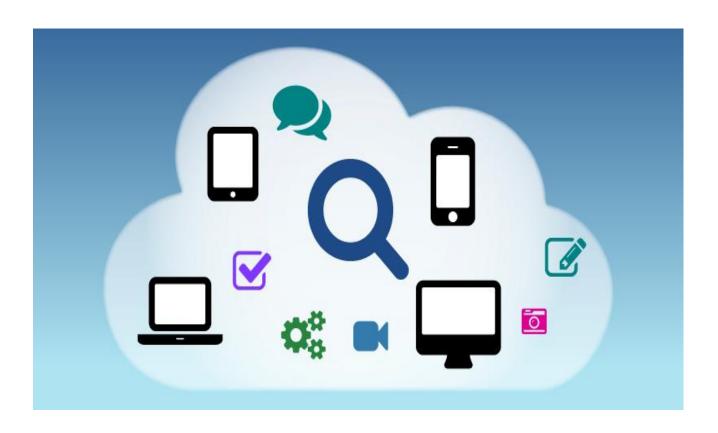


# 13. INFORMATION TECHNOLOGY







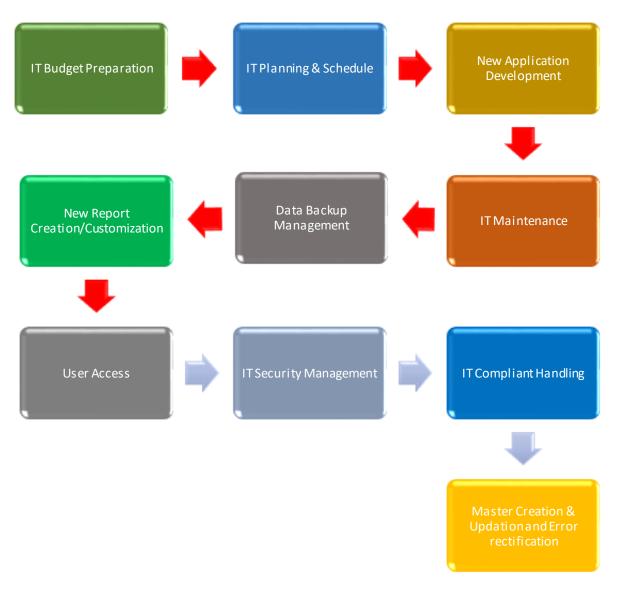
#### 13. INFORMATION TECHNOLOGY

#### **PROCESS SUMMARY**

#### **Objective:**

- Ensure on-time updating and Customization of ERP System as per the requirement of Users
- Ensure on-time backup of Data from System
- Conduct periodic Maintenance of IT Assets (Server, Network and Hardware)
- Ensure on-time providing of IT Training to Users

#### **Process Overview:**







## **Process beginning:**

• IT Budget Preparation and Planning

## **Process ending:**

• Master Code Creation and Updating in System

## **Key Inputs**

Particulars	From	Document Code
Annual Business Plan	Sales & Marketing	S&M/COM/002
Critical IT Assets	Purchase	ITS/COM/007
New Application Requisition	Respective HOD	ITS/COM/008
Application Feedback	Respective user	ITS/COM/010
New Report Creation/Customization Requisition	Respective HOD	ITS/COM/012
Email ID Creation Requisition	HR	ITS/COM/016
User Access Requisition	Respective HIOD	ITS/COM/020
Internet Access Requisition	Respective HOD	ITS/COM/021
IT Complaint Slip	Respective User	ITS/COM/022
Master Code Creation Form	Respective HOD	ITS/COM/023
Master Code Updation and Removal Form	Respective HOD	ITS/COM/024
Data Entry Error Rectification Form	Respective User	ITS/COM/025

## **Key Outputs**

Particulars	То	Document Code
Location Wise IT Budget Plan	F&A, MD	ITS/COM/002
IT Maintenance Schedule	IT, AMC	ITS/COM/003
IT Backup Schedule	IT	ITS/COM/004
Software License Renewal Schedule	IT, F&A	ITS/COM/006
Application Scope	Respective Department	ITS/COM/009
Application Signoff	Respective HOD	ITS/COM/011
IT Backup Register	MD	ITS/COM/015
Server Maintenance Register	IT	ITS/COM/017
Network Maintenance Register	IT	ITS/COM/018
Acknowledgement	Respective User/HOD	ITS/COM/030





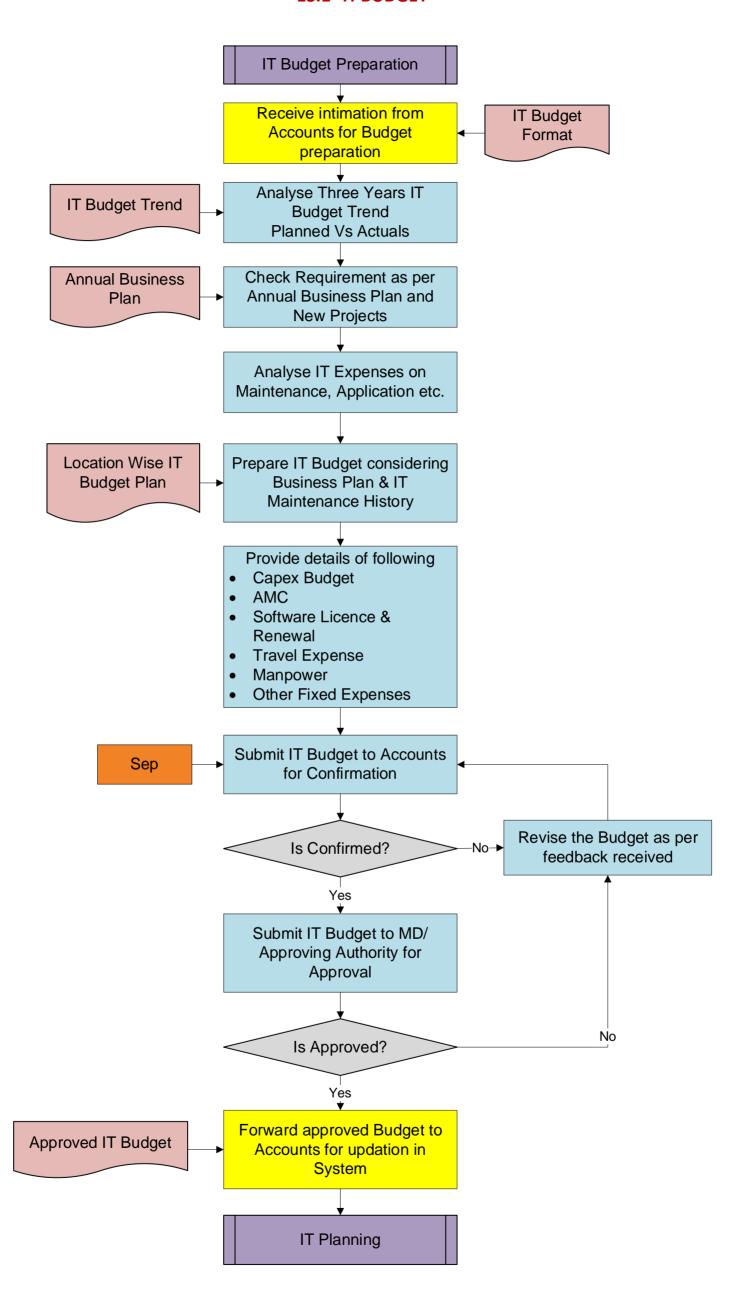
## Key Documents / Register / Files

Document / Register Name	Document Format	Document Code
IT Budget Trend	Excel	ITS/COM/001
Annual Business Plan	Excel	S&M/COM/002
Location Wise IT Budget Plan	Excel	ITS/COM/002
IT Maintenance Schedule	Excel	ITS/COM/003
IT Backup Schedule	Excel	ITS/COM/004
Information Security Policy	Word	ITS/COM/005
Software License Renewal Schedule	Excel	ITS/COM/006
Critical IT Assets	Excel	ITS/COM/007
New Application Requisition	Pre-Printed Form	ITS/COM/008
Application Scope	Word	ITS/COM/009
Application Feedback	Pre-Printed Form	ITS/COM/010
Application Signoff	Pre-Printed Form	ITS/COM/011
New Report Creation/Customization Requisition	Pre-Printed Form	ITS/COM/012
Application Master	Excel	ITS/COM/013
Report Master	Excel	ITS/COM/014
IT Backup Register	Excel	ITS/COM/015
Email ID Creation Requisition	Pre-Printed Form	ITS/COM/016
Server Maintenance Register	Excel	ITS/COM/017
Network Maintenance Register	Excel	ITS/COM/018
Computer, Printer Maintenance Register	Excel	ITS/COM/019
User Access Requisition	Pre-Printed Form	ITS/COM/020
Internet Access Requisition	Pre-Printed Form	ITS/COM/021
IT Complaint Slip	Pre-Printed Form	ITS/COM/022
Master Code Creation Form	Pre-Printed Form	ITS/COM/023
Master Code Updation and Removal Form	Pre-Printed Form	ITS/COM/024
Data Entry Error Rectification Form	Pre-Printed Form	ITS/COM/025
Email ID Master	Excel	ITS/COM/026
IT Compliant Register	Excel	ITS/COM/027
IT AMC Register	Excel	ITS/COM/028
Data Entry Error Register	Excel	ITS/COM/029
Acknowledgement	Mail/Form	ITS/COM/030





#### 13.1 IT BUDGET







IT Manager IT Head

#### **Departments Involved:**

All Departments

## **Key activities:**

13.1.1 IT Budget Analysis

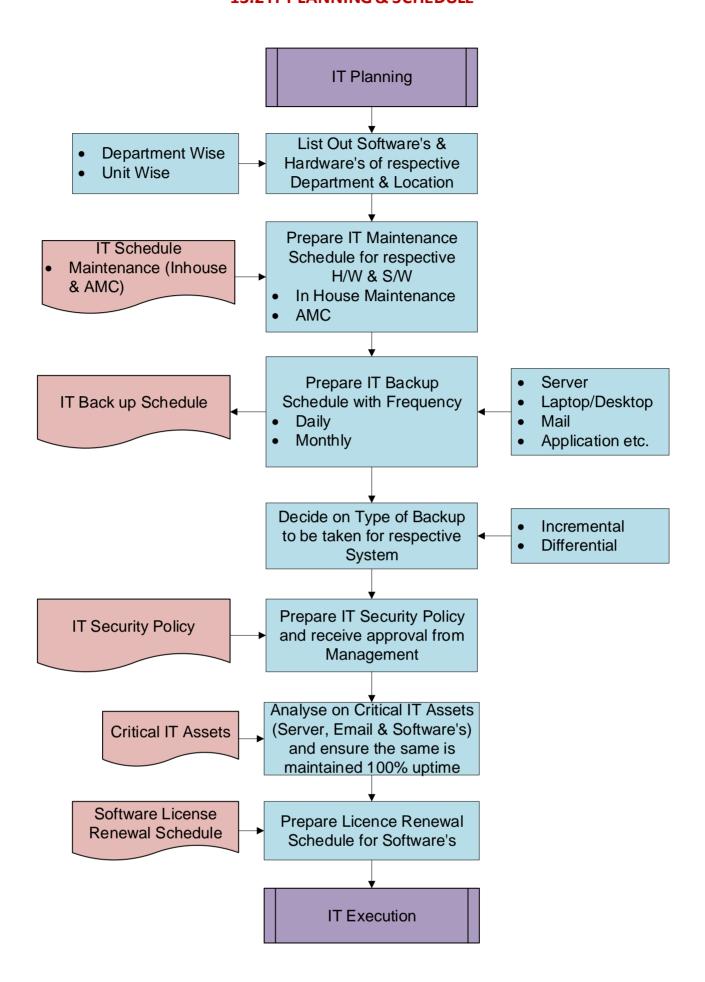
13.1.2 Preparation and Approval of IT Budget

Process	Maker	Checker	Approver
13.1.1 IT Budget Analysis			
1) Receive intimation from Accounts for Budget	F&A	IT Manager	-
preparation			
2) Analyze Three Years IT Budget Trend Planned Vs Actual	IT Manager	IT Head	-
and Check requirement as per Annual Business Plan			
and New Projects			
3) Analyse IT expensés on Maintenance, Application etc.	IT Manager	IT Head	-
13.1.2 Preparation and Approval of IT Budget	T	ī	T
1) Prepare Location Wise IT Budget plan considering	IT Manager	IT Head	-
Business Plan, & IT Maintenance History			
2) Provide details of following	IT Manager	IT Head	-
<ul> <li>Capex budget</li> </ul>			
• AMC			
<ul> <li>Software License &amp; Renewal</li> </ul>			
<ul> <li>Travel Expense</li> </ul>			
<ul> <li>Manpower</li> </ul>			
<ul> <li>Other Fixed Expenses</li> </ul>			
3) Submit IT Budget to Finance &Accounts for	IT Manager	IT Head	Finance
Confirmation			Head
4) On approval from F&A, Submit IT Budget to MD/	IT Manager	IT Head	MD/
Approving Authority for Approval			Approving
			Authority
5) Forward approved Budget to Accounts for updation in	IT Manager	F&A	-
System			
6) If not confirmed, Revise the Budget as per feedback	IT Manager	IT Head	-
received			





#### 13.2 IT PLANNING & SCHEDULE







IT Manager IT Head

#### **Departments Involved:**

All Departments

#### **Key activities:**

13.2.1 IT Maintenance Planning & Schedule

13.2.2 IT Backup Planning

13.2.3 IT Security Planning

13.2.4 License Renewal Schedule

Activity	Maker	Checker	Approver
13.2.1 IT Maintenance Planning & Schedule			
1) List Out Software's & Hardware's of respective	IT Manager	IT Head	-
Department & Location			
Department Wise			
Unit Wise			
2) Prepare IT Maintenance Schedule for respective H/W &	IT Manager	-	IT Head
S/W			
• In House Maintenance			
• AMC			
3) Analyze on Critical IT Assets (Server, Email & Software's)	IT Manager	IT Head	-
and ensure the same is maintained 100% uptime			
13.2.2 IT Backup Planning			
1) Prepare IT Backup Schedule for Server, Laptop/Desktop,	IT Manager	-	IT Head
Mail, Application etc. with following Frequency			
• Daily			
• Weekly			
Monthly			
2) Decide on Type of Backup to be taken for respective	IT Manager	IT Head	-
System			
• Incremental			
Differential			
13.2.3 IT Security Planning			
1) Prepare IT Security Policy and receive approval from	IT Manager	-	IT Head
Management			
2) Update IT Security Policy based on requirement	IT Manager	IT Head	-
3) Ensure all the functions were covered in IT Security	IT Manager	IT Head	-
Policy			



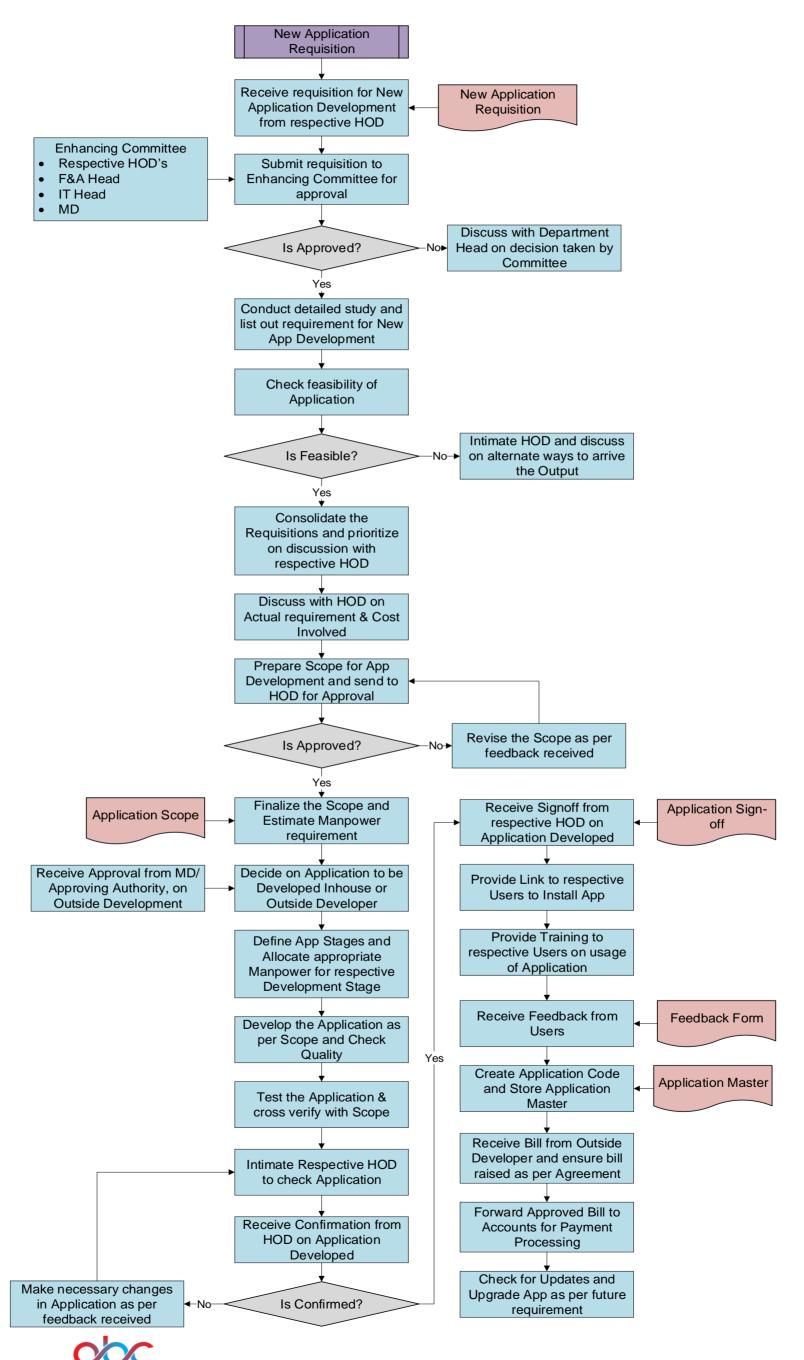


Activity	Maker	Checker	Approver
13.2.4 License Renewal & Schedule			
1) Prepare License Renewal Schedule for Software's	IT Manager	ı	IT Head
2) Ensure all the Software's were incorporate in License	IT Manager	IT Head	-
Renewal Schedule			
3) Update Schedule on Purchase of New	IT Manager	IT Head	-
Software's/Applications			
4) Check for any certification to be renewed on timely basis	IT Manager	IT Head	-
and update the same in schedule			





#### 13.3 NEW APPLICATION DEVELOPMENT





IT Manager IT Head

#### **Departments Involved:**

All Departments

#### **Key activities:**

13.3.1 New Application Requisition

13.3.2 Preparation of Application Scope

13.3.3 Application Development & Quality Testing

13.3.4 Application Handover & Signoff

13.3.5 User Training

13.3.6 Upgradation of Application

Activity	Maker	Checker	Approver
13.3.1 New Application Requisition			
1) Receive Requisition for New Application Development	Respective	IT Head	MD
from respective HOD	HOD		
2) Submit requisition to Enhancing Committee for approval	IT Head	Committee	-
Respective HOD's		Members	
F&A Head			
➤ IT Head			
➤ MD			
3) Discuss with Committee on requirement of New	IT Head	Committee	-
Application, Cost involved and process improvements		Members	
4) On approval from Committee, conduct detailed study	IT Manager	IT Head	Committee
and list out requirement for New Application			Members
Development.			
5) In case of not approved, discuss with HOD on decision	IT Head	Respective	-
taken by Committee Members.		HOD	
6) Check feasibility of Application and provide confirmation	IT Manager	IT Head	-
to respective HOD.			
7) If not feasible, Intimate HOD and discuss on alternate	IT Manager	IT Head	-
ways to arrive the Output			
8) Consolidate the Requisitions and prioritize on discussion	IT Manager	IT Head	-
with respective HOD & MD			
9) Decide on Application to be developed Inhouse or	IT Manager	IT Head	-
Outside Developer			
13.3.2 Preparation of Application Scope			
Inhouse Development			
1) Define Objective and Check requirements for	T Manager	IT Head	-
development of Application			





Activit	v	Maker	Checker	Approver
2)	Discuss with HOD on confirmation of Actual requirement	IT Manager	IT Head	-
3)	Define Stage Wise Application Development and arrive	IT Manager	IT Head	-
	at Due date for going live.	_		
4)	Check for Manpower requirement, Manhours to develop	IT Manager	IT Head	-
	the Application and Allocate appropriate Manpower for	_		
	respective Development Stage			
5)	Prepare Scope for App Development and send to HOD	IT Manager	IT Head	Respective
	for Approval			HOD
6)	If not approved, Revise the Scope as per feedback	IT Manager	IT Head	-
	received			
7)	On Approval, Finalize the Scope and Due Date of	IT Manager	IT Head	-
	Application Development.			
	e Developer			
1)	Identify Outside Developer and request for Vendor	IT Manager	IT Head	-
	Profile			
2)	Filter Companies based on profile and provide	IT Manager	IT Head	-
	requirements for Application Development			
3)	Receive Project Scope with Quotations from Minimum	IT Manager	IT Head	-
	Three Vendors			
4)	Select Vendor based on Price, Delivery Date etc. Ensure	IT Manager	IT Head	-
	the Price quoted were within the Budget.	IT NA	IT III and	N45/
5)	Submit to MD/Approving Authority for Approval	IT Manager	IT Head	MD/
				Approving
6)	On Approval from MD, Issue Confirmation to Vendor for	IT Managar	IT Head	Authority
0)	Development	IT Manager	Ппеац	-
12 2 2	Application Development& Quality Testing			
	Develop the Application as per Scope and Check Quality	IT Manager	IT Head	_
	Test the Application & cross verify with Scope	IT Manager	IT Head	_
3)	Intimate Respective HOD to check Application and	IT Manager	IT Head	Respective
3,	receive confirmation from HOD on Application	11 Wallage	i i i i cau	HOD
	Developed Total Tion Tion Application			
4)		IT Manager	IT Head	_
'	as per feedback received			
13.3.4	Project Handover & Signoff			1
1)		IT Manager	IT Head	Respective
	on Application Developed			HOD
2)		IT Manager	IT Head	-
	User Training			
1)	Provide Training to respective Users on usage of	IT Manager	IT Head	-
	Application			



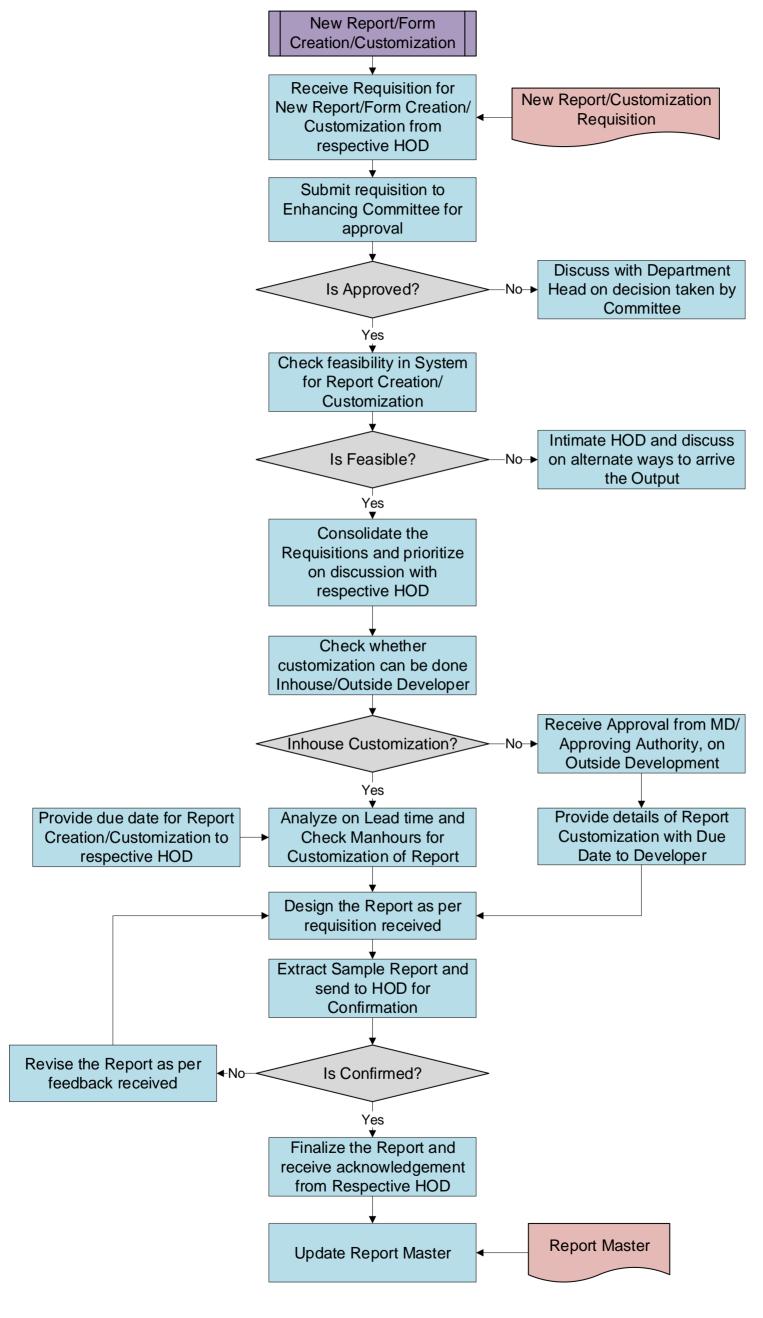


Activity	Maker	Checker	Approver
2) Receive Feedback from Users with the help of feedback	Respective	IT Manager	-
form	User		
3) Create Application Code and Store Application Master	IT Manager	IT Head	-
13.3.6 Application Upgradation			
1) Check for Updates and Upgrade App as per future	IT Manager	IT Head	-
requirement			





## 13.4 NEW REPORT/FORM CREATION & CUSTOMIZATION







IT Manager IT Head

#### **Departments Involved:**

All Departments

#### **Key activities:**

13.4.1 New Report/Form Requisition

13.4.2 Developing of New Report – Inhouse/Outside Developer

13.4.3 Finalizing of Report

Activity	Maker	Checker	Approver
13.4.1 New Report/Form Requisition			
Receive Requisition for New Report Creation/ Customization from respective HOD	Respective HOD	IT Manager	-
2) Submit requisition to Enhancing Committee for approval  Respective HOD's  F&A Head  IT Head  MD	IT Head	Committee Members	-
<ol> <li>Discuss with Committee on requirement of New Report, Cost involved and process improvements</li> </ol>	IT Head	Committee Members	-
<ol> <li>On approval from Committee, check feasibility in System for Report Creation/ Customization</li> </ol>	IT Manager	IT Head	Committee Members
5) In case of not approved, discuss with HOD on decision taken by Committee Members.	IT Head	HOD	-
<ol> <li>On Feasible, Consolidate the Requisitions and prioritize on discussion with respective HOD.</li> </ol>	IT Manager	IT Head	HOD
7) In case of not feasible, Intimate HOD and discuss on alternate ways to arrive the Output	IT Manager	IT Head	-
13.4.2 Developing of New Report			
<ol> <li>Analyze and Decide on Report Development by Inhouse or Outside developer</li> </ol>	IT Manager	IT Head	-
Inhouse Development			
Analyze on Lead time and Check Manhours for Customization of Report	IT Manager	IT Head	-
Design the Report as per requisition received	IT Manager	IT Head	-
Outside Developer			
Intimate Outside Developer and provide requirement for Report Customization	IT Manager	IT Head	-
2) Receive Quotations and submit top MD for Approval	Vendor	IT Head	MD
3) On Approval, Issue Confirmation to Outside Developer	IT Manager	IT Head	-



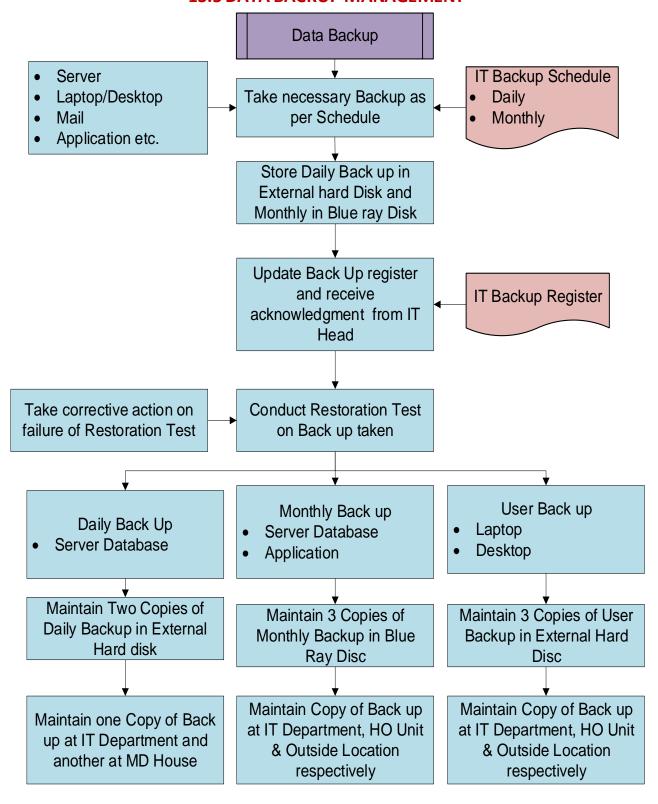


Activity	Maker	Checker	Approver
13.4.3 Finalizing of Report			
1) Extract Sample Report and send to HOD for	IT Manager	Respective	-
Confirmation		HOD	
2) In case of not confirmed, revise the report as per	IT Manager	IT Head	-
feedback received			
3) On Confirmation, Finalize the Report and receive	IT Manager	IT Head	Respective
acknowledgement from respective HOD			HOD
4) Update report master with necessary details	IT Manager	IT Head	-





#### 13.5 DATA BACKUP MANAGEMENT







IT Manager

## **Departments Involved:**

All Departments

#### **Key activities:**

13.5.1 Data Backup Schedule

13.5.2 Data Backup Execution

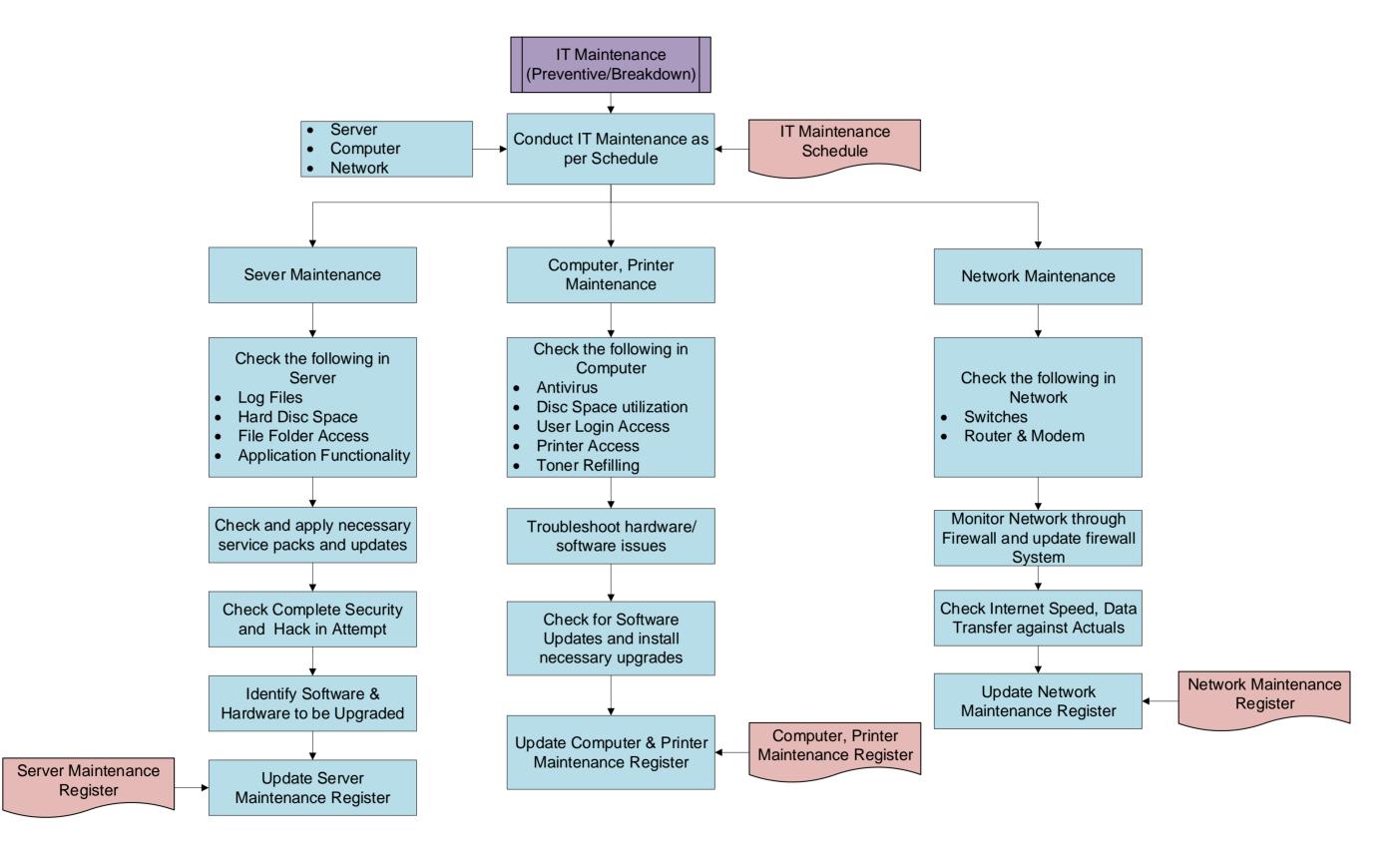
13.5.3 Disaster Management

Activit	у	Maker	Checker	Approver
13.5.1	Data backup Schedule			
1)	Take necessary Backup as per Schedule for	IT Manager	IT Head	-
	a. Server			
	b. Laptop/Desktop			
	c. Mail			
	<ul> <li>Application etc.</li> </ul>			
13.5.2	Data Backup Execution			
1)	Store daily back up in External Hard Disk and monthly	IT Manager	IT Head	-
	backup in Blue Ray Disk			
2)	Update Back Up register and receive acknowledgment	IT Manager	IT Head	-
	from IT Head			
3)	Take corrective action on failure of Restoration Test and	IT Manager	IT Head	-
	then Conduct Restoration Test on Back up taken			
13.5.3	Disaster Management			
1)	Daily Backup – Server Database	IT Manager	IT Head	-
	Maintain Two Copies of Daily Backup in External Hard			
	disk			
2)	Maintain one Copy of Back up at IT Department and	IT Manager	IT Head	-
	another at MD House			
3)	Monthly& User Backup	IT Manager	IT Head	-
	Server Database			
	Application			
	Laptop & Desktop			
4)	Maintain three Copies of Monthly & User Backup in Blue	IT Manager	IT Head	-
	Ray Disc/External Hard Disc			
5)	Maintain Copy of Back up at IT Department, HO Unit &	IT Manager	IT Head	-
	Outside Location			





#### **13.6 IT MAINTENANCE**







IT Manager

#### **Departments Involved:**

All Departments

## **Key activities:**

13.6.1 Server Maintenance

13.6.2 Computer & Printer Maintenance

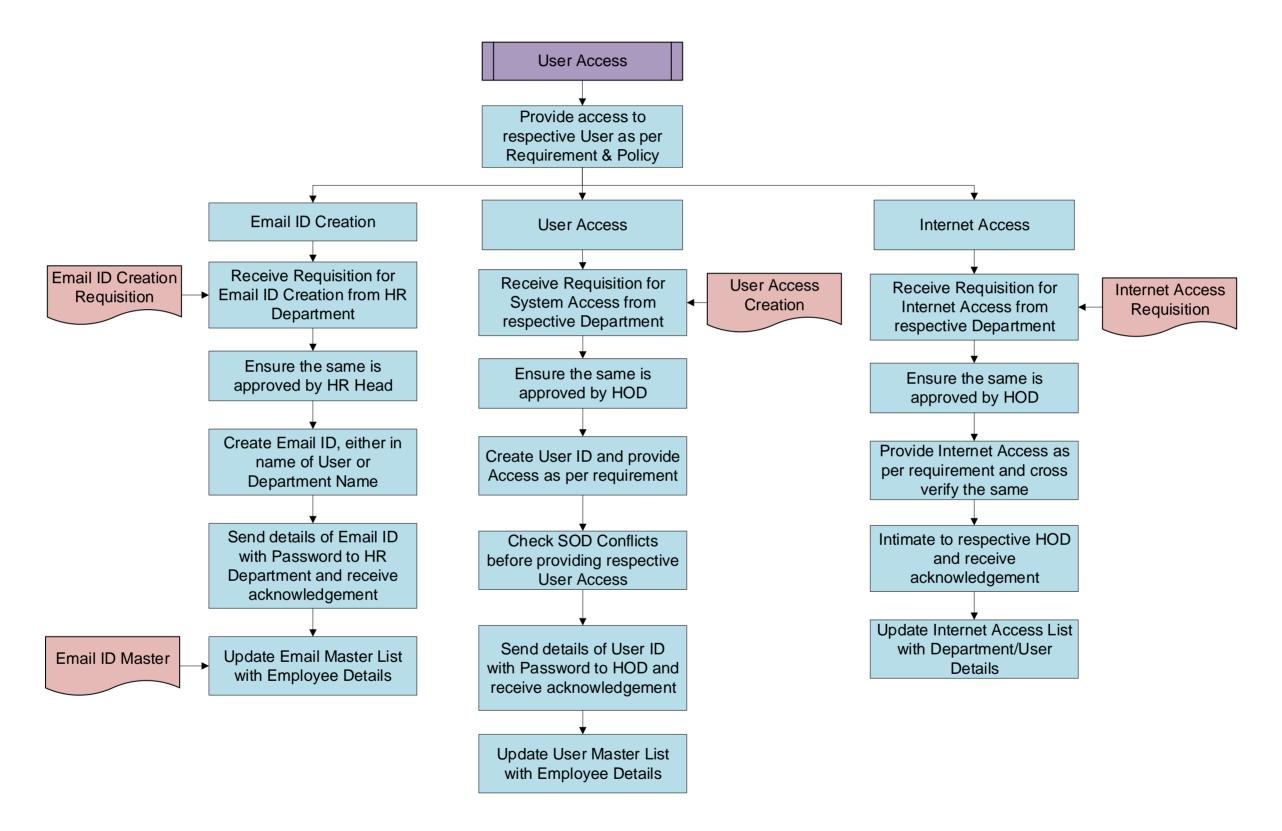
13.6.3 Network Maintenance

Activity	Maker	Checker	Approver
IT Maintenance			
Conduct IT Maintenance as per Schedule for	IT Manager	IT Head	-
a. Server			
b. Computer			
c. Network			
13.6.1 Sever Maintenance			
1) Check the following in Server	IT Manager	IT Head	-
a. Log Files			
b. Hard Disc Space			
c. File Folder Access			
d. Application Functionality			
2) Check and apply necessary service packs and updates	IT Manager	IT Head	-
3) Check Complete Security and Hack in Attempt	IT Manager	IT Head	-
4) Identify Software & Hardware to be Upgraded	IT Manager	IT Head	-
5) Update Server Maintenance Register	IT Manager	IT Head	-
13.6.2 Computer & Printer Maintenance			
1) Check the following in Computer	IT Manager	IT Head	-
a. Antivirus			
b. Disc Space utilization			
c. User Login Access			
d. Toner Refilling			
e. Printer Access			
<ol><li>Troubleshoot hardware/software issues</li></ol>	IT Manager	IT Head	-
3) Check for Software Updates and install necessary	IT Manager	IT Head	-
upgrades			
4) Update Computer & Printer Maintenance Register	IT Manager	IT Head	-
13.6.3 Network Maintenance			
1) Check the following in Network	IT Manager	IT Head	-
a. Switches, Router & Modem			
2) Monitor Network through Firewall and update firewall	IT Manager	IT Head	-
System			
3) Check Internet Speed, Data Transfer against Actuals	IT Manager	IT Head	-
4) Update Network Maintenance Register	IT Manager	IT Head	-





#### 13.7 USER ACCESS







IT Manager IT Head

#### **Departments Involved:**

All Departments

## **Key activities:**

13.7.1 Email ID Creation

13.7.2 User Access

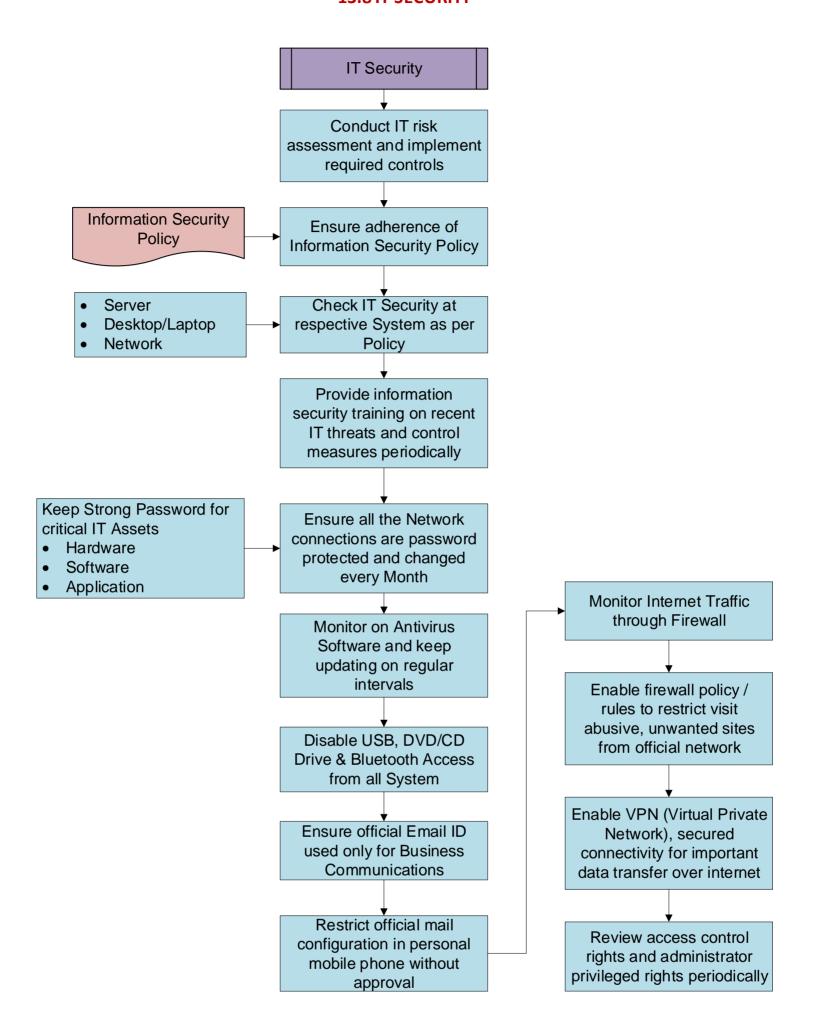
13.7.3 Internet Access

Activity	Maker	Checker	Approver
User Access			
Provide IT access to respective User as per Requirement &	IT Manager	IT Head	-
Policy			
1074 5 110 0 11			
13.7.1 Email ID Creation	· · · · ·	·-··	1
Receive Requisition for Email ID Creation from HR  Department	IT Manager	IT Head	HR Head
Department	IT N 4	IT Head	
2) Create Email ID, either in name of User or Department Name	IT Manager	IT Head	-
3) Send details of Email ID with Password to HR	IT Manager	IT Head	_
Department and receive acknowledgement			
4) Update Email Master List with Employee Details	IT Manager	IT Head	-
13.7.2 User Access			
1) Receive Requisition for System Access from respective	IT Manager	IT Head	Respective
Department			HOD
2) Create User ID and provide Access as per requirement	IT Manager	IT Head	-
3) Check SOD Conflicts before providing respective User	IT Manager	IT Head	-
Access			
4) Send details of User ID with Password to HOD and	IT Manager	IT Head	-
receive acknowledgement			
5) Update User Master List with Employee Details	IT Manager	IT Head	-
13.7.3 Internet Access			
1) Receive Requisition for System Access from respective	IT Manager	IT Head	Respective
Department			HOD
2) Provide Internet Access as per requirement and cross	IT Manager	IT Head	-
verify the same			
3) Intimate to respective HOD and receive	IT Manager	IT Head	-
acknowledgement			





#### **13.8 IT SECURITY**







IT Manager

## **Departments Involved:**

All Departments

#### **Key activities:**

13.8.1System Security 13.8.2 Password Security 13.8.3Data Security

Activity	Maker	Checker	Approver
13.8.1 System Security			
1) Conduct IT risk assessment and implement required	IT Manager	IT Head	-
controls			
Ensure adherence of Information Security Policy	IT Manager	IT Head	-
3) Check IT Security at following respective System as per	IT Manager	IT Head	-
Policy			
• Server			
<ul><li>Desktop/Laptop</li></ul>			
Network			
4) Provide information security training on recent IT	IT Manager	IT Head	-
threats and control measures periodically			
13.8.2 Password Security			
1) Keep Strong Password for critical IT Assets	IT Manager	IT Head	-
Hardware			
• Software			
Application			
Ensure all the Network connections are password			
protected and changed every Month			
2) Monitor on Antivirus Software and keep updating on	IT Manager	IT Head	-
regular intervals			
3) Disable USB, DVD/CD Drive & Bluetooth Access from all	IT Manager	IT Head	-
System			
13.8.3 Data Security			_
1) Ensure official Email ID used only for Business	IT Manager	IT Head	-
Communications			
2) Restrict official mail configuration in personal mobile	IT Manager	IT Head	-
phone without approval			
Monitor Internet Traffic through Firewall	IT Manager	IT Head	-
4) Enable firewall policy / rules to restrict visit abusive,	IT Manager	IT Head	-
unwanted sites from official network			
5) Enable VPN (Virtual Private Network), secured	IT Manager	IT Head	-



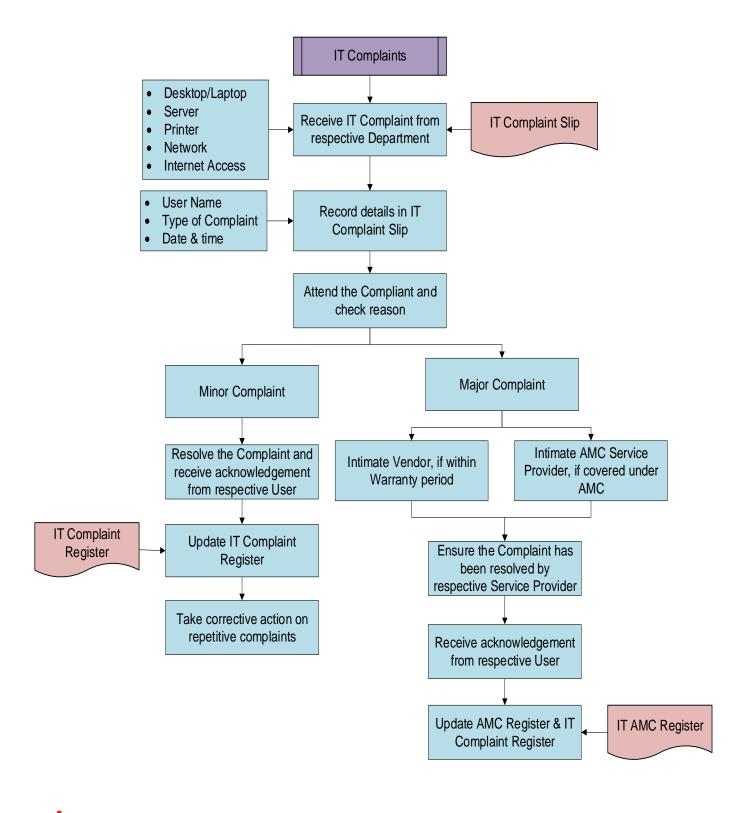


Activity	Maker	Checker	Approver
connectivity for important data transfer over internet			
6) Review access control rights and administrator	IT Manager	IT Head	-
privileged rights periodically			





#### 13.9 IT COMPLAINT HANDLING







IT Manager

## **Departments Involved:**

All Departments

#### **Key activities:**

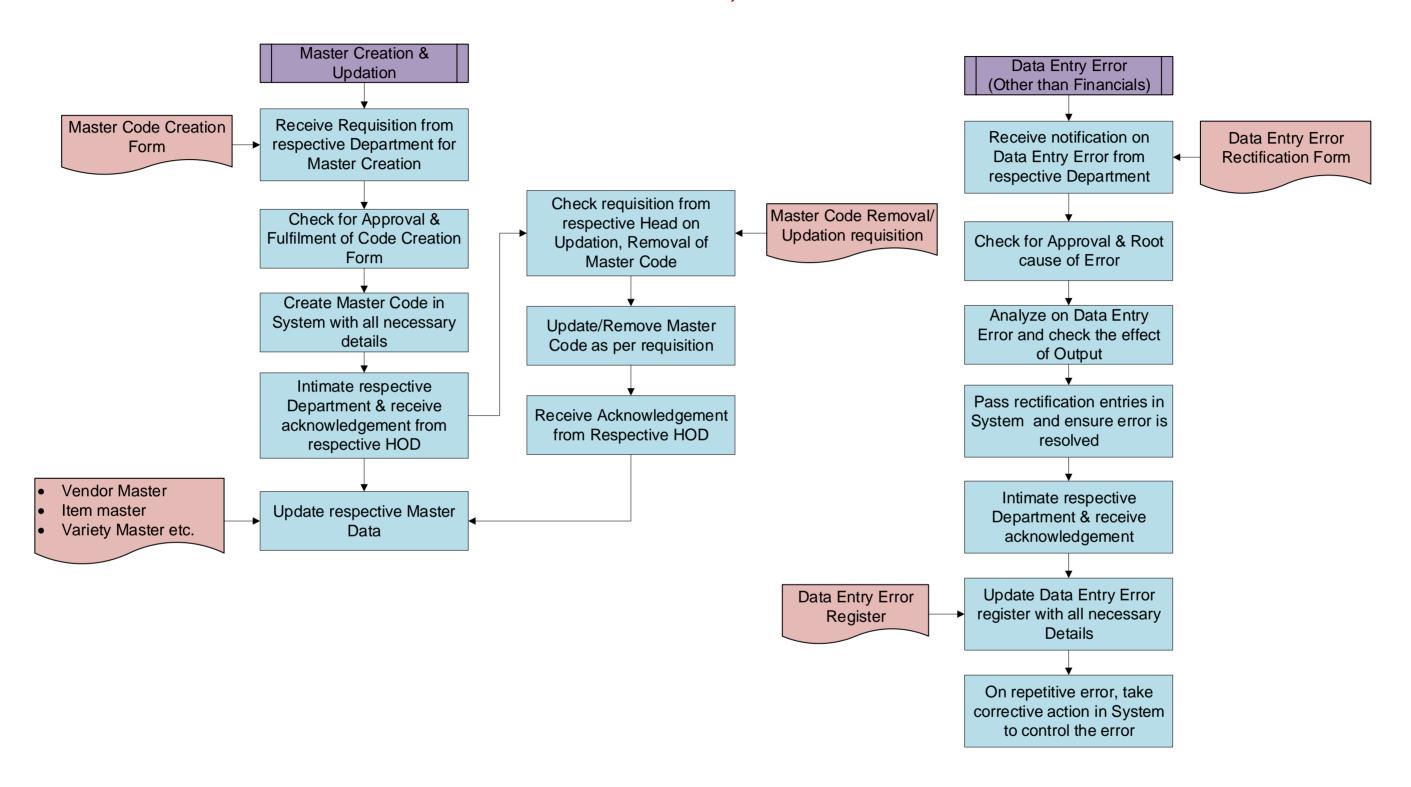
13.9.1 IT Complaint Intimation 13.9.2 Attending to Compliant

Activity	Maker	Checker	Approver
13.9.1 IT Compliant Intimation			
Receive following IT Complaint from respective     Department	Respective Department	IT Manager	-
a. Desktop/Laptop b. Server c. Printer			
d. Network  ● Internet Access			
2) Record following details in IT Complaint Slip  a. User Name  b. Type of Complaint  • Date & time	Respective User	IT Manager	-
13.9.2 Attending to Compliant			
1) Attend the Compliant and check reason	IT Executive	IT Manager	-
Minor Complaint			
<ol> <li>Resolve the Complaint and receive acknowledgement from respective User</li> </ol>	IT Executive	IT Manager	1
<ol> <li>Update IT Complaint Register and Take corrective action on repetitive complaints</li> </ol>	IT Executive	IT Manager	-
Major Complaint			
<ul> <li>1) If so, follow either of the following         <ul> <li>Intimate Vendor, if within Warranty period</li> <li>Intimate AMC Service Provider, if covered under AMC</li> </ul> </li> </ul>	IT Executive	IT Manager	-
<ol> <li>Ensure the Complaint has been resolved by respective Service Provider</li> </ol>	IT Executive	IT Manager	-
Receive acknowledgement from respective User	IT Executive	IT Manager	-
4) Update AMC Register & IT Complaint Register	IT Executive	IT Manager	-





#### 13.10 MASTER CREATION & UPDATION, DATA ENTRY ERROR RECTIFICATION







IT Manager

## **Departments Involved:**

All Departments

## **Key activities:**

13.10.1 Master Code Creation & Updation

13.10.2 Data Entry Error Notification & Rectification

13.10.3 Updation of Master

Activity	Maker	Checker	Approver
13.10.1 Master Creation and Updation			
Receive Requisition from respective Department for Master Creation	Respective User	IT Manager	-
2) Check for Approval & Fulfilment of Code Creation Form	-	IT Manager	-
3) Create Master Code in System with all necessary details	IT Manager	IT Head	-
4) Intimate respective Department & receive acknowledgement from respective HOD	IT Manager	IT Head	-
5) Update respective Master Data	IT Manager	IT Head	-
a. Vendor Master			
b. Item master			
c. Variety Master etc.			
6) Simultaneously Check requisition from respective Head on Updation, Removal of Master Code	IT Manager	IT Head	-
7) Update/Remove Master Code as per requisition	Respective User	IT Manager	-
8) Receive Acknowledgement from Respective HOD and update respective Master Data	IT Manager	IT Head	Respective HOD
13.10.2 Data Entry Error Notification & Rectification			
Receive notification on Data Entry Error from respective     Department	Respective User	IT Manager	-
2) Check for Approval & Root cause of Error	-	IT Manager	-
3) Analyze on Data Entry Error and check the effect of Output	IT Manager	IT Head	-
<ul> <li>4) Pass rectification entries in System and ensure error is resolved</li> </ul>	IT Manager	IT Head	-
5) Intimate respective Department & receive acknowledgement	IT Manager	IT Head	-
13.10.3 Updation of Master			
Update Data Entry Error register with all necessary     Details	IT Manager	IT Head	-
On repetitive error, take corrective action in System to control the error	IT Manager	IT Head	-

