



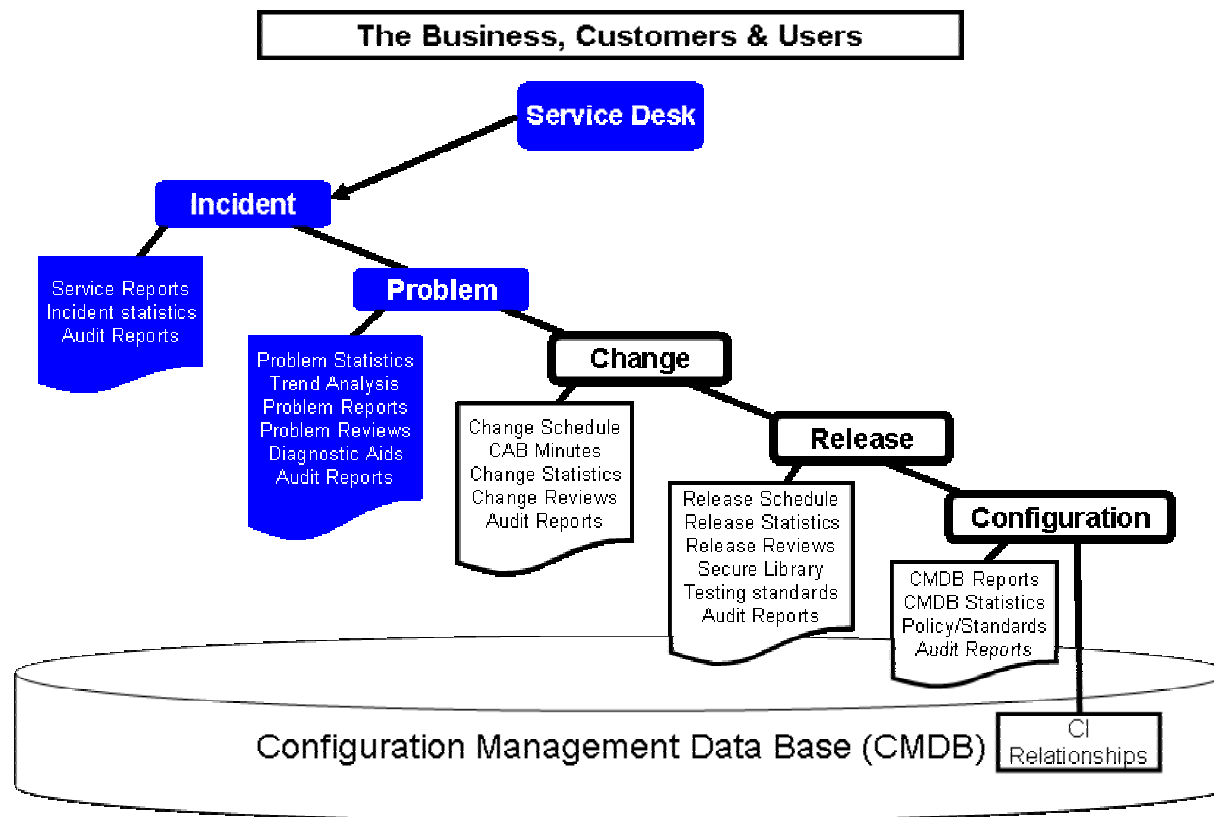
Problem Management Workshop Agenda

- Problem Management is the process of analyzing the identified technology problems and translating them into costs to stack rank them for improvement plans.
 - What Constitutes a Problem
 - Root Cause Analysis (RCA) form
 - Cost Translation
 - Trend Analysis
 - Request for Change



ITIL Service Support

- Problem Management is preceded by the Service Desk providing Incident Management and using proper categorization codes



What Constitutes a Problem

- Definition
 - Multiple Incidents that exhibit common symptoms
 - All at once or over time
 - A single Incident with a high impact
 - Impact is measured by cost/revenue and customer valuation
 - A single Incident with an unknown cause
- SCGov started with these thresholds
 - More than one occurrence in one month for Location, User, Service, Site
 - The occurrence affects ≥ 5 people at a time or ≥ 2 sites at a time.
- In process of working with customer to establish their fiscal and operational valuation



Root Cause Analysis (RCA) form

■ Process

- RCA forms are required for all Problems

■ Content

- See column 1
- Important to have impact information
- Use a form to easily convert content into a database

■ Required to be submitted within 3 business days from event

- Escalation emails to:
 - Day #2: Engr
 - Day #3: Engr + Mgr
 - Day #4: Engr + Mgr + Dir
 - Day #4: Engr + Mgr + Dir + CIO

■ Example

<i>Request for Info.</i>	<i>Description</i>
<i>Incident #</i>	114390
Problem Description	Pump Station 2's Comcast connection went down.
Date/Start Time of Incident	6/13/2006 14:00
Date / End Time of Incident	6/14/2006 7:00
Length of Outage	1 day
Business Centers Affected	Pump Station 2
Number of Users Affected	3
Systems Affected	internet, groupwise
Cause of the Outage	Comcast was experiencing technical difficulties in the area.
Problem Resolution	
Temporary Fix	Comcast fixed it.
Permanent Resolution	Redundant connectivity or local server environment needed.
<i>Technical</i>	
<input type="checkbox"/> Hardware Upgrade/Replacement	
<input type="checkbox"/> Software Patches/	
Submitted by / Date	Jason Herlihy 7/7/06
To be completed by the Problem Process Team	
RCA Status - Open / Closed	
<i>Cost of Remediation</i>	
Comments	



RCA Analysis & Cost Translation

■ Summary

Cost translation

Incident	Area	Scope of User Impact	Resolution Provided	Analyst Notes/Comments	Outage (business hours)	#	%	User Impact \$	Business Impact \$
117151	WebMail	Groupwise Webmail	Restarted WebAccess Agent	Server abended because of a corrupted Java Servlet	1.25	1000	5%	1550	
113476	Magic	Service Desk Technicians	Reboot of the IIS services for Magic	This type of outage, though not directly impacting Service Desk's ability to assist clients, causes delays in obtaining report data, which is crucial in monitoring and managing Service Desk operations, productivity, and efficiency	2	6	10%	18.6	
114097	Verizon	No Users, only Unattended Scale system at Jackson Rd Facility	Vendor Resolved		35.5	1	1%	0.31	3550
114267	Groupwise	All Groupwise Users	Message Database file was rebuilt	E-mail outages prevent the normal flow of communication of information necessary for conducting County business.	12	1500	10%	4650	
114291	Groupwise	8 users reported, all Groupwise users affected	Deleted mail that was clogging the SMTP gateway & restarted SMTP Gateway	Users though able to communicate internally, could not send or receive e-mails to/from external sources (i.e. Yahoo). According to the RCA, blocking of the SMTP Gateway was caused by the Yamanner worm. Once infected e-mails were deleted, external e-mail services were restored	11	1500	10%	4650	
114390	Comcast	All Users at Pump Station 2 Site	Vendor Issue - No Resolution Given		8	1	100%	31	800
114490	Crystal Reports	HR Advisors, Service Desk	Server Restarted	The cause of this outage was that the Server cache was full. Rebooting the server cleared the cache and resolved the issue.	3	20	10%	62	
114711	Telecom	All users at Fleet Administration	Re-enabled phone service .	Issue caused by the improper disconnection of the phones from the wall jack by painters.	3	25	20%	155	
114976	Comcast	2 Workstations at Nokomis Community Park	Repaired by Vendor		56	2	10%	6.2	
114977	Telecom	Fire Station 5	Reset 9150	Full error log caused the hardware to shut down.	2	3	10%	9.3	



Cost Translation

- Establish agreed upon standards
 - Average fully burdened employee cost ~\$31 / hour
 - Units in use by Business Center
 - Cost impact or valuation as defined by the Business Center

Category	Business Center	Users	Productivity Impact	User Cost/Hr	Business Cost/Hr
Blackberry	Commissioners	6	100%	75	1000
Blackberry	ED/GM	50	100%	75	500
Blackberry	Environmental Services	100	75%	31	200
Blackberry	Public Works	50	75%	31	200
Blackberry	Emergency Management	50	100%	31	500
Blackberry	All others	600	50%	31	
Next item...					

- Use RCA impact data when possible
- Cost translation is only an estimate



Trend Analysis

- Review cost trends and RCA occurrences over time

Area	2006.06	2006.07	2006.08	Total	Pct	Cumul	2006.06	2006.07	2006.08	Total
Groupwise	9,300	465		9,765	28%	28%	2	1		3
Network		4,137	566	4,703	14%	42%		6	4	10
Blackberry	6	4,650		4,656	13%	55%	1	1		2
WebShield		4,650		4,650	13%	69%		1		1
Novell		1,550	1,550	3,100	9%	78%		1	1	2
WebMail		1,550		1,550	4%	82%		2		2
Nextel		1,550		1,550				1		1
TRAC	775	155		930			2	1		3
Verizon	0	629	157	786			1	2	4	7
Telecom	405	130		535			8	5		13
Intranet			465	465					1	1
Kronos			465	465					1	1
Ronco			465	465					1	1
Web Application		395		395				2		2
iFAS	310			310			1			1
Comcast	37	56	54	147			2	3	2	7
Crystal Reports	62			62			1			1
Terminal Server	16		16	31			1		1	2
Magic	19			19			1			1
Server		16		16				1		1
FTP			8	8					1	1
Telecove	3			3			1			1
Vendor	3			3			1			1
Total	10,936	19,933	3,745	34,614			22	26	16	64





Request for Change (RFC)

- Periodic review of the top cost areas
 - Validate the cost estimates
 - Review with Business Center contacts to verify their valuation
 - Prepare potential solutions to propose to the group
- Joint planning session
 - Select the appropriate technical expertise
 - Bring in Business Center if appropriate
 - Define feasible solutions
- Prepare and propose the RFC with solutions and cost analysis
- RFC reviewed and decided upon by Management

