**Process Document - 16**

**Problem Management**

22.04.2013

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| **For Airtel Money Environment only** | |
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1. **Process Overview**
2. **Description and Scope**

This document describes the process intended to decrease both numbers and severity of incidents & problems on Airtel Money environment.

The process will be applicable for :

1. Problem Control
2. Error Control
3. Problem Review
4. Proactive prevention of problems

An Incident is defined as any event that is not part of the standard operation of a service and which causes or may cause an interruption to or a reduction in the quality of that service.

A Problem is defined as repeating/recurring incidents or any deviation/interruption in to service ( incident) for which cause is not known.

A known Error is defined as a problem whose underlying cause has been analyzed and work-around has been identified.

A Work-around is defined as a solution to decrease/eliminate the effect of any incident.

The Objective of Problem Management is to minimize the adverse impact of Incidents and Problems on the business that is caused by errors within Airtel Money environment and to prevent recurrence of Incidents related to these errors. The Problem Management process objectives are:

* Improved IT service Quality and ability to identify problems proactively.
* Minimize overall number of repeat incidents by using Permanent solutions.
* Meeting service availability by reducing no. of incidents.
* Increasing staff efficiency and productivity by doing issue resolution and problem diagnosis.
* Minimize the impact of incidents, avoid unnecessary or unplanned downtime by improved organizational learning
* Improved user and customer satisfaction

Problem Management is the process by which problems are discovered, recorded, diagnosed, resolved and eliminated.

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1. **Process Activities and workflow**

**Problem Management process workflow**

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| **Sl. No.** | **Activity** | **Responsibility** | **Internal SLAs/ Performance Criteria** |
| 1 | Incident Management process | Other Processes | Incident Manager refer the problem management process under certain conditions : |
|   High priority/Major incidents |
|   Unresolved incidents which have not met SLA for resolution. |
|   Re-occurring incidents |
|   Incident cause unknown |
|   Incident trend analysis |
| In the above case IM goes to Problem management |
| 2 | Identify, Review and ask IT Helpdesk to Raise Problem request. | Problem Manager | Problem Manager identifies and reviews the request from Incident Manager, In case find problem viable ask the IT Helpdesk team to log the problem. |
| 3 | Log the problem in the help desk tool | IT Helpdesk | IT Helpdesk logs the problem |
| 4 | Classify the problem | Problem Manager | Classify the problems as per the classification based on business rules |
| 5 | Prioritize the problem | Problem Manager | Prioritize the proble as per the priority matrix and ask support teams to find root cause of the problem |
| 6 | Investigate the problem and find out the root cause | Support Teams | Support Teams ( Ops, Infra, Security, Network, Application, Product) Investigate the problems and find out the root cause. |
| 7 | Is RFC needed? | Problem Manager | Check for the need of RFC |
| 8 | Change Management process | Other Processes | in case CR required, Change Management process to be followed |
| 9 | Provide resolution/ workaround | Problem Manager | Provide resolution/ workaround |
| 10 | Is resolution reviewed /approved? | Problem Manager | Check for the resolution approval and the RFC review to ensure the needed resolution implemented |
| 11 | Is problem resolved? | Problem Manager | Check for the resolution of the problem from Incident Manager. In case no, problem goes for the prioritization, else problem gets closed. |

1. **Problem Management process LifeCycle**

Handling of problems goes through different stages in problem management Process Life Cycle. The same is listed below:

* Problem identification and recording
* Classification and prioritization
* Investigation and diagnosis
* Resolution and recovery
* Closure

1. **Problem Management Business Rules**

Here is the list of business rules used for implementing and practicing Problem Management process.

* Categorization of problems
* Classification of problems
* Priority Matrix
* Problem Resolution categories

1. **Roles and Responsibilities**

This section describes responsibilities of those involved in delivering or supporting the Problem Management Process. Responsibilities include but are not limited to those listed for each role.

* 1. **Problem Manager**

The Problem Manager is responsible for:

* Identify, analyze and qualify problems reported by Incident management
* Co-ordinate with IT Teams/SMEs for analysis of Incodents/Problems and identifying underlying issues
* Facilitate workarounds and categorize the problems.
* Co-ordinate the identification of resolution methods for known errors
* Initiate RFC for implementation of the resolution
* Conduct trend analysis of incidents for proactive problem management
* Develop and maintain problem and error control systems
* Review the efficiency and effectiveness of proactive problem management activities.
* Produce management information
* Track problem support staff
* Allocate resources for the support effort
* Monitor the effectiveness of error control and making recommendations for improvement
  1. **Incident Manager**

The Incident Manager is responsible for: (only the responsibilities relevant to the Problem Management process have been listed)

* Co-ordinate with Problem Management for workarounds and resolution.
* Conduct trend analysis of incidents and service requests and refer potential problems to Problem Management
  1. **IT Helpdesk ( Level 0)**
* Problem Registration
  1. **Problem Handling Support staff ( L1/ L2/L3/ Infra/ Network/ Application)**
* Monitoring problem details, including the Configuration Items affected
* Problem investigation and diagnosis ( including resolution where possible)
* Co-ordination with Incident Management/ Change Management
* The resolution and recovery of assigned problems
  1. **Change Manager**

(only the responsibilities relevant to the Problem Management process have been listed)

* Receive and register the RFC
* Validate classification of changes and prioritize in collaboration with the Problem Manager
* Implement the RFC and notify Problem Manager about the resolution

1. **Process Outputs and Exit Considerations**

The expected outputs from the Problem Management process include:

* Updated workarounds,
* Closed Problem Records
* Communication on Problem status
* Management Reports

Problem Life cycle is completed when :

* User is informed and appraised about the resolution/ workaround of the problem reported. Problem related incidents are closed
* Problem Record is closed.
* Confirmation from user on the fix/workarounds is obtained

1. **Process KPIs and Reports**

The Problem Manager needs to provide ongoing reporting around the KPIs and process related metrics and trends that indicate the health of the process to the SM and IT Management on a regular basis as part of the process reviews and continuous improvement plans.

Below are some of the Key Performance Indicators ( KPI) for Problem management process:

* Number of Repeated Incidents (Problems)
* Number of RFCs raised
* Number of Improvement initiatives
* RFCs not completed within Turnaround Time
* Number of RCA submitted in a month versus number of RCA due in the same month

Reports should be produced under the authority of the Problem Manager, who should draw up a schedule and distribution list, in collaboration with the support groups handling problems.

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| **Problem Management Process Reports** | | |
| 1 | Operational Reporting | Number of problems: by status, priority, category |
| Number of problems resolved |
| Number of problems unresolved |
| Number known errors and workarounds added in database |
| Number of RFCs raised for resolution of problem |
| Total number of workarounds identified |
| 2 | Trend Reports | Number of Knowledgebase entries |
| Number of recurring problems by classification or location |
| Number of incidents linked to problem records |
| Number of improvement initiatives initiated |
| Number of recommendations in necessary process changes |

Templates :





Annexure :

1. Contact Details :

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|  | **Contact Person** | **Contact details** |
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