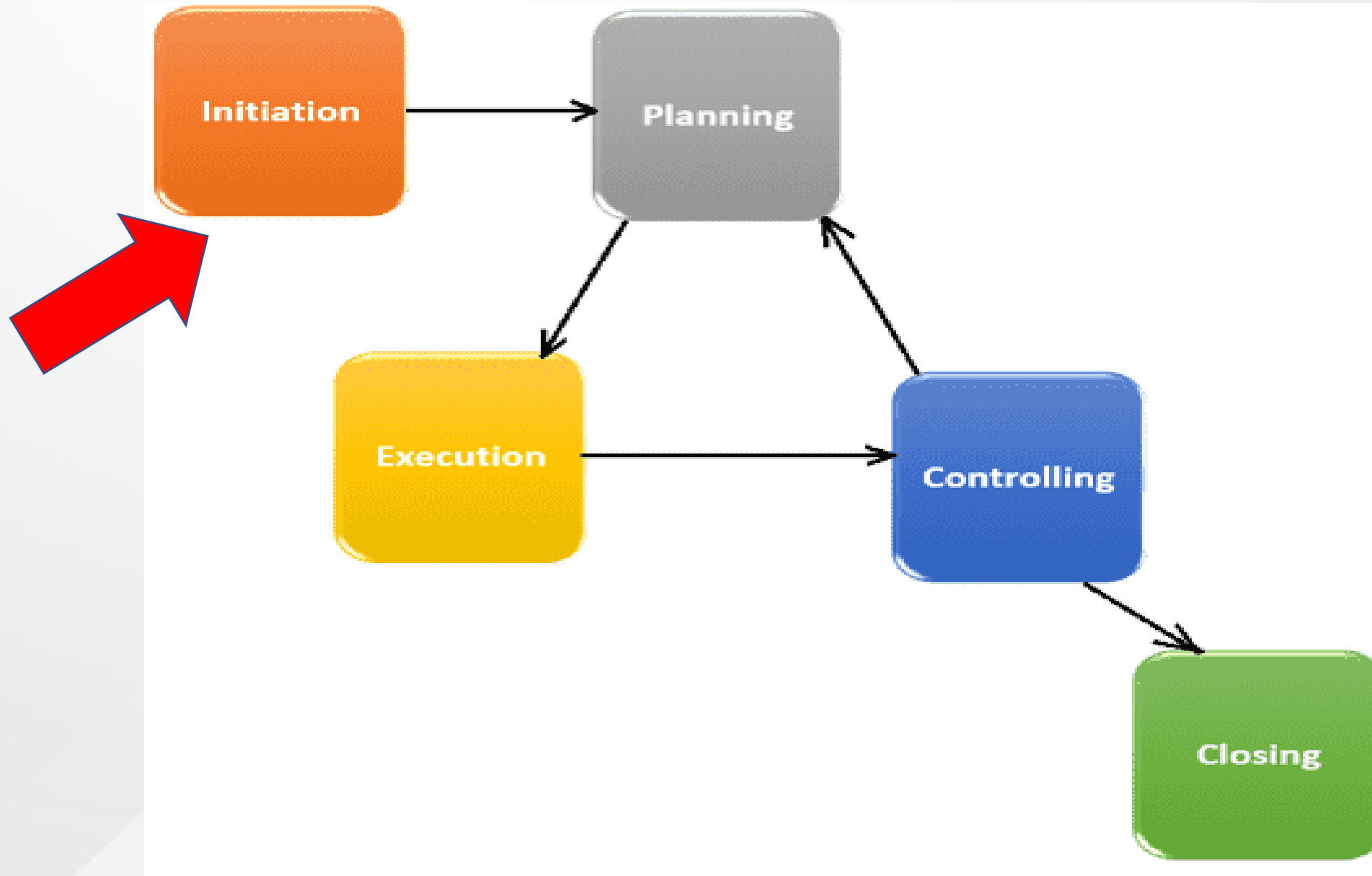


Project Planning

Lecture 3

PMG202
Feasibility Study

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Learning Outcomes

At the end of this chapter, students should be able to:

- Design the framework for a sound project feasibility study.
- Conduct a simple marketing feasibility study.
- Determine the components of the technical feasibility study.
- Conduct a financial analysis to determine the viability of the project.
- Identify the scope of the project environmental impact study, project organization study, and legal study.
- Illustrate the need to determine the project's impact on the national economy and society.

The project feasibility study



The project feasibility study - Definition

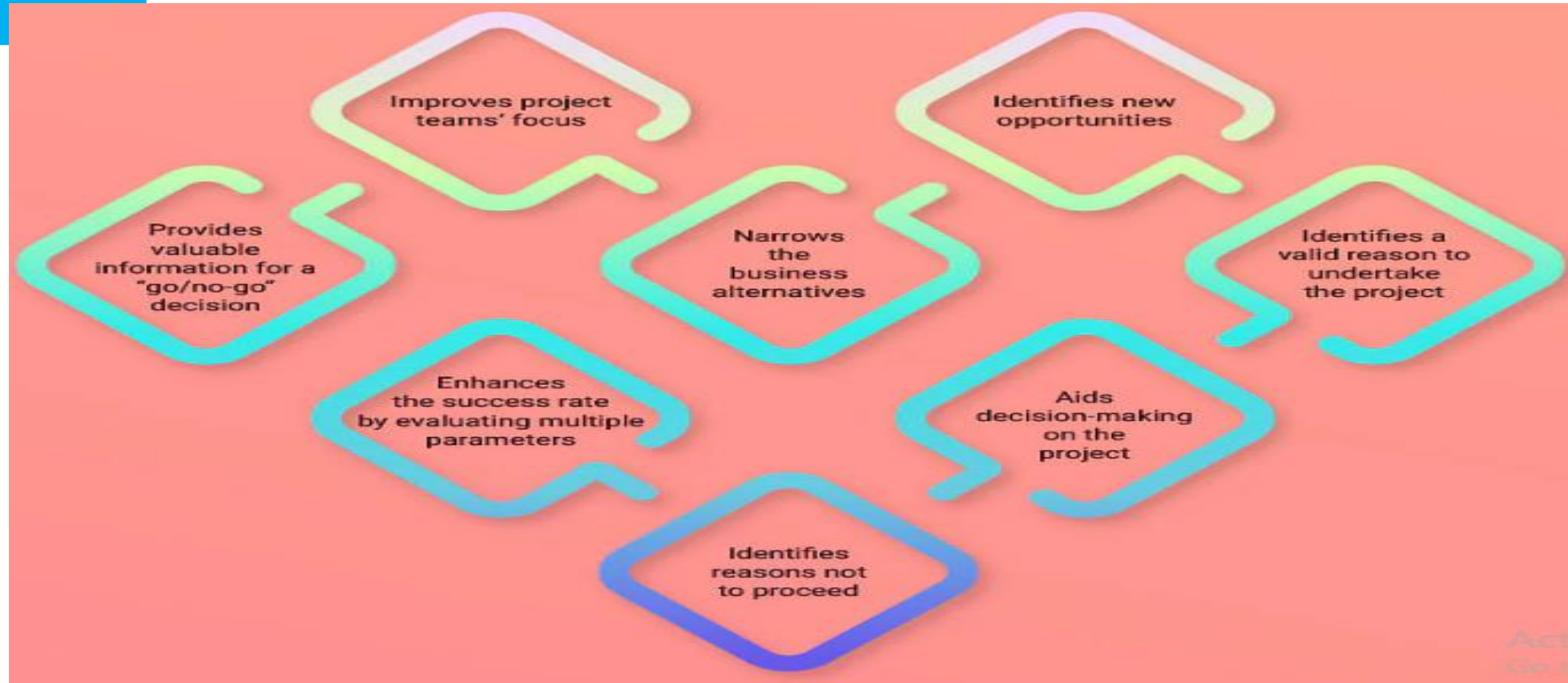
- The Term **“feasibility”** is derived from “feasible”, which simply means **capable of being done or accomplished.**



The project feasibility study - Definition

- The word “feasibility” means **the expected benefit or return from the project**.
 - The return may be **financial**, which is the **profit** that will accrue to the owner of the project.
 - The return may be **social**, which is the **benefit that will accrue to society**, such as satisfying the community’s need or employing a number of workers, as a solution to the problem of unemployment or meeting the needs of the local market for a specific good or service.

There are some key benefits of conducting a feasibility study:



Possible Constrains

When the project feasibility areas have all been examined, the study helps identify any constraints the proposed project may face, including:

Internal Project Constraints:

Technical, Technology, Budget, Resource, etc

Internal Corporate Constraints:

Financial, Marketing, Export, etc

External Constraints:

Logistics, Environment, Laws and Regulations, etc

Data Sources for a Feasibility Assessment

- Data required for a feasibility study can come from primary or secondary sources
 - **Primary data** can include formal interviews and surveys
 - Collection of primary data can be expensive and time consuming
 - **Ex:** Focus groups, interviews, observation, Questionnaire
 - **Secondary data** can include industry and trade publications, statistics of industry associations, and government agency reports, newspapers, magazines

Types of Feasibility (7 Types)

Feasibility study

Market Feasibility

Technical Feasibility

Financial Feasibility

legal Feasibility

Administrative Feasibility

Environmental Feasibility

Commercial profitability study

(1) Market Feasibility study



(1) Market Feasibility study

- **Market Feasibility study** means to ascertain whether there is a need, demand, or gap in the market for the project idea as a product or service.

(1) Market Feasibility study

A market study needs to collect information that covers the following questions:

- What is the **volume of demand** for the product to be studied?
- What is the **supply size** of the product to be studied?
- What is the **expected gap** in the market?
- What are **the methods of distributing the product** to be studied in the current market?
- What is the **selling price** of the product in the market?
- What are the **strengths and weaknesses** of the product compared to competing products?
- Are the **required raw materials available or not**? And what is **the alternative**?
- Where is the **site chosen** for the establishment of the project?
- Is this **site equipped with the basic services** for establishing the project?
- Is the **labor required** for the project **available**?



(1) Market Feasibility study

This study means that the owner of the project or its manager should stand on the following factors.

- The **availability of the project's needs** of raw materials and services
- The **appropriate quality** of these needs
- The **appropriateness of the price**
- The **appropriateness of the quantity**
- The appropriate **timing for the supply** of these requirements
- What are the appropriate **sources of supply**.

(2) Technical Feasibility study



(2) Technical Feasibility study

After determining the quantity of the product for the market that we mentioned in the previous step, the technical study comes as a next step.

The technical study means knowing the extent to which the product (commodity / service) can be manufactured, the steps for its production and manufacturing, the equipment and machinery required for production, determining the required labor, the project area, and what are the sources of raw materials and their specifications.



(2) Technical Feasibility study

The technical study includes the following stages:

1. Determine **the quantity/size of production** capacity needed by the market
2. Determine **the type of technical method** for manufacturing production.
3. Determine the **raw materials required for manufacturing** and their cost according to the production capacity
4. Determine **technological equipment** and machines according to production and their cost, in addition to other equipment.
5. Determine **the labor required** for production (administrative - financial - marketing) and its cost.

(2) Technical Feasibility study

The technical study includes the following stages:

6. Determine **the driving energy** (electricity - gas - water) and its cost.
7. Determine **the location of the project** and its proximity to markets, means of transportation and transportation, and its proximity to the main facilities.
8. Determine **the unit cost of the product + profit margin**.
9. Is the **project technically feasible**?

(3) Financial Feasibility study

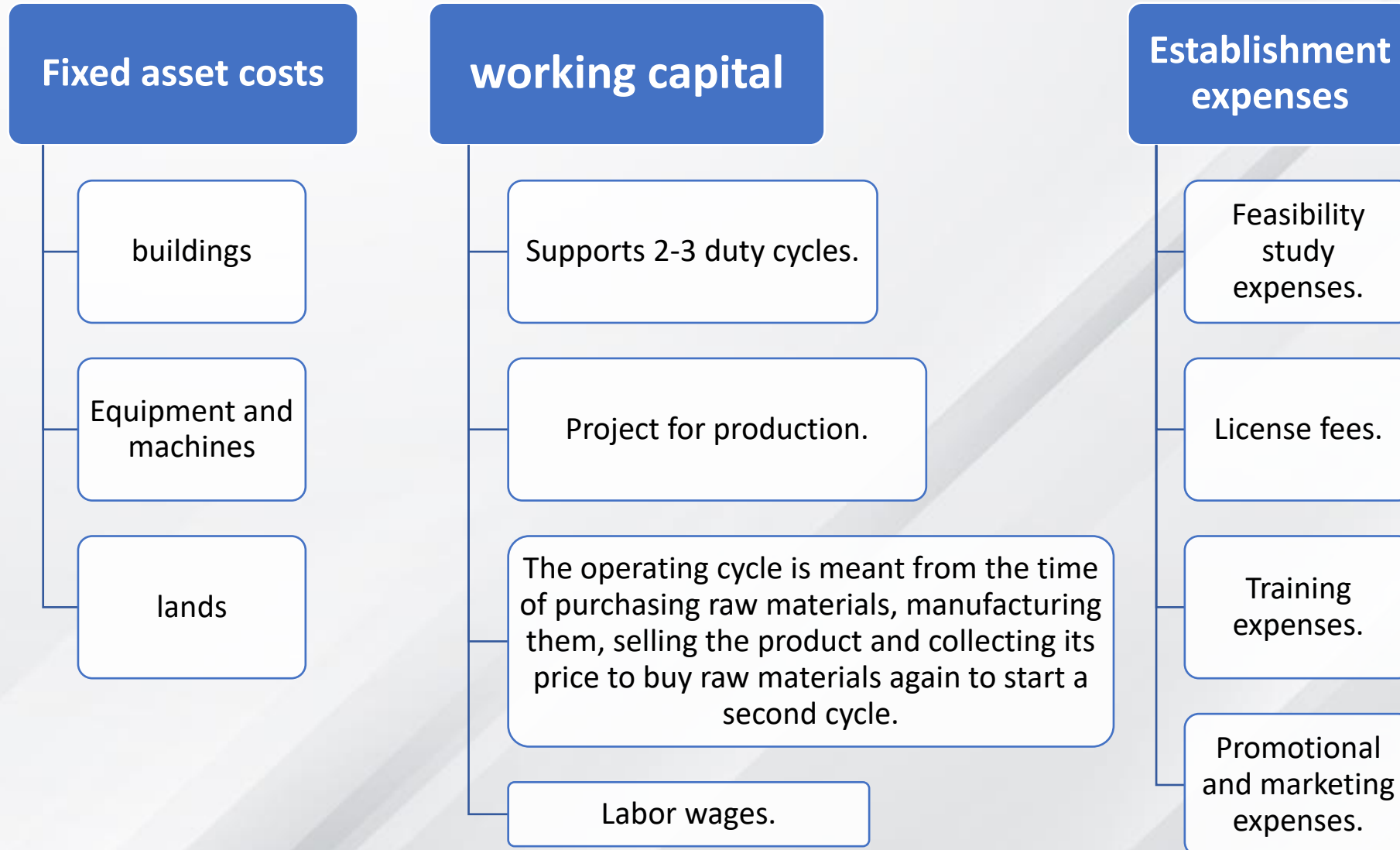


(3) Financial Feasibility study

This study aims to **determine the size of the necessary and optimal financing for the project (self - loan).**

This study requires collecting information related to estimating the costs of establishing and operating the project, how to obtain the necessary financing and its proper use, as well as its continuation for a reasonable period so that a return can be achieved.

(3) Financial Feasibility study



(4) Legal Feasibility study



(4) Legal Feasibility study

- **Legal Feasibility study** aims to identify the legislation that governs investment in the project and its impact on the establishment of the project, production, export, contracting and pricing.



(4) Legal Feasibility study

In this study, the following are known:

- **Public laws** and **government regulations**
- Choose the **legal form of the project**
- **Import systems**
- **Rules for the use of labor**, if required

(5) Administrative Feasibility study



(5) Administrative Feasibility study

This study aims to determine the following:

- ☐ **Determine the type of organizational structure** for the project
- ☐ **Designing the organizational structure** of the project
- ☐ Determine **work systems** (places - procedures - methods)
- ☐ **Job descriptions**
- ☐ **Appropriate employment** as / in quality / at the right time
- ☐ **Wage scales**

(6) Environmental Feasibility study



(6) Environmental Feasibility study

This study aims to determine the following:

- ☐ Determine **the impact of production** in the new project or product **on the environment**.
- ☐ **How to treat project waste** and its impact on the environment.
- ☐ **Security and safety of project personnel**

(7) Commercial Feasibility study



(7) Commercial Feasibility study

- It aims to **determine the profitability of the project and** is considered one of the topics of utmost importance in the feasibility study of projects.
- Through it, we know **all the costs** incurred by the project and **all the returns** it receives during the life of the project and **compare the cost with the returns** so that we can know the extent of **the profitability** of the project or not.
- Taking into account the timing of all the costs incurred by the project and all the revenues it collects, so that the costs and revenues are calculated according to the present value concept (the real value).



Summary

- **The project feasibility study (definition, benefits, constraints, Data Sources, and types)**
 - Market Feasibility
 - Technical Feasibility
 - Financial Feasibility
 - legal Feasibility
 - Administrative Feasibility
 - Environmental Feasibility
 - Commercial profitability study



Questions

Which of the following is not the purpose of feasibility study?

- Establish market trends
- Provide quality information for decision making
- Give focus to the project and outline alternatives
- Specify business alternative

Which of the following is included in the composition of feasibility study?

- Financial feasibility study
- Demographic feasibility study
- Physical feasibility study
- Resources feasibility study

Questions

Which of the following is among aspects of technical feasibility study?

Location

Demand

Security

Instruction

_____ is the process of determining whether a project idea is viable.

Feasibility study

Opportunity recognition

Viability analysis

Achievability analysis

Questions

_____ feasibility study is a quick financial assessment of the viability of a project idea.

Financial

Organizational

Institutional

Product/service

"Measures whether the organization has or can obtain the hardware, software, and people needed to deliver and then support the proposed information system."

The above statement describes one of the 4 feasibility assessments done by a System Analyst.

what is the feasibility assessment about?

Technical feasibility

Financial feasibility

Economic feasibility

Operational feasibility

Questions

Talking to industry experts, obtaining feedback from prospective customers, and administering surveys are examples of _____ research.

- primary
- secondary
- derivative
- fundamental

Trade journals, industry-related publications, government statistics, and competitors' Web sites are examples of _____ research.

- secondary
- primary
- derivative
- fundamental

Questions

What is an example of secondary research?

Newspaper
Focus Group
Observation
Questionnaire

What is an example of primary research?

Observation
Magazine
Newspaper
Government statistics

Questions

Public laws and government regulations are part of-----

Legal feasibility

Technical feasibility

Financial feasibility

Economic feasibility

Designing the organizational structure of the project is part of-----

Administrative feasibility

Technical feasibility

Financial feasibility

Economic feasibility



Thank You