Information Systems
(තොරතුරු පද්ධති)
Part 7
(System Implementation & Maintenance)

Objectives – Learning Outcomes

- The objectives of this section are to get knowledge on System Implementation & Maintenance.

When you have followed this section you will:

About parallel/direct/pilot and phase implementation of systems

you will understand about system maintenance

Outline

- Implementation
  - Parallel
  - Direct
  - Pilot
  - Phase
- Review, Support and Maintenance

System Implementation

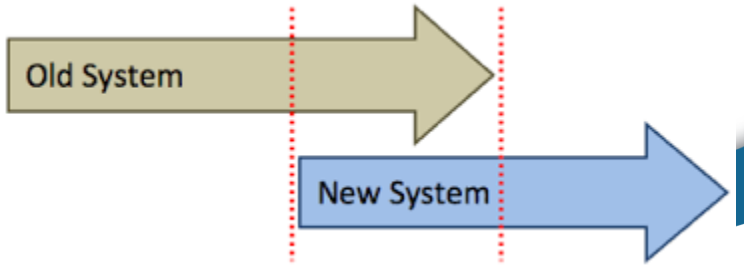
- What is System Implementation?
  - System implementation method is a systematically structured approach to effectively integrate a software/system based service or component into the workflow of an organizational structure or an individual end-user.

System Implementation Cont.

- System Implementation Methods
  - Parallel Implementation
  - Direct Implementation
  - Pilot Implementation
  - Phase Implementation

System Implementation Cont.

- Parallel Implementation
  - Both the old and new systems operate side-by-side for a period of time.
  - Both are maintained and kept up-to-date so that in the event of the failure of the new system, the organization can fall back on the old one.
  - It is an expensive option and very labor intensive, and there is a danger of staff ignoring the new system in favor of the old one.



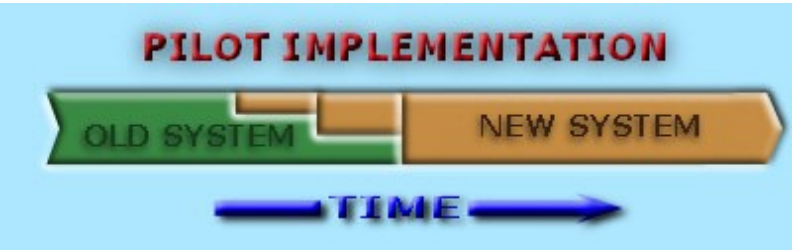
System Implementation Cont.

➢ Direct Implementation

- Once the system is tested and ready, the whole organization is transferred on one day to the new system.
- This is less expensive than running parallel systems and makes the transfer process less time-consuming.
- However, if the system develops a problem, the entire organization is affected, resulting in lost productivity and staff discontent.

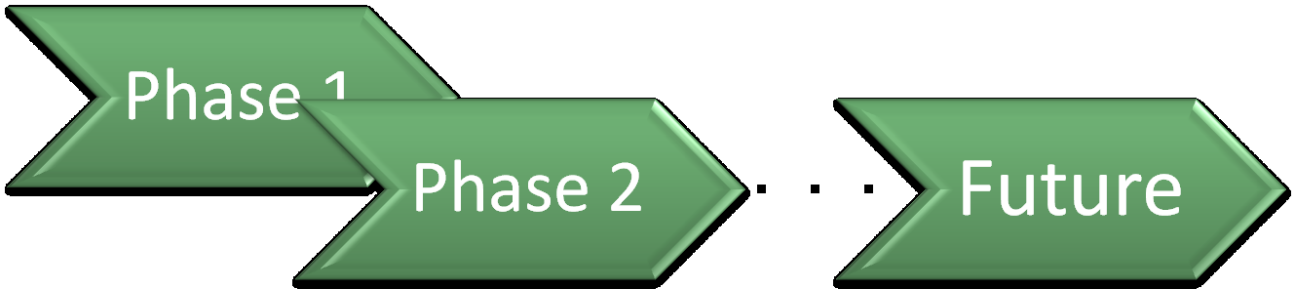
System Implementation Cont.

- Pilot Implementation
  - One section or department in the organization is completely changed over to the new system.
  - Any 'bugs' are ironed out before the system is extended to the whole organization.



System Implementation Cont.

- Phase Implementation
  - This involves bringing in the new system one step at a time.



System Maintenance

What is System Maintenance?

- It stands for all the modifications and updates done after the delivery of software product.
- There are number of reasons, why modifications are required,
  - Market Conditions
  - Client Requirements
  - Host Modifications
  - Organization Changes

System Maintenance Cont.

➢ Types of System Maintenance

- **Corrective Maintenance** - This includes modifications and updates done in order to correct or fix problems, which are either discovered by user or concluded by user error reports.
- **Adaptive Maintenance** - This includes modifications and updates applied to keep the software product up-to date and tuned to the ever changing world of technology and business environment.

.

System Maintenance Cont.

➢ Types of System Maintenance

- **Perfective Maintenance** - This includes modifications and updates done in order to keep the software usable over long period of time. It includes new features, new user requirements for refining the software and improve its reliability and performance.
- **Preventive Maintenance** - This includes modifications and updates to prevent future problems of the software. It aims to attend problems, which are not significant at this moment but may cause serious issues in future.

Summery

In this section you have given an idea about the entire process of System Development, System Testing, System Implementation and System Maintenance.

Also this section covered about different testing types, implementation types and maintenance approaches

References

- SOFTWARE ENGINEERING, Ninth Edition, Ian Sommerville
- https://www.tutorialspoint.com

End of the Series