

Project Feasibility Studies

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Abstract- Project feasibility studies are done before the start of the project to check whether a project will be a success in the long term and is carried out for almost all the major projects. There are different types of feasibilities which are to be considered while making a feasibility report like financial feasibility, organizational feasibility, economical feasibility etc. Generally the feasibility studies are only carried out for major projects and not smaller projects the reason for carrying out feasibility study for major projects are due to the complexity of a project. Project feasibility study not only gives an idea regarding success rate of a project but also may help in identifying various risks related to the project.

Keywords- Economical Feasibility, Feasibility study, Infrastructure Project, Market Feasibility, Reason, Success.

I. INTRODUCTION

A feasibility study is an analysis of the viability of an idea through a disciplined and documented process of thinking through the idea from its logical beginning to its logical end. A feasibility study provides an Investigating function that helps answer “Should we proceed with the proposed project idea? Is it a viable business venture?” A feasibility study should be conducted to determine the viability of an idea BEFORE proceeding with the development of a business. There are many different types of feasibility aspects like Technical feasibility, financial feasibility, organizational feasibility etc.

A report which is derived from feasibility studies have many advantages which will help in completion of any project with minimum problems. As in India feasibility study are done prior before pre planning phase of any mega project.

II. RESEARCH ELABORATIONS

There are different types of feasibility studies

- **Technical feasibility**
- **Financial feasibility**
- **Economical feasibility**
- **Organizational feasibility**
- **Market feasibility**
- **Environmental feasibility**
- **Market Feasibility**
- **Political Feasibility**

- **Safety Feasibility**
- **Cultural Feasibility**
- **Social Feasibility**

Technical feasibility- First systematic investigation of Project Design Viability. Foundation of all other Feasibility studies. Assessment of a Project Capabilities. Investigation of Technical & Physical Parameter

Technical feasibility Reviews: Technical Capability of HR. Capability of Available techniciansat Technical side.Foreign consultants Role –LDCs Too rigid & Advanced Technical Specification Cannot be met by Country.

1. Adequate “Choice of Available Technologies for Alternative Design” purposes, considering:

- a).Physical layout
- b).Engineering design
- c).Availability of raw materials

2. Costs of Constructing & Operating Project facilities

- a) Machinery,
- b) Equipment,
- c) Spare Parts.

3. Manpower Req:

- a) From professional to labor
- b) locally available?
- c) Responses vary – sector to sector

Primary task of Technical Feasibility is Blueprinting:

- a) Manpower Needs
- b) Resources, and Design
- c) Provide Design Alternatives
- d) A Choice of Available Technologies,& Cost estimates for each alternative

Administration/Managerial Study (AM S)

Evaluates Strategy of company in Checking Out Project Activities. Providing info & Guidelines Used to improve overall Project Administration. Project manager in investigating team.

Examines 4 Components:

- a. External linkages,
- b. Internal organization,
- c. Personnel, and
- d. Management plan

Economical feasibility- Examines a Proposed Plan in terms of: Net Contribution to Industry /Economy & To society.

Addresses 3 Related Questions:

- a).Project-Responsive to “Urgent Present or Anticipated Economical/Social” need?
- b).Project-Planned Econ o/p Serve Intended Purpose?
- c).Service Proposed to be Performed by Project?
- d). Benefits - Justify Project - Cost?

Study of all of **Economical Implications of Project:**

- a).Demand & Supply of All Project- O/P.
- b).Project- Ability to Inc employment
- c).Project- “Multiplier” Effects (-Inc Purchase of goods Effect
- d).Effect on inc PS Revenue (income tax, sales),
- e).Use of Locally Available resources.

Assess Project- Net Contribution to Econ/social welfare of community. From costs of Construction & Operations. **Benefit> Cost** Project- Economically feasible. Profitability analysis can also be conducted.

Financial feasibility- Financial feasibility is the capability of project/organization to raise funds to implement the proposed project. It is the strength of an organization to support the proposed project to support its running cost whether a company can gather working capital required to start and run a project.

Market feasibility- Market feasibility should not be confused with Economical Feasibility.

Market feasibility analysis:

- a).Potential Impacts of Market Demand
- b).Competitive Activities, etc.
- c).Divertible Market Share -Available

Environmental feasibility-Concern must be shown. Action must be taken to address any & all environmental concerns raised or anticipated. Mega Dams issues are generally raised in environmental feasibility and all the near by surroundings are taken into consideration and alternative solutions are also taken into account.

Political feasibility-It can also be referred to politically correct project. political consideration often dictate the direction of project. It is one of the major influences on a project.

Safety feasibility-Safety parameters are also considered in Project Planning. Analysis is done if Project is Capable of Implementation & Operated Safely. Fact that minimal adverse effects on masses are carried are taken into consideration.

Reasons For Study

- a) Gives focus to the project.
- b) Narrows the business alternatives.
- c) Identifies new opportunities.
- d) Identifies reasons not to proceed.
- e) Provides valuable information for “go/no go” decision.
- f) Increases probability of business success by identifying weaknesses early.
- g) Provides documentation that the idea was thoroughly investigated.
- h) Helps attract funding from lenders, grant providers, etc.
- i) Helps attract equity investment

III. FINDINGS**Description of the Process:**

Identification and exploration of business scenarios. Define the project and alternative scenarios. Relationship to the surrounding geographical area.

MARKET FEASIBILITY

- a) Industry description.
- b) Industry competitiveness.
- c) Market potential
- d) Access to market outlets.
- e) Sales projection

TECHNICAL FEASIBILITY

- a) Determine facility needs.
- b) Suitability of production technology.
- c) Availability and suitable of site.
- d) Raw materials.
- e) Other inputs

FINANCIAL/ECCONOMICAL FEASIBILTY

- a) Estimate the total capital requirements.
- b) Estimate equity and credit needs.
- c) Budget expected costs and returns.

Economical feasibility methods

- a) **Return on investment (ROI)**-equals to net cash receipts of the project divided by the cash outlays of the project. Firms choose the project that provides the highest ROI. (Hoffer, George, Valacich)
- b) **Payback period (PP)**-is amount of time required for an investment to generate sufficient cash flows to recover its initial cost. Payback period is similar to the break-even analysis, except the fact that payback period ignores the concept of time value of money. (Baker and Powell)
- c) **Profitability index (PI)**-shows the relative profitability of any investment. It equal to the present value of cash inflow divided by present value of cash outflow. (Baker and Powell)

ORGANIZATIONAL/MANAGERIAL FEASIBILITY

- a) Business Structure
- b) Business Founders

The study results which can be obtained from study can help any organization to make crucial or key decisions related to their project and also forecast their future.

Once a project is passed feasible then an organization can take the following steps.

- a) Choosing the most viable business model, developing a business plan and proceeding with creating and operating a business
- b) Identifying additional scenarios for further study
- c) Deciding that a viable business opportunity is not available and moving to end the business assessment process and following another course of action.

IV. CONCLUSION

The feasibility analysis is an internationally accepted process used to evaluate various project dimensions important for achieving the desired project benefits. It is an effective tool for appraising the project from standpoints of all project stakeholders. It significantly reduces the risks in project implementation. While setting up a industry, expanding a business, overtaking a venture it is desirable to initially make a project feasibility study which examines various aspects of the venture like marketing, finance, technology, legal, ecological etc. Next the entrepreneur has to prepare a business plan. Depending on the type of project, location and investment involved, the entrepreneur has to proceed to take further steps in establishing the unit. As examined earlier all the feasibility study done can vary substantially with original results if there are various factors such as political etc. affecting a mega project.

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