

# Information Systems (තොරතුරු පද්ධති)

## Lesson 04

### (Information system and its feasibility)



# Objectives – Learning Outcomes

- The objectives of this section are to introduce information system and its feasibility on several aspects.

When you have followed this section you will:

- Understand Technical feasibility of a system
- Understand Economic feasibility of a system
- Understand Operational feasibility of a system
- Understand Organizational feasibility of a system



# Outline

- Preliminary Investigation
- Feasibility Study
  - Technical feasibility
  - Economical feasibility
  - Operational feasibility
  - Organizational feasibility



# Preliminary Investigation

In the first phase, the system is investigated. The objective of this phase is to conduct an initial analysis and findings of the system.

1. System (problems) Identification
2. System Scope
3. Alternate Solutions
4. Feasibility Study
5. Preliminary Plan (prioritizing)



# Preliminary Investigation Cont.

## 1. System (problems) Identification

This is the initial phase that used to identify the need for a new system. So It is very important step and everything performed in future depends on this phase

## 2. System Scope

The scope of the system is defined at this phase. The scope of a system can be decided based on many factors such as cost, time, availability of resources etc.



# Preliminary Investigation Cont.

## 3. Alternate Solutions

A system may be developed by many ways. This step identifies all possible ways to develop a system. It is used to select the best solution that fulfills the requirements.

## 4. Feasibility Study

A system must be affordable and acceptable for the organization. A feasibility study is used to find whether the proposed system is feasible. This decision depends on different issues such as financial and time limits.



# Preliminary Investigation Cont.

## 5. Preliminary Plan (prioritizing)

Preliminary plan is a written report . It is also called feasibility report. It is normally submitted to the top managers of the organization. They can take decision based on the report whether to reject or approve.



# Feasibility Study

In simple terms, a feasibility study involves taking a judgment call on whether a system is doable or not. There are several ways for judging the feasibility,

1. Technical Feasibility
2. Economic Feasibility
3. Operational Feasibility
4. Organizational Feasibility





# Feasibility Study – Technical Feasibility

- Assessment is centered on the technical resources available to the organization.
- It helps organizations assess if the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems.
- Technical feasibility also involves evaluation of the hardware and the software requirements of the proposed system.



# Feasibility Study – Economic Feasibility

- Helps organizations assess the viability, cost, and benefits associated with projects before financial resources are allocated.
- It also serves as an independent project assessment, and enhances project credibility, as a result.
- It helps decision-makers determine the positive economic benefits to the organization that the proposed system will provide, and helps quantify them.
- This assessment typically involves a cost/ benefits analysis of the system (Tangible/Intangible)



# Feasibility Study – Operational Feasibility

- This involves undertaking a study to analyze and determine whether your business needs can be fulfilled by using the proposed solution.
- It also measures how well the proposed system solves problems and takes advantage of the opportunities identified during scope definition.
- Operational feasibility studies also analyze how the project plan satisfies the requirements identified in the requirements analysis phase of system development.



# Feasibility Study – Organizational Feasibility

- This is concerned with determining whether the business itself has sufficient skills and resources to bring a particular product or service idea to market successfully
  - Management expertise
  - Organizational competence
  - Resources



# Feasibility Study – Benefits

- Gives project teams more focus and provides an alternative outline.
- 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.



# Summery

In this section you have given an idea about information system and its feasibility on several aspects

- Also this section covered the Technical, Economic, Operational & Organizational feasibility of a system & its benefits



# References

- SOFTWARE ENGINEERING, Ninth Edition, Ian Sommerville

**Next Lesson >>>**

**Lesson 05 : System Analysis & System Design**

