MIS UNIT III

- JALPA PORIYA

STEPS IN SYSTEM IMPLEMENTATION

There are four basic methods for system implementation:

- (i) Install a system in a new operation or organization, one just formed.
- (ii) Cut off the old system and install new. This produces a time gap during which no system is in operation.

STEPS IN SYSTEM IMPLEMENTATION CONTI.

(iii) Cut over by segments, this method is also referred to as —phasing in∥ in the new system. Small parts or subsystems are substituted for the old.

(iv) Operate in parallel and cut over. The new system is installed and operated in parallel with the current system until it has been check out; then the current system is cut out.

STEPS IN SYSTEM IMPLEMENTATION

- (A) Plan the Implementation
- (B) Acquire Floor Space and Plan Space Layout
- (C) Organize the Implementation
- (D) Develop Procedures for Implementation
- (E) Train the Operating Personnel

STEPS IN SYSTEM IMPLEMENTATION

- (F) Computer Related Acquisition
- (G) Develop Forms for Data Collection and Information Dissemination
- (H) Develop the Files
- (I) Test the System
- (J) Cutover
- (K) Document the System

(A) PLAN THE IMPLEMENTATION

The three main phases in implementation take place in series; these are the initial installation; the test of the system as whole; and the evaluation -maintenance and control of the system.

(A) PLAN THE IMPLEMENTATION

The first step is plan for implementation that having the following steps:

- 1. Identify the Implementation Task: Before starting implantation system analyst should identify the implementation tasks. The plans should list all subtasks for each of these major tasks so that individuals in the organization may be assigned specific responsibilities.
- 2. Establish Relationship Among Task: In the small system, the order of performance may be simply be described in text form. In large project, many concurrent and sequential activities are interrelated, so that a network diagram must be employed in any good plan.

- 3. Establish a Schedule: A first estimation of the schedule is prepared by having a system designer estimate the times between the events in the program network. The critical time should be calculated. Management may apply pressure or provide additional personnel to shorten the network times.
- 4. Prepare the Cost Schedule ties to Tasks and Time: The cost for completing each milestone and possibly each task required to complete a milestone, should be established as part of the plan, then the rate of expenditure should be budgeted.
- 5. Establish a Reporting and Control System: Reporting and control of the work in progress may be obtained by weekly meetings of the key people involved or by brief written progress reports. The objective of the control system is to minimize the confusion and the associated delays and costs.

(B) ACQUIRE FLOOR SPACE AND PLAN SPACE LAYOUT

The installation of a new system to replace a current one may require a major revision of facilities as well as completely new office, computer room and production layouts.

The MIS manager must prepare rough layouts and estimates of particular floor areas he or she feels needed. The manager should prepare cost estimates for this.

(C) ORGANIZE THE IMPLEMENTATION

Once the implementation tasks have been defined in the planning phase, manager usually assigns a project manager to guide the implementation.

A manager of MIS may assume this responsibility by virtue of a permanent assignment.

(D) DEVELOP PROCEDURES FOR IMPLEMENTATION

The project leader has available the network plan for proceeding with the implementation.

The leader must now call upon key people in the project to prepare more detail procedure for system implementation.

The system analyst must develop the procedure for delivering instructions and forms to supervisors, for coordinating and integrating this very small portion of the MIS with other parts of the manufacturing system, and for the working out the problem involved.

(E) TRAIN THE OPERATING PERSONNEL

A program should be develop to support management and personnel the nature and goals of the MIS and to training of operating personnel in their new duties.

Practical attention should be paid the training of first -line supervisors, then to professional support personnel like accounting and production personnel and then operational personnel like clerk etc.

(F) COMPUTER RELATED ACQUISITION

Computer related acquisition have the following basic parts:

```
(i) Hardware
```

(ii) Software

(iii) Personnel

(iv) Materials

(G) DEVELOP FORMS FOR DATA COLLECTION AND INFORMATION DISSEMINATION

A vast amount of detailed data, both external and internal to the company, must be colleted for input to the MIS.

Forms are required not just for input and output but also for transmitting data at intermediate stages.

So the form should be develops to collect data.

(H) DEVELOP THE FILES

In the implementation stage, the actual data must be obtained and recorded for the initial testing and operation of the system.

This requires a checklist of data, format of data, storage form and format, and remarks to indicate when the data have been stored.

The implementation also requires the development of a procedure for updating each piece of the data and for updating entire sections of the file s required. The translation of specifications for files into computer programs is the function of computer specialists.

(I) TEST THE SYSTEM

As each part of the system is installed, test should be performed in accordance with the test specifications and procedures described earlier.

Tests during the installation stage consist of component tests, subsystem tests, and total system acceptance tests. Components test may include; equipments, old and new; new forms; new software; new data collection methods; new work procedures and new reporting formats.. As more subsystem installed subsystem may be tested.

(J) CUTOVER

Cutover is the point at which the new component replaces the old component or the new system replaces the old system.

This usually involves a good deal of last-minute physical transfer of the files, rearrangement of office furniture and movement of workstations and people.

Old forms, old files, and old equipments are suddenly retired.

(K) DOCUMENT THE SYSTEM

Documentation of the system means preparation of written descriptions of the scope, purpose, information flow components and operating procedures of the system.

Documentation is not a frill; it is a necessary -for troubleshooting, for the replacement of the subsystems, for interfacing with other system, for training new operating personnel and also for evaluating and updating the system.

ORGANIZATIONS EVALUATE THE MIS

After the MIS has been operating smoothly for a short period of time, an evaluation of each step in the design and final system performance should be made.

The evolution should be made by the customer as well as by the designers. They should also attempt to identify cost savings and increased profit directly attributable to the MIS. Following structure is generally used to partial evaluation
The measurements of the costs and benefits are the
measurement of the changes or differences between the old
and new.

Hierarchy in the MIS: Company Profit, Company Costs & Revenues, Decisions, Information, System Characteristics

For a particular MIS, The designer may select the level at which measurement is to take place based upon specific objectives of the MIS.