Feasibility Studies

A feasibility study is a multi-dimensional set of actions which aims to analyse and evaluate a project in order to determine if its construction is feasible.

**What is Project Feasibility Study:**

A feasibility study is an analysis of how successfully a project can be completed, accounting for factors that affect it such as economic, technological, legal and scheduling factors. Project managers use feasibility studies to determine potential positive and negative outcomes of a project before investing a considerable amount of time and money into it.

Before planning any project, you must ask the question - Can this project be successful? If the answer is no, then the project should not commence. If there is only a very slight possibility for project success, then it is also unlikely the project should go ahead.

Some questions to ask in order to consider whether a project can be successful include:

- Is it technically possible?
- Is it achievable within budget?

In order to answer these critical questions, a project feasibility study must be conducted. The project feasibility study is a document containing a detailed description of the project, followed by a set of different feasibility areas. These are aspects of the project that will drive the success or failure of the project. This study will provide the necessary information so that you can decide whether or not your project will begin or whether it has a shot at success.
WHY A FEASIBILITY STUDY IS IMPORTANT IN PROJECT MANAGEMENT?

The purpose behind a project feasibility study is to know the different variables involved with your business venture and how it will be accepted on the open market along with who will be the target audience.

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Development of Feasibility Study

- Initial Idea
- Examination of Planning Policies
- List of Required Applications and Fees
- Examination of Site Characteristics
- Objectives
- Examination of Pertinent Documents
- Specifications
- Concept Plan Preparation
- Determination of Best Property Use
- Expectations

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Feasibility studies

- Definition of functional requirements
- Development of alternative concepts
- Quantitative assessment of alternatives

- The problem definition
- The creative process
- The analytical process
BENEFITS OF CONDUCTING A FEASIBILITY STUDY

A project feasibility study examines a number of variables and can reveal that even though a project might be profitable or beneficial to your company, you don’t have the resources to pull it off. A feasibility study might show that you should go forward with a project but at a specific time. Conducting a feasibility study helps you determine your likelihood of success and can indicate how and when to do a project.

Below are some key benefits of conducting a feasibility study:

- Improves project teams’ focus
- Identifies new opportunities
- Provides valuable information for a “go/no-go” decision
- Narrows the business alternatives
- Identifies a valid reason to undertake the project
- Enhances the success rate by evaluating multiple parameters
- Aids decision-making on the project
- Identifies reasons not to proceed
FEASIBILITY STUDIES FOR PROJECTS
Feasibility studies are preliminary studies undertaken in the very early stage of a project. They tend to be carried out when a project is large or complex, or where there is some doubt or controversy regarding the proposed development. The purpose of feasibility studies is to:

- Establish whether the project is viable.
- Help identify feasible options.
- Assist in the development of other project documentation such as the business case, project execution plan and strategic brief.

On large or complex projects, there may be a number of different feasibility studies carried out, sometimes requiring different skills, and considering issues such as:

- Planning permission.
- The likelihood that an environmental impact assessment will be required.
- Other legal/statutory approvals.
- Analysis of the budget relative to client requirements.
- Assessment of the potential to re-use existing facilities or doing nothing rather than building new facilities.
- Assessment of any site information provided by the client.
- Site appraisals, including geotechnical studies, assessment of any contamination, availability of services, uses of adjoining land, easements and restrictive covenants, environmental impact.
- Appraisal of servicing strategies.
- Programme considerations.
- Procurement options.
Feasibility Studies

USER DESIRABILITY
BUSINESS VIABILITY
TECHNICAL FEASIBILITY

What is the best use for this site?
- Allowable uses
- Your goals/mission
- Planning and zoning parameters
- Codes issues

What do you need?
- Site elements
  (circulation, parking, utilities, landscape)
- Building Elements

What goes where?
- Options for site organization
- Options for building organization

What approvals do you need?
- Planning
- Zoning
- Historic District

City + town approvals
- Approvals

Estimation

Before the project begins properly an estimate must be prepared for the work to be done during Feasibility Study phase

Estimate could be a timebox - a fixed team for a fixed period - or could be based on a schedule of workshops and the associated effort to complete the products

First estimate for the whole project is prepared towards the end of Feasibility Study

Rough estimate, based on high level requirements - assist management to assess the value and practicality of continuing with the project

Second estimate is produced at the end of the Business Study - scope of the project is decided, the necessary business functionality to be delivered is defined and prioritised, and the system architecture is defined

Detailed estimate as it based on the like major components of the delivered solution identified from the prioritised requirements

Estimate must reflect a level of risk and confidence that is acceptable to the relevant stakeholders

Purpose of this estimate is to plan and schedule the project and used to re-evaluate the Business Case to assess whether the project is still viable
About SDT

SDT international was established in 1991 as an engineering consultancy company that provides comprehensive range of services in the Structural, Mechanical, Electrical, Infrastructure, Environmental and Plumbing design.

For the past 22 years, we have been a pioneering force in the planning, design and implementation of development projects in the Middle East, UK and Australia.

With six offices in six countries, we employ high caliber specialized engineers capable to apply innovative approaches to design and deliver practical and cost effective solutions.