Chapter# Feasibility Study, Project Proposal and Project Appraisal

❖ Feasibility Study
An analysis of the ability to complete a project successfully, taking into account legal, economic, technological, scheduling and other factors. Rather than just diving into a project and hoping for the best, a feasibility study allows project managers to investigate the possible negative and positive outcomes of a project before investing too much time and money.

An analysis and evaluation of a proposed project to determine if it

1. is technically feasible,
2. is feasible within the estimated cost,
   and (3) will be profitable. Feasibility studies are almost always conducted where large sums are at stake. Also called feasibility analysis. See also cost benefit analysis.

❖ Why Feasibility study?

1. A feasibility study will help you to determine the profitability of the business venture. Before starting a business, seasoned entrepreneurs and investors would want to know if the business would be worth their time, effort and resources. It is worthwhile to know that many entrepreneurs have abandoned solid business ideas because the profitability could not be ascertained on conducting a feasibility study on the business idea.

2. A feasibility study will help prove to the entrepreneur, venture capitalists, lenders and investors the existence of the market, the liquidity of the business venture and the expected return on investment.

3. A feasibility study will help you identify the flaws, business challenges, strengths, weaknesses, opportunities, threats and unforeseen circumstances that might affect the success and sustainability of the business venture. Just like the case of my dad’s business, the business failure and loss of money would have been avoided if we had carried out a feasibility study. We simply jumped in based on someone’s recommendations because we were flushed with cash and we paid dearly for it.

4. Before starting a business, a feasibility study will enable you estimate the financial, human and technological resources that will be needed to ensure the successful launching of the business. Feasibility study helps to reveal the number and level of skill or unskilled workers to be employed and their salary scale.

5. Feasibility study will help you to determine the amount of capital required to start the business. It will also help you in establishing the budget plan, working capital and cash flow projections of the business.

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**Objectives of feasibility study**

The worth noting objectives of feasibility study are shown in the following ways:

i) To evaluate worthiness of the investment
ii) To evaluate marketing, financing and operational effectiveness.
iii) To forecast problems in implementation & operational phase
iv) To help final decision making
v) To evaluate environmental aspects with regard to present & future

**Schematic diagram of Feasibility study**

![Diagram of Feasibility Study]

**Market and Demand analysis**

The analysis which is done to know the aggregate demand for the products or services is known as market analysis. It focuses on present and potential collective demand of the market. Hence, therefore market analysis one easily get the answer of the following question:

What is likely aggregate demand for the product or service?

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The analysis which is done to know the market share is usually known as demand analysis.

It focuses on the present and potential individual demand of the goods or services. Hence, through market analysis, one can easily get the answer of the following question:

What share of the market will the proposed project enjoy?

**Steps in market and demand analysis**

There are six steps closely associated with market and demand analysis. These steps are mentioned in the following diagram along with their interrelationship:

- **Technical analysis**

  Technical analysis is concerned primarily with material inputs, production, technology, plant capacity, location and site, machineries and equipment, structure and civil worker, project charts and layouts, and work schedule.

  Technical analysis determines or examines whether proposed project can be implemented with the availability of above aspects. The two main themes of technical analysis are:

  i) To ensure that the project is technically feasible in terms of all inputs available.
  ii) To facilitate most optimal formulation of the project in terms of technology, site location and so on.

- **Financial analysis**

  The use of financial statements calculation ratios and other techniques to monitor and evaluate the financial aspects of any project is said to be financial analysis.
Social Cost Benefit Analysis

Social cost benefit analysis is a methodology developed for evaluating the investment projects from the standpoint of the society (or economy) as a whole. It is also known as economic analysis.

According to Clifton and Eyffe, “Social cost benefit analysis is the evaluation and appraisal of projects contribution toward the society”

According to P.K. Matoo, “Social cost benefit analysis is the process of evaluating a project from view-point of the impact on the economy of the nation.”

On the whole, it can be said that social cost benefit analysis is concerned with tactical decision making within the framework of broad strategic choices defined by planning at the macro level.

Need to examine the following things:

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1. Contribution of projects towards savings by the nation, which is recycled in the form of fresh investment to increase national income.

2. Creation of merit goods or services like parks, public entertainment places, roads and highways, educational institutions etc.

3. Developing countries usually go for effective resources allocation and capital investment.

4. Development of infrastructure facilities needs SCBA rather than commercial profitability.

5. Impact of project on production of goods and services that is contribution to GDP and for sustainable economic growth.

6. Impacts of the projects on redistribution of income should be examined.

7. International competition in international trade, globalization of business and formation of regional trade blocs can only be taken care of with the help of SCBA.

8. Impacts on poverty alleviation by creating employment as well as self-employment.


10. Projects lead to enhancement of standard of living of the people.

11. Regional socioeconomic development.

12. Exploration of hitherto unexplored mineral and natural resources.

13. Ensure a balance growth of agriculture and industries.

14. Effects on macro management.

15. Effects manpower or human resources development.

16. Insure total quality management along with self-reliance in the economy.

17. Effects on trade deficit and adverse balance of payments.

**Environmental Analysis:**

Environmental and ecological analysis should be done particularly for the projects which have significant impact on natural environment and ecological implications (polluting industries like bulk drugs, chemicals and lather processing). Two key points need to be considered are:

- Types of likely damage caused by project to environment
- Cost of restoration measures required to ensure that the damage to the environment is contained within acceptable limit.

The following issues should be considered in environmental analysis:

\[a. \quad \text{Physical / chemical (pollution)}\]
- Water
Area of study is mostly dependent on the nature of a project. For instance, a project of ‘Development of Computer Software’ has neither impact on environment. Hence, it is not required to conduct ‘environmental feasibility study’ of this project.

**Concept of Project Proposal**

A project proposal (PP) refers to an investment plan or a set of investment documents for evaluation. A PP may be required to seek loan from the financial institutions, to get donation from the donor agencies, to get sanction or subsidy from the higher authorities, for initial public offering, and equity participation. A feasibility report is an added qualification for the consideration of a PP. In a competitive environment, a feasibility report is a must for preparing project proposal. The PP must be submitted with a cover or forwarding letter to the respective institution.

**Project Proposal**

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A project proposal is a detailed account of a succession of activities meant to solve a certain problem. In order to be successful, the document should: give a logical arrangement of a research idea, demonstrate the importance of the idea, explain the idea's connection to past actions, and express the activities for the intended project.

Project proposals are documents designed to present a plan of action, outline the reasons why the action is necessary, and convince the reader to agree with and approve the implementation of the actions recommended in the body of the document. In many cases, the document is drafted as a response to a Request for Proposal (RFP) that is issued by a current or prospective client. However, a document of this type may also be prepared to serve an internal purpose, especially when someone within the company has an idea of how to make the company more profitable or efficient and needs authorization and backing to implement the action.

In any situation, a project proposal will be clearly arranged so that readers can follow a logical progression of thought to the conclusion. Many sample proposals offer a basic guideline that can help even novices get into the swing of effective proposal writing. The guidelines usually identify five key components or sections of any project proposal: the introduction, background, strategy, budgeting or financing, and outcome.

Types of Project Proposal

Considering severity of technicalities, project proposal may be divided into two categories: (i) Non-technical PP, and (ii) Technical PP.

3.4.1 Non-Technical PP: Conventional PPs prepared by the project initiators or organizational staff may be refereed to as Non-Technical PP. No consultancy is required to prepare such a PP. A promoter can develop a good non-technical PP based his previous experience, and intuition.

Technical PP: In most of the cases, a technical PP is prepared by the experts. There are a number of consultancy firms established in the society to conduct feasibility study, and to prepare technical PPs. A professionally developed consultancy organization can prepare a good technical PP. A complete technical PP must cover eight study areas like a feasibility analysis (discussed earlier). But a feasibility study must not be treated as a project proposal. A feasibility report is considered as a pre-requisite of a technical project PP. A technical PP must consider investment decision-making tools. Two categories of investment decision-making tools are widely used in Bangladesh. These are: (a) Conventional – Payback Period and Ratio Analysis; (b) Modern – NPV and IRR.

Purpose of Project Proposal:
- To seek loan from financial institution;
- To get donation from donor agencies;

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- To get approval from government bodies;
- To get subsidies from higher authorities;
- To go for initial public offering;
- To go for equity participation.

**Importance of Project Proposal:**

- Helps in negotiation with the venture capitalists;
- Makes the firm better prepared for changes in the external environment;
- Gives brief idea about project’s goals and objectives;
- Gives a comprehensive idea about project activities;
- Provides the management a communication tool for outside financial sources as well as a operational tool for guiding the project to success.
- Qualifies objectivity, provides a measurable benchmarks for comparing forecast with actual result
- Identifies critical risks and crucial events with a discussion of contingency plans that provide opportunity for project’s success.
- May help management to avoid the project doom to failure.

**Contents of Project Proposal**

Contents of a project proposal are depended on the nature of the project. However, a complete project proposal must cover the following areas:

a. Project summary
   *(Basic information of the project at a glance)*
   - Name of the project
   - Location
   - Status
   - Authorized & paid capital
   - Debt equity ratio / equity partners
   - Basic product
   - Production capacity
   - Total project cost
   - Total fixed cost
   - Cost of imported machineries
   - Cost of local machineries
   - Total manpower required
   - NPV & IRR of the project
   - Scheduling / Gestation period
b. Company / Project overview -
   - Mission statement
   - Vision statement
   - Key products / services
   - Corporate strategy or objectives
   - Management team

c. Operational Plan
   - Overview of the products / services
   - Facilities
   - Production / manufacturing process
   - Research and development
   - Human resource plan
   - Scheduling of the project

d. Market Analysis
   - Potential customers
   - Size and growth of market
   - Competitor analysis
   - SWOT analysis
   - Risk analysis (unforeseeable barriers)

e. Marketing plan
   - Sales and marketing
   - Distribution plan
   - Advertising / product promotion
   - Customer service

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f. Financial plan
   - Assumptions
   - Break Even Analysis
   - Calculation of IRR & NPV
   - Projected Cash Flow Statements
   - Projected Balance Sheet
   - Sensitivity analysis