

## Feasibility Analysis

**When complex problems and opportunities are to be defined, it is generally desirable to conduct a preliminary investigation called a Feasibility Study.**

A Feasibility Study is conducted to obtain an overview of the problem and to roughly assess whether feasible solutions exist prior to committing substantial resources to a project.

During a Feasibility Study, the systems analyst usually works with representatives from the department(s) expected to benefit from the solution.

The primary objective of a feasibility study is to assess three types of feasibility:

1) **Technical feasibility**

Can a solution be supported with existing technology ?

2) **Economic feasibility**

Is existing technology cost effective?

3) **Operational feasibility**

Will the solution work in the organisation if implemented? By intent, the Feasibility Study is a very rough analysis of the viability of a project.

It is, however, a highly desirable checkpoint that should be completed before committing more resources.

The feasibility study answers a basic question: Is it realistic to address the problem or opportunity under consideration?

The final product of a successful feasibility study is a project proposal for management.

The contents of this report may include, but are not restricted to the following items.

- 1) Project Name.
- 2) Problem or opportunity definition.
- 3) Project description.
- 4) Expected benefits.
- 5) Consequences of rejection.
- 6) Resource requirements.
- 7) Alternatives.
- 8) Other considerations.
- 9) Authorisation.

**A Feasibility Study is the first stage** of the product or service development cycle. Its aim is to analyse the viability of a proposed project, product or service.

It analyses the proposed project, product or service with respect to the performance objectives expected by the organisation, and may include an evaluation of a current system.

The Feasibility Study may produce a cost benefit report and a project charter to be used as a guide during the analysis phase.

A Feasibility Study is the process of defining exactly what a project is and what strategic issues need to be considered to assess its feasibility, or likelihood of succeeding.

Feasibility Studies are useful both when starting a new business, or identifying a new opportunity for an existing business, such as a new product, service or branch.

A key factor in any Feasibility Study must be ensuring that you are dealing with correct facts, correct assumptions and up to date financial data.

Many projects fail because assumptions were based on incorrect facts.

**Ideally, the feasibility study process involves making rational decisions about a number of enduring characteristics of a project, which may include:**

1. Establishing project scope - stating exactly what the project is and what it is intended to achieve - its objectives
2. Vision/mission statement
3. Vision - where do you see this opportunity taking you?
4. Situation analysis, history and background of the product/service, industry and the organisation
5. Identifying the statutory and mandatory requirements
6. The aims, goals and objectives of pursuing the opportunity
7. Market opportunities
8. Current market penetration
9. Current market segments
10. Projected growth in each market segment
11. A review of what is currently on the market
12. Customer profile and demographics
13. Performance objectives expected
14. Estimation of customers and potential revenues
15. Critical success factors
16. Determination of competitive advantage
17. Barriers to entry, education, distribution channels, costs
18. Definition of proposed operations/management structure and management methods
19. The time frames
20. The initial costs involved
21. Financing and projected cash flows - where will the money come from?
22. Break even analysis
23. The pay back period
24. Return on investment
25. A report of cost benefits
26. Development of an action plan for the project to proceed
27. A summary of findings

## **Secondary issues**

**Some secondary issues which may need to be addressed are:**

1. Is there a key decision maker involved?
2. Is technical feasibility an issue?
3. Are there clear business objectives to be addressed by the Feasibility Study?
4. How committed are users and management to achieving the stated business objectives?
5. Appointing analyst(s) to conduct the initial assessment.
6. Producing a schedule for the Feasibility Study and determining its size and scope based on previous experience, and considering the following points:
  7. Deadlines imposed by the organisation
  8. An estimation of the time required to complete the Feasibility Study
  9. Appointing a research team based on the preliminary study to conduct the Feasibility Study.
10. Should a campaign go forward at this time?
11. Are there any Foundations and Grants to assist our project?
12. Are we in the optimal possible position to conduct a campaign?
13. Is there enough strong leadership available for the campaign?
14. When is the best time for the campaign to take place?
15. Where will the financial support come from?
16. What is a feasible goal for the project?
17. Do you have a business plan for this project, product or service?
18. What action do we need to take to make our vision a reality?