.
- Clearly outline the purpose and goals of the study.
- Provide a detailed description of the project, its nature, and its components.
- Explain the project's background, context, and its importance.
- Determine the technical requirements and capabilities needed for the project.
- Evaluate the availability of technology and infrastructure.
- Identify potential technical challenges and solutions.
- Enumerate potential candidate system.
- Select the best candidate system.

INPUT/OUTPUT FORM DESIGN

The first step in any system design is to design Input Output

i. Input Design

In input design, user originates input are converted to a computer bases format. It also controlled the errors entered by data entry operators can be controlled by input design. The goal of designing input data is to make entry as easy, logical and free from error as much as possible. In entering data, operators need to know the following the allocated space for each field.

Field sequence, which must be match that in the source document The format in which data field are entered.

It also include deter mining the record media, method of input speed of capture, and entry into the system. Online data entry accepts command and data through a keyboard. The data are displayed on a cathode ray tube (CRT) screen for verification. The major approach to input design are menu, the formatted, the prompt design that are used by us for talking input in the.....

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ii. Output Design

Output design refers to the process of designing the format, structure, and content of the information that a software system generates and presents to users.

Effective output design is essential for ensuring that the system provides clear, relevant, and user-friendly information. In output design, the emphasis is on producing a hard copy of the information requested or displayed the output on a CRT screen in a predefined format.

The output devices to consider depends on the factor such as compatibility of the device with the system response time requirements expected print quality, and the no. of copies needed.

The standard for printed output suggests the following:

- Give each output a specific name or title.
- Provide a sample of the output, including areas where printing may appear and the location of each field.
- State whether each output is to include significant zeroes, space between field and alphabetic or any other data
- Specific the procedure for providing the accuracy of output data.
- In online application information is displayed on the screen.

iii. Form Design

Without data there is no system, but data must be provided in the right form for input and the information produced must be in a format acceptable to the user, so for purpose we use the forms. Since form design encompasses both input and output forms. Thus the data may be related to input forms design and information may be used with regard to output forms design. So we can say that the form is a physical carrier of data of information. It also constitutes authority for action and request for action. It provides information for making decision and improving operations.

With this in mind, it is hard to imagine a reception operation operating without using forms. As they are the vehicle for communication like taking name, age etc. as input from a new customer and on the same from the output is also given like battery name

Some major requirements for making form more communicative are:

- The form title must be clearly identifying its purpose
- The form must be easy to use and fill out
- The form's composition, color, layout and paper stock should lend themselves to easy reading
- The form must be easily stored
- The instruction that accompanies a form should clearly show how it is used and handled

CONCLUSION

It is concluded that the input/output form design is a user-focused, well-structured, and accessible element of the software system that enhances the user experience, data processing efficiency, and overall usability of the application. It plays a crucial role in meeting user needs and ensuring a positive user interaction with the software. A feasibility study is an essential step in the process of evaluating the practicality and viability of a proposed project or business endeavor. It serves as a critical tool for decision-makers to assess the risks and opportunities associated with the project.

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