

WELCOME

Feasibility Study of Project

Presented by

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বেক্টর, রেলওয়ে ট্রেনিং একাডেমি, বাংলাদেশ রেলওয়ে, চট্টগ্রাম

Outline

Feasibility Study of Project

Feasibility Study

What Is a Feasibility Study?

A feasibility study is simply an assessment of the practicality of a proposed project plan or method. This is done by analyzing technical, economic, legal, operational and time feasibility factors.

TELOS is an acronym in [project management](#) used to define five areas of feasibility that determine whether a project should run or not.

- T - Technical — Is the project technically possible?
- E - Economic — Can the project be afforded? Will it increase profit?
- L - Legal — Is the project legal?
- O - Operational — How will the current operations support the change?
- S - [Scheduling](#) — Can the project be done in time?



Components of a feasibility report

Executive summary: a short outline of the feasibility study being presented.

Description of a product or services delivered.

Technology considerations: what technology is required to complete a project, and how much it will cost.

Marketing considerations: what the existing market place for the product/ services is, and what marketing strategy will be applied to target potential customers.

Staffing requirements: what and how many employees are required for project completion.

Expected schedule and timeline: mapping out the milestones.

Financial outlook: forecasted costs of a project and projected income.

Findings and recommendations based on the conducted feasibility study.

Feasibility Study

What's the Importance of a Feasibility Study?

A project feasibility study should be done during the project management life cycle after the [business case](#) has been completed. So, that's the "what" and the "when" but how about the "why?" Why is it important to conduct a feasibility study?

- The main purpose of a feasibility study is to determine whether the project can be not only viable but also beneficial from a technical, financial, legal and market standpoint.

5 Phases of Project Life Cycle

Initiation

The project details are collected

objectives and project scope are drafted

the deliverables are properly defined

Planning

project requirements

other client requirements

determine the cost it will incur

Execution

tailor their workflows

strategies based on requirements

subsequently allocate the required resources

Monitoring and Controlling

Track performance

keep a check on the performance

project risks are also monitored

Closure

discuss the challenges

achievements encountered

experience review meeting

BUSINESS CASE DEVELOPMENT

5 Step to Develop a Solid Business Case

Confirm the Opportunity

- Launch the business case project.
- Confirm the business opportunity.
- Specify the high-level business requirements.
- This is a sample text you can edit.

Analyze & Develop Shortlisted Options

- Identify the alternative approaches.
- Select three or four options to analyze.
- Gather info. about each alternative.
- Analyze options & develop shortlisted options.

Evaluate the Options

- Analyse how the alternatives will affect the business objectives.
- Select the preferred option, taking into account the strategic and financial value created & the risks.

Implementation Strategy

- Create the Implementation Plan for The Recommended
- How will you achieve your goal?
- Who will be accountable for each milestone?
- How will you mitigate the project risks?

Recommendation

- Confirm the recommended option.
- Document the business case.
- Present Business Case for Approval
- This is a sample text you can edit.

Feasibility study

What Is Included in a Feasibility Study Report?

The findings of your project feasibility study are compiled in a feasibility report that usually includes the following elements.

1. [Executive summary](#)
2. Description of product/service
3. Technology considerations
4. [Product/service marketplace](#)
5. Marketing strategy
6. Organization/staffing
7. [Schedule](#)
8. Financial projections
9. Findings and recommendations

Feasibility Study of Project :

Project Feasibility Study Report

Section 1: Basic Information

1. Name of the Project :

2. (a) Sponsoring
Ministry/Division

(b) Implementing Agency

:

:

3. Project Objectives
(Project to be taken
based on the study)

:

4. Estimated Project Cost
(Taka in Crore)

Feasibility Study of Project :

Project Feasibility Study Report

Section 1: Basic Information

5. Sector & Sub-Sector :

6. Project Category
(Based on Environment
Conservation Rules 1997)

:

7. Project Geographic
Location

(a) Countrywide

(b) Division

(c) District

(d) Upazila

(e) Others (City
Corporation/Pourashva)

8. Project Duration :

Feasibility Study of Project

Section 2: Introduction

(a) Project Background:

Creating a clear and unambiguous background for a project is one of the most important actions to be taken at the very beginning to ensure the success of the project at the end. The clearer the background is, the more accurately and understandably the project will be spelled out.

(b) Objectives of the feasibility study;

(c) Approach and methodology of the feasibility study; and

(d) Organization of the feasibility study.

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Section 3: Market/Demand Analysis

This section assesses the need for public investments and involves the elements listed below:

- (a) **Problem Statement:** Provide an explicit definition of the problem to be addressed, identify the likely causes (both direct and indirect) of the problem and give a brief insight of the likely consequences if no intervention in public sector is made.
- (b) **Relevance of the Project Idea:** Justify the need for the proposed project by linking the project(s) goals, outcomes and outputs to Global/National Development Plans/Policies and Sector Strategic objectives.
- (c) **Proposed Project Interventions:** Describe the interventions (project inputs & outputs) that need to be undertaken by the government through the proposed project to address the problem, describe the interventions undertaken earlier to solve this problem by this organization or other organizations (if any).
- (d) **Stakeholders:** Identify the key stakeholders that are likely to be associated with the project interventions.

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Section 3: Market/Demand Analysis

This section assesses the need for public investments and involves the elements listed below:

- (e) **Demand Analysis:** Identify the need for public investments by assessing:
 - (i) **Current demand** (based on statistics provided service providers regulators/ ministries/national & regional statistical offices for the various types of users);
 - (ii) **Future demand** (based on reliable demand forecasting models) in both the scenarios with and without the project; and
 - (iii) Various constrains and means to meet the **demand including government regulations**, technological developments etc.
- (f) **SWOT Analysis:** Identify the Strengths, Weaknesses, Opportunities and Threats to the project.

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Section 4: Technical/Technological & Engineering analysis

(a) **Location:** description of the location of the project including a geographical illustration (map and/or geo-coordinates) with justification. Availability of land is a key aspect; evidence should be provided that the land is owned (or can be accessed) by the organization, which has the full title to use it, or has to be purchased (or rented) through acquisition/requisition process. Besides, it should address if any kind of utility shifting is required. Identify the issues of disaster risks (existing and future) in the proposed location along with project site on hazard map.

(b) **Technical design:** description of the main components, technology adopted, design, standards and specifications. Key output indicators should be defined as the key physical quantities produced (e.g. meters, sq. meters, kilometers, numbers, man months, etc.). If the project is in disaster prone areas and has the probability of climate change impact, disaster and climate change risks related information should be integrated in technical design in order to address the impact of hazards on the project.

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Section 4: Technical/Technological & Engineering analysis

(c) **Output plan:** description of the output and the expected utilization rate. These elements describe the service provision from the supply side in the context of the forecasted demand.

(d) **Costs estimates:** estimation of the financial needs for project design, implementation and operations, component wise cost estimates should be provided based on evidence.

(e) **Implementation timeline:** considering the volume of works, capacity of implementing agency, budget flow, project priority etc. a realistic project timeline along with the implementation schedule should be provided (for example, a Gantt chart with the work plan).

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Section 5: Environmental Sustainability, Climate Resilience and Disaster Risk Analysis

- (a) What are the likely environmental, disaster and climate change impacts or risks from the project (any impact of project to increase the existing disaster and climate change related risks and/or contribute to create new risks)?
- (b) What counter measures should be taken to reduce these impacts?
- (c) What is the cost for reducing/mitigating the negative impacts?
- (d) Are there alternative ways of delivering the required services or goods without incurring these environmental costs? What are the costs of these alternatives?
- (e) Is there any resettlements issue to be addressed? If yes, provide resettlement modality in details.

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Section 6: Cost-Benefit Analysis

6.1 Financial Analysis

- (a) Identify the components of cost & benefit;
- (b) Transfer them in monetary value;
- (c) Construct cash flow;
- (d) Identify the Key Assumptions considered in exercises; then
- (e) Compute the following indicators and interpret the results:
 - (i) Financial Net Present Value (FNPV)
 - (ii) Financial Benefit Cost Ratio (FBCR)
 - (iii) Financial Internal Rate of Return (FIRR)

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Section 6: Cost-Benefit Analysis

6.2 Economic Analysis

- (a) Identify the direct, indirect and associated cost and benefit components;
- (c) Convert the value of cost and benefit components into economic price by using Standard Conversion Factor (SCF) determined by the Government;
- (d) Construct the cash flow;
- (e) Mention the Assumption;
- (f) Compute the following indicators and interpret the results:
 - (i) Economic Net Present Value (ENPV)
 - (ii) Economic Benefit Cost Ratio (EBCR)
 - (iii) Economic Internal Rate of Return (EIRR)

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Section 7: Human Resources and Administrative Support Analysis

(a) What types of managerial and skilled workforces are needed during implementation and operational phases of the project?

(b) Does the project entity have ability to provide the managerial and skilled workforces needed for implementation of the project? If not, provide suggestions specifically.

(c) Does the implementing agency have institutional capacity (financial & technical) to retain the project output functional? If not, provide specific suggestions.

(d) Is the project entity equipped with skilled & experienced workforces to operate the project output? If not, provide specific suggestions.

(e) Does the entity have adequate fund under its recurring budget to incur the operational expenditure of the project output? If not, provide specific suggestions.

(f) Is timing of project consistent with organizational capacity (in terms of quantity and other)?

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Section 8: Institutional and Legal Analysis

- (a) Does the project match with the legal boundary (allocation of business or mandate) of the project entity?
- (b) Are the capabilities and physical facilities of the agency being properly utilized?
- (c) Is there any need for adjustment (reforms) in the policy and/or institutional setup?
- (d) What adjustments may be required before the project is implemented?
- (e) Do the institutions have suitable skills and capacity in line with the project requirements?
- (f) Are there any incentives or penalties in place to ensure the project delivery on time and within the budget?
- (g) Are there any critical governance issues that may affect implementation? If yes, state briefly.
- (h) Are there any challenges related to cross-cutting issues to be addressed? If yes, mitigation strategy would be suggested.

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Section 9: Risk (Uncertainty) and Sensitivity Analysis

- (a) What are the major risks that may affect project?
- (b) How will the project be affected if the risk event materialized?
- (c) What are the possible mitigation measures needed?
- (d) How sensitive are the assumptions used in the financial and economic models in an environment that differs significantly?
- (e) Are there any risks, legal and regulatory obligations that could increase costs or decrease the benefits? If there any, how much project implementation may be hampered or benefit of the project may be reduced?

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Section 10: Alternative/Options Analysis

Option Analysis with recommendations & justifications. Technology and strategy

recommended to achieve the goals and objectives of the proposed project should be described

along with advantages and disadvantages considering various technologies and strategies applicable.

Section 11: Recommendation and Conclusion

Illustrate the solutions specifically to overcome the critical issues that may hinder the project

implementation and that would be supported by different sections of analysis.

Section 12: Annexes

Attach detailed technical and engineering designs, plant prototypes designs etc. Financial & Economic models and any supporting documents

Thank You