

Sources of information

1) Internal Sources

- TPS
- Database
- Report & Docs
- Employee input

2) External Sources

- Market Research report
- Public Database
- Web & Social media
- Suppliers and partners
- Govt report

3) Automated vs Manual Data entry

→ Automated (without human) ⇒ lot, api

→ Manual (Require human) ⇒ Customer Service Notes

Implementation of MIS

1) Requirement Gathering Analysis

2) Feasibility Study

- Technical
- Financial
- Operational

3) System Design and Development

- CSD
- DFD - Data Flow Diagram
- Database design
- UI Design

4) Development and Testing

- System Development
- Unit testing
- Integration testing
- User Acceptance Testing (UAT)

5) Data Migration

- Data mapping
- Data cleaning
- Data migration

6) Deployment

- Install mis
- Configure
- Pilot Testing (Test in single dept)

7) Training and Change management

- Create training program
- Develop user manuals
- Change management

8) Monitoring and Maintenance

- System monitoring
- Troubleshooting and Support
- System updates

9) Post Implementation Review

- Collect feedback
- Measure performance
- Identify improvement areas

Training and Operating Personnel

Employee has necessary skills and knowledge to use manage and troubleshoot the system effectively.

Importance

- 1) Improved efficiency
- 2) User adoption
- 3) Reduced downtime
- 4) Maximizing ROI

Types of Training

- 1) Role based Training
- 2) On the job training
- 3) Workshop and Seminars
- 4) Online Training
- 5) Simulations

Key Components of Training

- 1) System Overview
- 2) Operational Guidelines
- 3) Advanced functionalities
- 4) Troubleshooting basics
- 5) Data Security practices

Importance of Operating personnel

- 1) Continuous Monitoring
- 2) Maintenance updates
- 3) User Support

Challenges in Training and operating

- 1) Resistance to Change
- 2) Resource limitation
- 3) Time constraints
- 4) Skill gap

Computer Related Acquisitions

Selecting and procuring hardware, software and network

Importance

- 1 System Comptability
- 2 Scalability
- 3 Cost - Effectiveness
- 4 Operational Efficiency

Components

- 1) Hardware assets
- 2) Software assets
- 3) Network assets
- 4) Cloud services

Process of Acquisitions

- 1) Needs assessment
- 2) Vendor Selection
- 3) Procurement planning
- 4) Installation and Testing

Challenges

- 1) Budget
- 2) Compatibility
- 3) Rapid Technological changes
- 4) Vendor dependence

Developing forms for data collection

- Design user friendly forms
- Standardize across the org
- Ensure data validation and accuracy
- Automate information dissemination

Steps

- 1 Identify requirements
- 2 Define the purpose
- 3 Design the form
- 4 Add validation rules
- 5 Test the form
- 6 Digitize the form

Key element

- 1) Heading purpose
- 2) Field name and label
- 3) Input field
- 4) Instruction
- 5) Submission detail

Challenges

- 1) Complexity
- 2) Data overload
- 3) Inconsistent formatting
- 4) Integration

Best practice

- 1) Keep it simple
- 2) Focus on relevance
- 3) Enable Feedback
- 4) Ensure accuracy

Developing Files

- Involves organizing data into well structured, secure, and efficient files to support the system storage, processing, and reporting needs.

Types of file

- 1) Master (Rigid)
- 2) Transaction (Dynamic)
- 3) Reference
- 4) Backup
- 5) Archive

Steps

- 1) Identify data requirement
- 2) choose file types
- 3) define file structure
- 4) Design file layout
- 5) Establish file access methods
- 6) Integrate file validation
- 7) Test the files
- 8) Document the file design
- 9) Implement backup and security measure

Challenges

- 1) Data redundancy
- 2) Data inconsistency
- 3) File corruption
- 4) Access conflicts

System Cut over

Transitioning from old system to new MIS

- Direct cut over
- Parallel Cut over
- Phased Cut over
- Pilot Cut over

Activity in cut over

- 1) Data migration
- 2) Testing
- 3) User training
- 4) Backup and Recovery
- 5) System Go live
- 6) Monitoring and Support

Challenges

- 1) Data loss or corruption
- 2) User Resistance
- 3) Downtime
- 4) System failure
- 5) Resource overload

Past - Cut over activity

1. Monitoring and fine-tuning
2. User feedback collection
3. Ongoing support and training
4. System documentation update

Documenting

Understandable
~~understand~~, maintainable and
Scalable over time

Process

- 1) Identify audience needs
- 2) Organize information
- 3) Use visual aids
- 4) Ensure clarity and accuracy
- 5) Test the documentation
- 6) Maintain updates

- 1) User manual
- 2) Technical documentation
- 3) Troubleshooting guides
- 4) Training materials

Evaluating MIS

It aligns with org. goals provides value and operate efficiently.

- 1) Identity gap
- 2) Support goals
- 3) Cost Justification

Objective

- 1) Assess System Effectiveness
- 2) Measure Efficiency
- 3) Identify Weakness.

Framework

- 1 System performance
- 2 Usability (ease of navigation and visual)
- 3 Data management (consistency, accuracy and completeness data)
- 4 Org Impact (measure reduction in manual task)
- 5 Scalability and Maintenance
- 6 Feedback metrics

Quantitative metrics

- 1) Error rate
- 2) System availability
- 3) Task Completion rate
- 4) ROI

Evaluation metrics

- 1) System performance metrics
 - Accuracy
 - Response time
 - Down time
 - Processing Speed

2) Usability metrics

- User satisfaction
- Task completion
- Error rate

- 3) Data Quality metrics
- 4) Decision making support metrics
- 5) Cost and Efficiency metrics
- 6) Security metrics