



Information Technology Infrastructure Library (ITIL[®])

A Case Study on Incident Management

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Agenda

- Incident Management's Value Proposition
- ITIL Incident Management Implementation Case Study
 - Project Approach
 - Situation Overview
 - Key Challenges
 - Project Results
 - Project Critical Success Factors
 - Key Performance Indicators
 - Lessons Learned
- ITIL Incident Management Process Overview
- Questions/Comments



Value Proposition

Incident Management value proposition

- To restore normal IT Service operation as quickly as possible, and to minimize the adverse impact on business operations thus assuring the best possible levels of service quality and availability as agreed in the Service Level Agreements
- The Process of Incident Management is all about ensuring that when an IT-based Service has been disrupted, in either a small or significant way, normal functioning capabilities are rapidly re-established. Normal Service operation is defined as that which has been agreed to in the Service Level Agreement (SLA).



ITIL® Incident Management Implementation

Case Study – “The Bank”

Project Objectives

- Deploy subject matter expertise in ITIL Incident Management implementation disciplines utilizing industry Best Practices
- Provide orientation on ITIL Incident Management to the "The Bank's" project Stakeholders and participants
- Define a Process Roadmap to be followed for the entire project lifecycle
- Provide Training and awareness on all aspects of Incident Management processes

Project Approach – Best Practice

- Interview Key Stakeholders
 - Business Executives/Business Process Owners
 - IT Executives/IT Support groups
 - Service Desk
- Analyze SLA criteria
 - Ensure targets are reasonable, can be attained, how to attain, document
- Complete Assessment/Create Gap Analysis
 - What works/What doesn't/What's needed
 - Identify starting point to gain momentum, quick wins and confidence
- Establish Incident Control procedures
 - Identify, Record, Classify, Prioritize
- Link Service Desk Tool to Configuration Management Database (CMDB)
 - Incident records
 - Known errors
 - SLAs

Key Findings from Stakeholder interviews

Executive/Business Process Owner

- SLAs below acceptable levels
- Revenue Impact/Financial Risk
- Negative Impact on Banking products, Financial Services programs
- Negative perception in large Business Banking customer markets

IT Executives

- Improve IT Service Delivery Value
- Evolve IT to be more business-centric
- Improve First Call Resolution and minimize functional escalation
- Evolve into ITIL® process model and best practices framework
 - Essential process relationship/interface dependencies (Problem Management, Change Management, Service Desk)
- Improve Service Desk capabilities
 - Strengthen Knowledge base
 - Provide ability to identify and proactively alert IT Management of issues affecting customers

"The Bank's" IT Service Quality Improvement Goals

- Service Desk/Call center efficiencies
 - Decrease inbound call volume
 - Decrease call times
 - Meet or surpass SLAs
- Decrease Mean Time To Identification (MTTI -)
- Decrease Mean Time To Recovery (MTTR -)
- Improve Incident Management Activities
 - Detect and Record
 - Classification and Initial Support
 - Investigation and Diagnosis
 - Resolution and Recovery
 - Closure
 - Ownership, Monitoring, Tracking and Communication
 - Management Information, Metrics and Reporting



Incident Management Challenges at “The Bank”

- Unknown and/or unrealistic Service Levels
- Poor alignment and integration
 - Service Desk Incident origination and tracking Tool
 - Problem Management
 - Change Management
 - Configuration Management
 - CMDB
 - Service Quality Management
 - Metrics and reporting accuracy
- Lack of investment in Service Desk automation
- Poorly trained Service Desk agents and Incident Management staff
 - Inadequate staffing of the Service Desk
- Visibility into End-user Performance Monitoring for proactive issue detection and alerts.
 - Providing meaningful information regarding alerts and user service issues in production that are not yet identified by IT Infrastructure teams.



Project Results (Outcomes)

Business Benefits

- Reduced lost Business productivity
- Improved Customer Service
- Decreased Financial Risk and Revenue impacts
- Stabilized Service Desk utilization of Incident Management processes
- Provided Accurate information pertaining to Service Levels
- Achieved Service Quality enhancements

IT Benefits

- Reduced inefficient IT Staff utilization
- Improved data accuracy via Tool integration and CMDB
- Increased Customer/User satisfaction
- Enhanced abilities to meet SLA requirements
- Achieved integration into other key ITIL processes
 - Problem Management, Change Management, Configuration Management, Service Level Management

Project Critical Success Factors

- Standardized Incident Lifecycle "Status".
 - New
 - Accepted
 - Assigned
 - Work in Progress (WIP)
 - Resolved
 - Closed
- Established Problem/Error "knowledge base"
 - Linked functional problems and known-errors to resolution instructions
 - Documented escalation instructions by problem type
- Provided effective Automation via Incident Management Tools
 - Incident recording, tracking, workflow, updating, resolution and closure
- Recalibrated and Documented known SLAs
 - Ensured SLAs were realistic and attainable with stakeholders
- Established Key Performance Indicators



Initial Key Performance Indicators (KPIs)

- ✓ Elapsed Time to Resolution targets – less than baseline
- ✓ Percentage of Incidents handled within SLA targets
 - Response – Decrease over time compared to baseline
 - Resolution – Decrease over time compared to baseline
- ✓ Size of Incident Backlog – Decrease over time compared to baseline
- ✓ Resolutions per customer service agent – increase over baseline
 - Level of decrease in overall call volume
 - Level of decrease in call abandonment – wait time that caused a user/customer to abandon the call
 - Level of decrease in call-times per incident
- ✓ Service Unavailability Time to Customer – Decreasing trend over time
- ✓ Improved Customer satisfaction feedback from surveys
- ✓ Large Business Customer attrition – Decreasing trend over time
- ✓ Balance Score Cards show Service Performance improvements

Other KPIs to Be Employed Over Time

Number of Incidents
open, closed,
related to a problem

Percentage
of incidents handled
within SLA

Time spent on
incidents,
by impact category

First call
resolution rate



Total time
incidents open,
by impact category

End-User Satisfaction

Lessons Learned

- Best Practices are constantly evolving
- Existing Help Desk tools are not always easily linked in the CMDB
- Monitoring tools can not always provide meaningful information to Incident Management processes lead by the Service Desk
- Work instructions and procedures currently in use by Help Desk personnel can pose training and best practice utilization challenges
- Level-setting and agreeing on Acceptable SLA targets can become a challenge as not all stakeholders share common goals.
- Establishing visibility and Proactive notification of user issues from Incident Management to Infrastructure requires additional investment

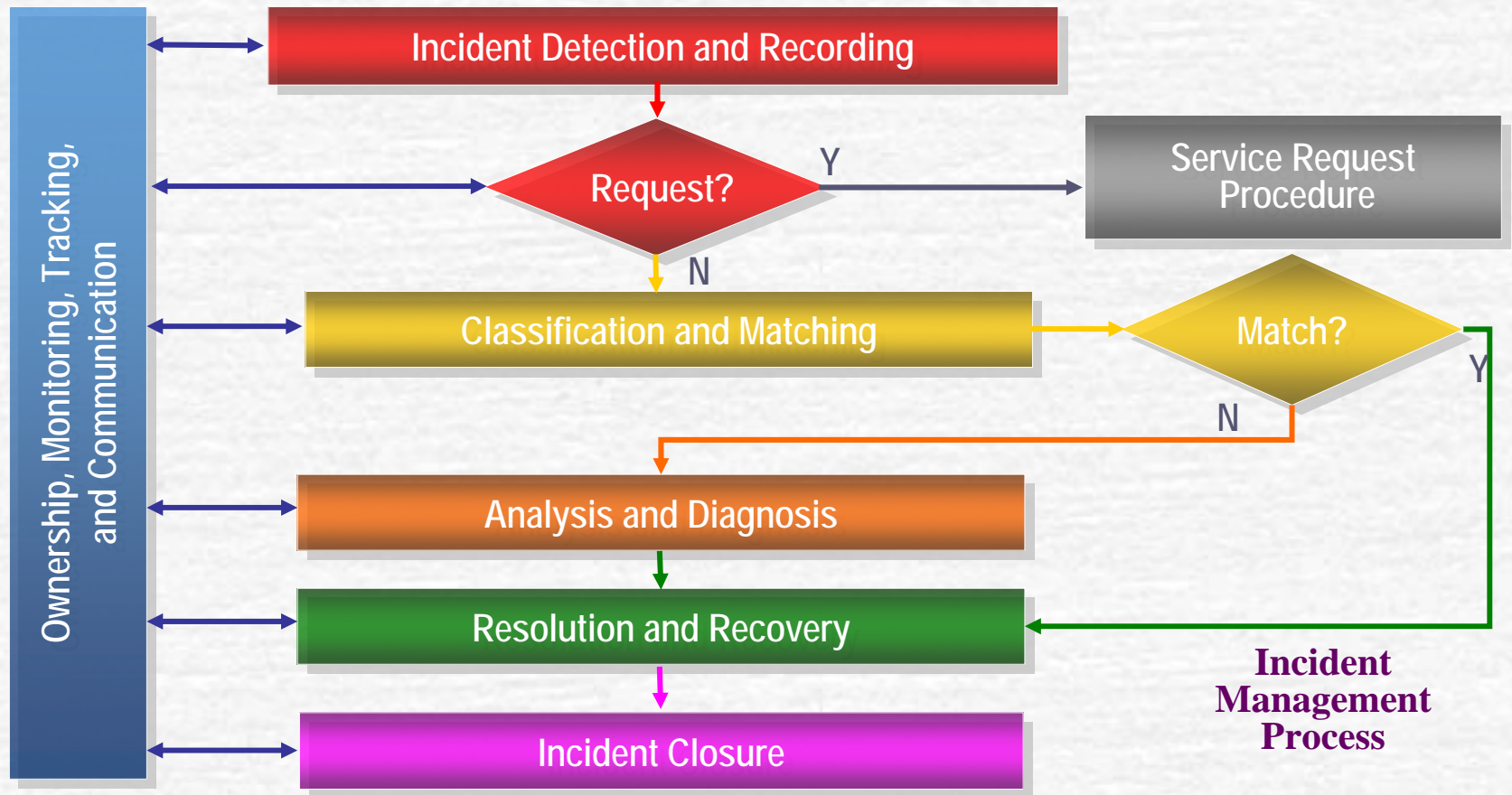


ITIL Incident Management Processes

Source - OGC

Incident Management Activities

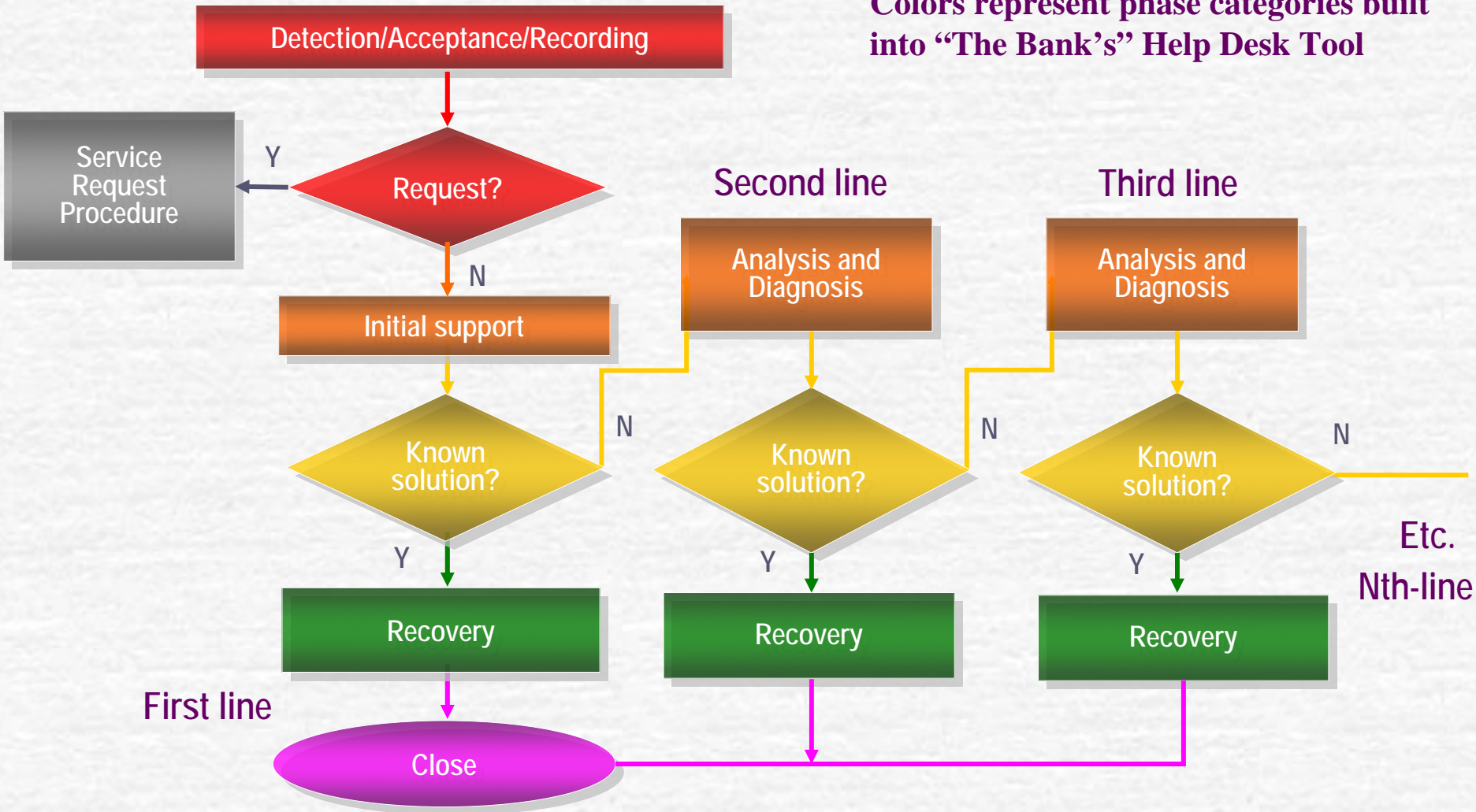
Colors represent phase categories built into “The Bank’s” Help Desk Tool



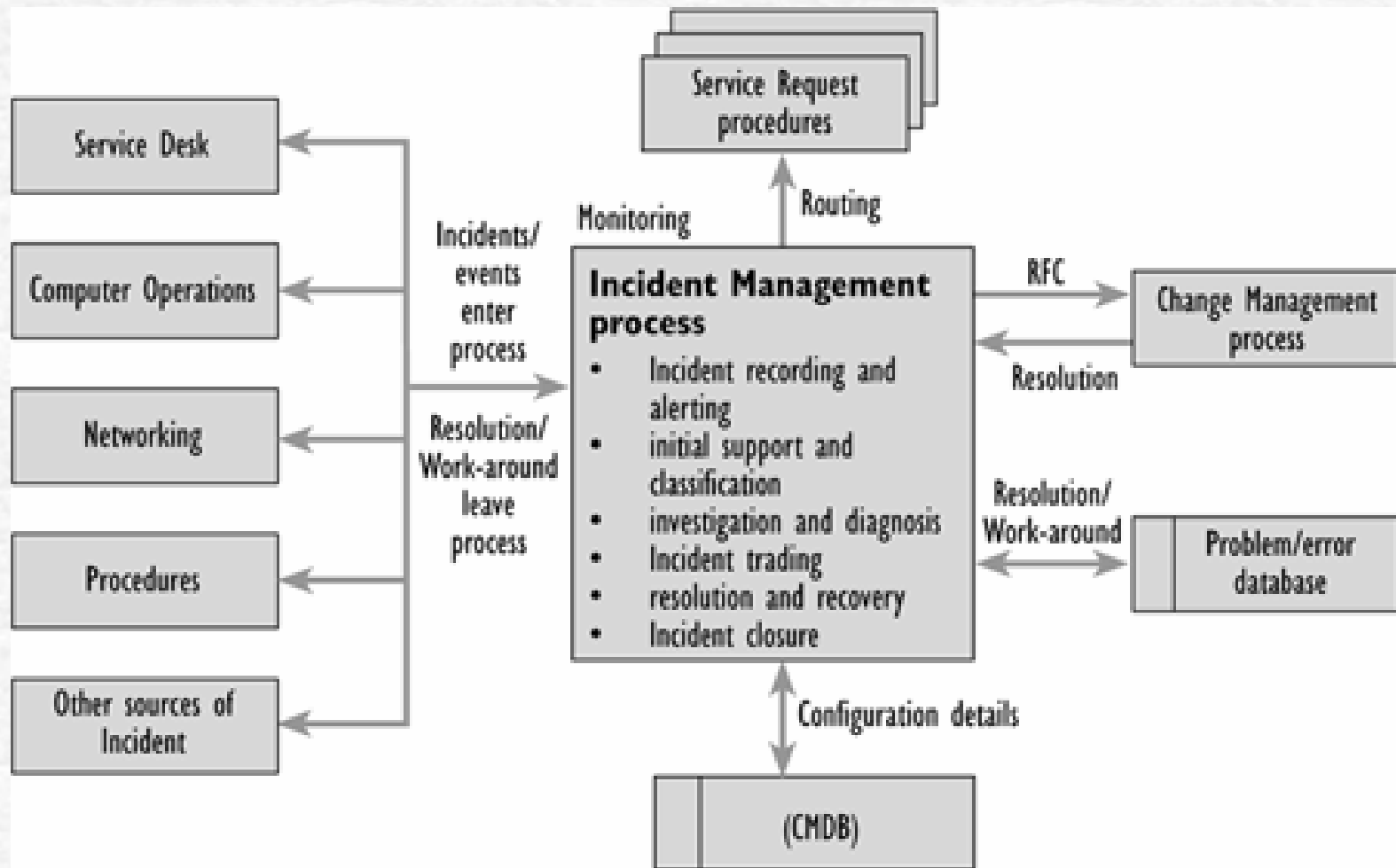
**Incident
Management
Process**

First, Second, and Third-line Support roles

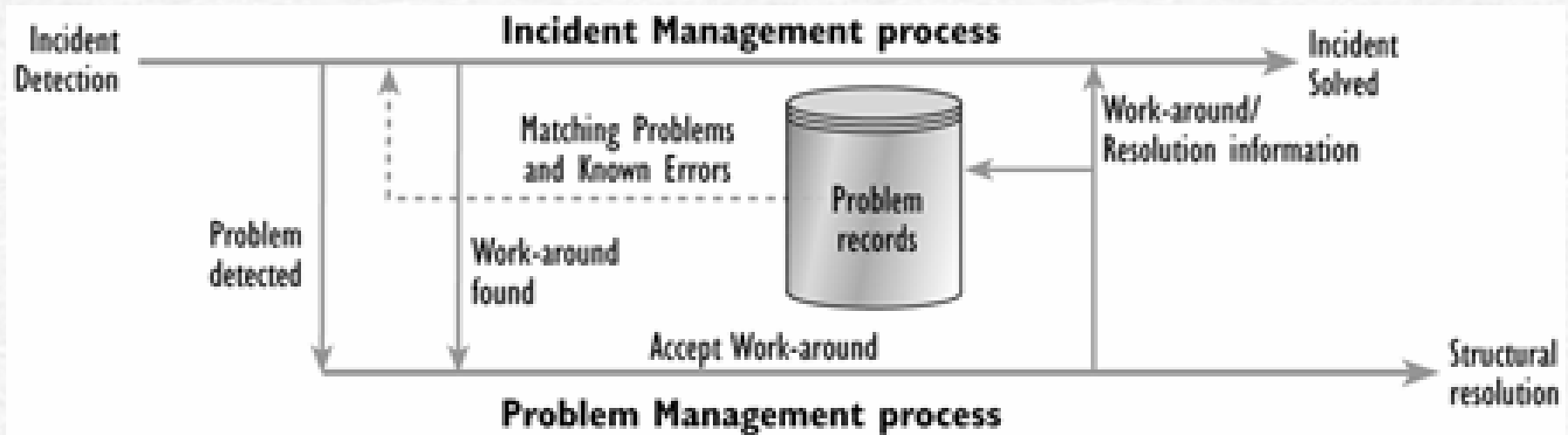
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Incident Management Process details - Source OGC



Handling Incident Workarounds and Resolutions - Source OGC



Coding System for Incident/Request Classification - source OGC

Type of Incident	Main Category	Sub-category	Indication Priority
Failure	Software	Wordprocessing	2
		Spreadsheet	2
		Business application	1
	Hardware	Mainframe	1
		Midrange	1
		Workstation	2
	Etc...		
Service request	Password reset		1
	Change toner cartridge		3
	Help User	Office software	3
		Business application	2
	Etc...		

Note: 'Priority' order to handle Incidents is primarily defined by impact and urgency. Depending on the type of call, an indication of impact and urgency (and thus priority) can be given in advance. Thus priority is often based on experience or agreements/expectations with the Customer.

Linking an 'indication priority' to a 'type of Incident' also speeds up the classification process and helps the Service Desk staff to be consistent in assigning priorities.

Priority Coding System — Source OGC

		<i>Impact</i>		
		<i>High</i>	<i>Medium</i>	<i>Low</i>
<i>Urgency</i>	<i>High</i>	1	2	3
	<i>Medium</i>	2	3	4
	<i>Low</i>	3	4	5

<i>Priority code</i>	<i>Description</i>	<i>Target resolution time</i>
1	Critical	1 hour
2	High	8 hours
3	Medium	24 hours
4	Low	48 hours
5	Planning	Planned

Note: A third aspect defining priority, namely expected effort, is not incorporated in this model.



Questions/Comments

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