



The ROI of Problem Management

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**“Problem Management
is (arguably) the most valuable process
in the ITIL framework”**



An Industry Perspective

Problem Management - The Poor Relation



- › Problem Management is one of the least understood of the ITIL processes
- › Process is typically not defined in detail
- › Education on “What is a Problem” is lacking with consequent misperception
- › Normally confused with and lacking separation from...
.....Incident Management
- › A Problem is NOT a major Incident

Problem Management - The Poor Relation



- › Rarely are enough resources allocated to make the process fully effective
- › Requires pro-active and effective communications between related “silo” groups and departments
- › This process can become the prime source of organizational knowledge
- › Toolsets often lack support for the 360° visibility required to manage Incidents, Problems, Knowledge, Changes and related Configuration Items cohesively

Problem Mgmt Process Adoption (according to HDI Survey)

Percent who followed the ITIL process in previous years

	2009	2008	2007	2006
Asset management	20.0	21.8		
Availability management	15.6	17.5	14.4	10.5
Capacity management	15.1	18.2	13.6	9.9
Change management	40.9	34.6	33.9	25.2
Configuration management	24.3	23.9	21.9	14.6
Continuity management	15.4	17.6	14.1	10.9
Event management	17.9	19.6		
Financial management	9.9	15.4	11.5	
Incident management	50.2	41.9	40.5	33.6
Problem management	39.9	33.5	32.3	25.1
Release management	23.4	21.5	20.1	13.0
Security management	16.5	18.2	16.7	11.6
Service request management	33.7	28.6		

**15% growth in
Problem Mgmt
adoption in 4 years**

The Problem with Problem Management



- › Incidents will be **closed** too early in the overall support cycle
- › No actions taken to prevent recurrence
- › The same incidents will have to be fixed over and over again.....but we're good at it
- › **Worse**.....Incidents will be kept open so that follow-up and analysis can be donecausing lost visibility as to when the user's service was actually restored
- › Results in a large number of open incidents, many of which will never be closed unless a periodic 'purge' is undertaken.

Problem Management Questions

- › How many Open Incidents do you have that have been “out there” for more than a week?
- › How many of these are really Problems?
- › How many do you keep because they are useful as “Knowledge”?
- › How many of your Incidents are really Requests?

It's time to separate these out.....

Implementing a new system is a prime opportunity to finally categorize according to good practice



What Should Happen.....

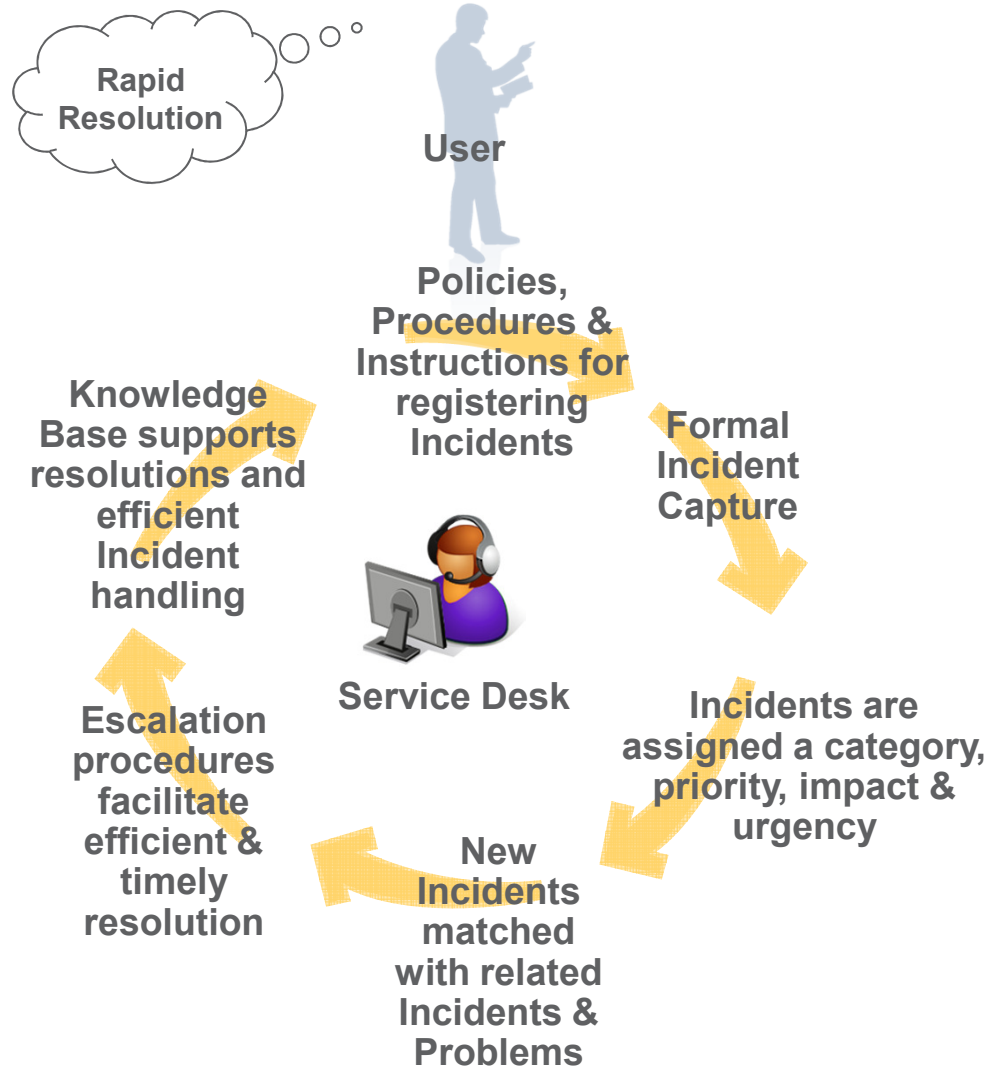
Incident Management - Summary

Goal:

- › Efficiently and rapidly resolve minor and major service disruptions

Business Benefits:

- MTTR can be reduced
- FCR rates can be improved
- Service and response can be optimized with prioritization based on impact to the business



Problem Management - Summary

Goal:

- › Eliminate the cause of recurring and related service disruptions

Business Benefits:

- Incident volume is reduced
- Faster resolution of Incidents
- Service availability increases
- Shift from reactive to proactive delivers higher value service



The Problem Management Process (according to ITIL® v3)



A 'Problem' is an unknown underlying cause of one or more Incidents

The goal of Problem Management is to reduce the number and severity of Incidents and Problems and their impact on the business

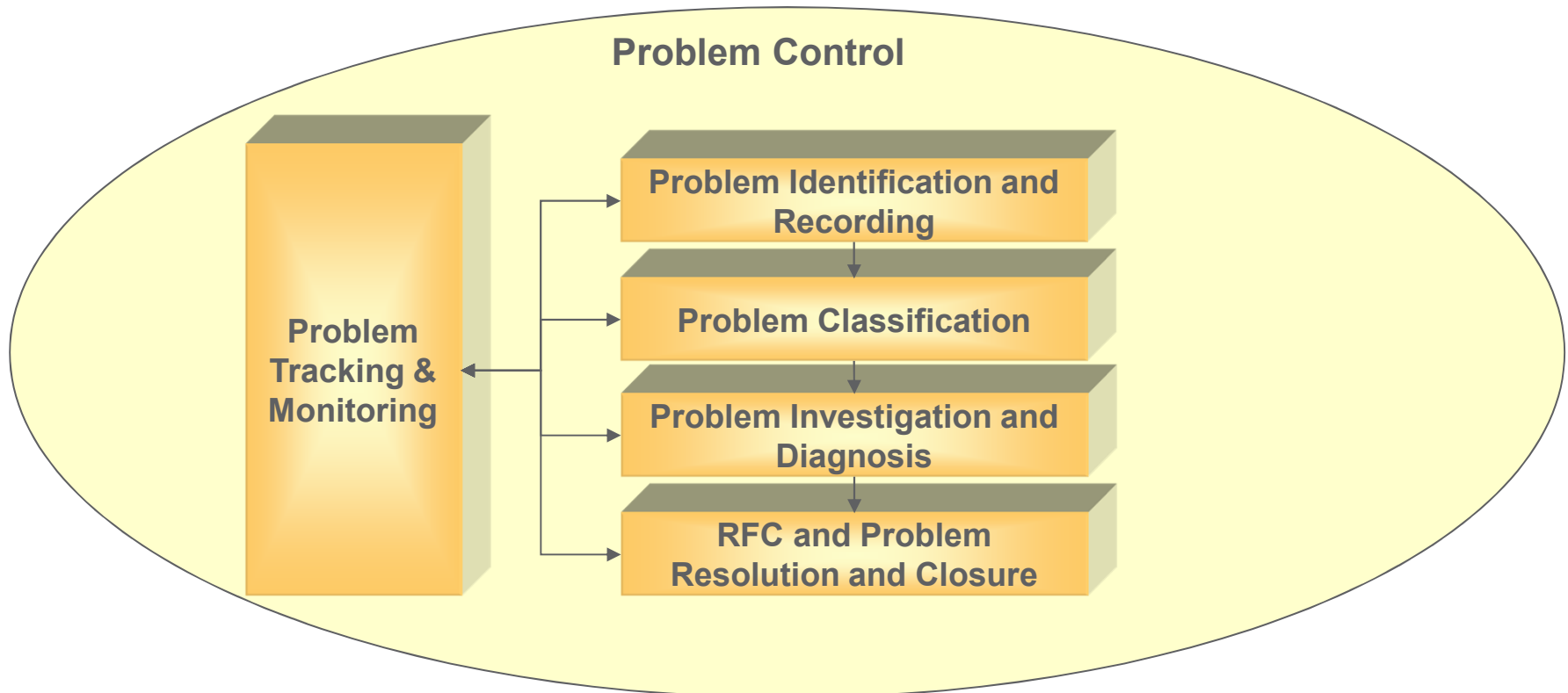
The proactive process identifies and resolves problems **before** related Incidents occur

Problem Management involves:
Root-cause analysis to determine and resolve the cause of Incidents,
Proactive activities to detect and prevent future Problems / Incidents
and a Known Error sub-process to allow quicker diagnosis
and resolution should further incidents do occur.

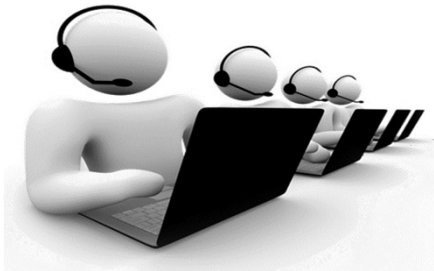
Problem Control - Activities



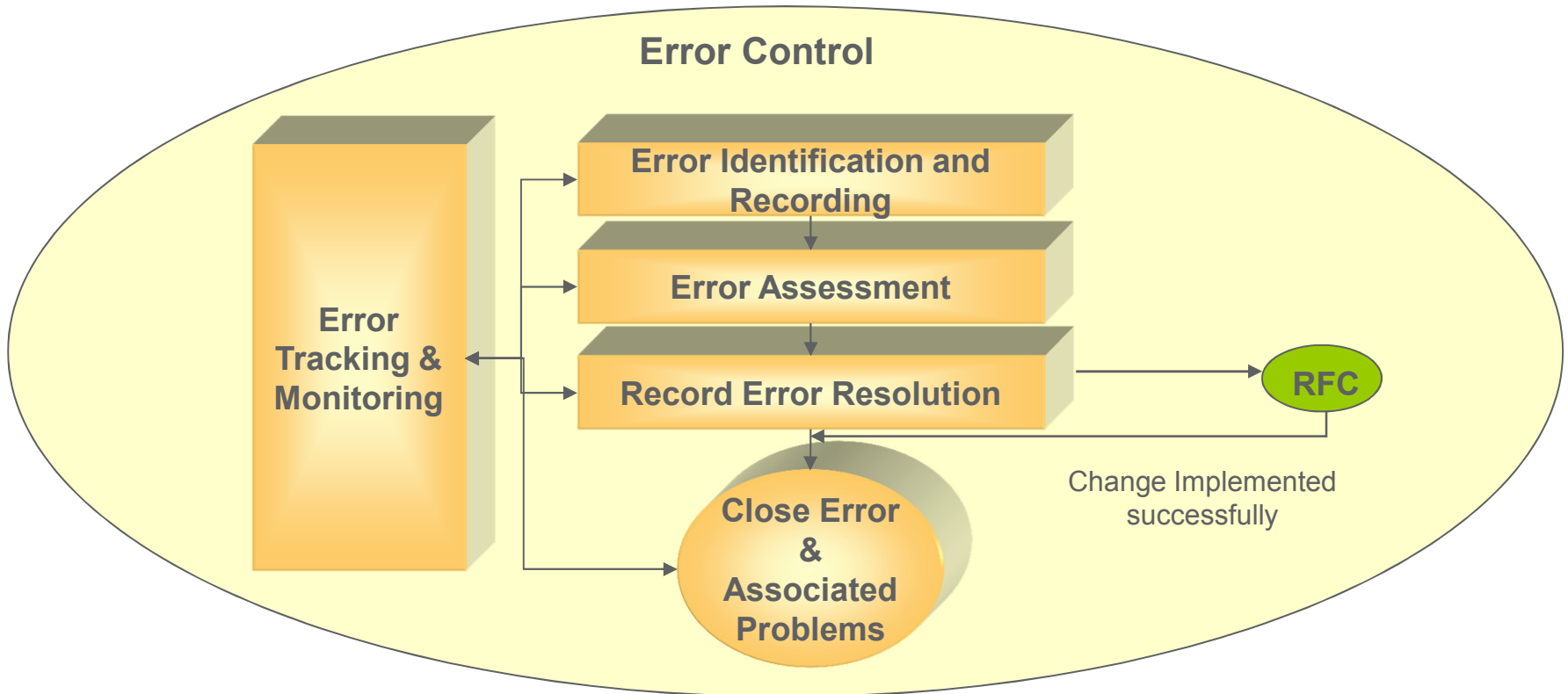
Problem Management



Error Control - Activities



Problem Management



Problem Management Implementation



Problem Management

Key Success Factors

Designated Problem Management Resources:

Allocation of resources across all groups creating a Problem Management Team

Unique Problem Management Toolset:

Separate Incident and Problem Management support within the toolset

Defined Configuration Mgmt Database:

Problem Management built around a CMDB that allows for tracking of known errors against affected CIs and associated Business Services

Defined Knowledge Base:

Structured repository of Known Errors and Knowledge Cases

You know you've got a Problem when.....



- › Analysis of Incident data indicates you have “recurring” Incidents
- › Incident Analysis shows Incidents not been matched effectively to the correct Problems or Known Errors
- › Analysis of events or symptoms from the IT Infrastructure indicates an underlying Problem that could potentially lead to Incidents (and ongoing Service disruptions)
- › A major or significant Incident occurs highlighting one or a series of related Problems has impacted a Service or related / dependent CI



Problem Management Benefits & Metrics

Problem Management - Benefits



› **Improved IT Service Quality**

- Problem Management helps generate a cycle of rapidly increasing IT service quality
- High-quality reliable services are good for the business users of IT
- Improved Service provision and System stability is good for the productivity and morale of the IT team

› **Incident Volume Reduction**

- Problem Management is the key to reducing the number of Incidents that interrupt Services

Problem Management - Benefits



› **Permanent Solutions**

- There will be a gradual reduction in the number and impact of Problems and Known Errors as those that are resolved stay resolved

› **Improved Problem Solving Skills / Resolution Techniques**

- The Problem Management process is based on the concept of learning from past experience
- The process provides the historical data to identify trends, and the means of proactively preventing failures and of reducing the impact of failures, resulting in improved User productivity

Problem Management - Benefits



› **Improved First Call Resolution (FCR)**

- Problem Management enables improved FCR of Incidents at the Service Desk
- Improved Knowledge Management database containing Incident resolution and Workaround data integrated within the workflow automation of the Support toolset

Problem Management - Process Metrics



- › Number of Incidents related to Problems
- › Number of Problems and Known Errors created - by status, service, impact, category, group / dept
- › Number of Problems by CI
- › Impact of Incidents occurring before the Problem is resolved and closed or a known error is confirmed
- › Number of Workarounds or temporary solutions provided
- › Number of Problems outstanding and expected resolution time
- › Number of RFC's issued
- › Problem Management - Time Investment by Period



Problem Management ROI

Problem Management - ROI

Savings Potential

Recurring Incidents Avoided

Incident Handling Time Reduced

Outbound Calls Avoided

Business Service Interruptions Avoided

How is it Realized?

Dedicated proactive resources to diagnose and address Problems before they impact the business

Integrated Incident, Problem and Knowledge Toolset that supports ITIL good practice processes

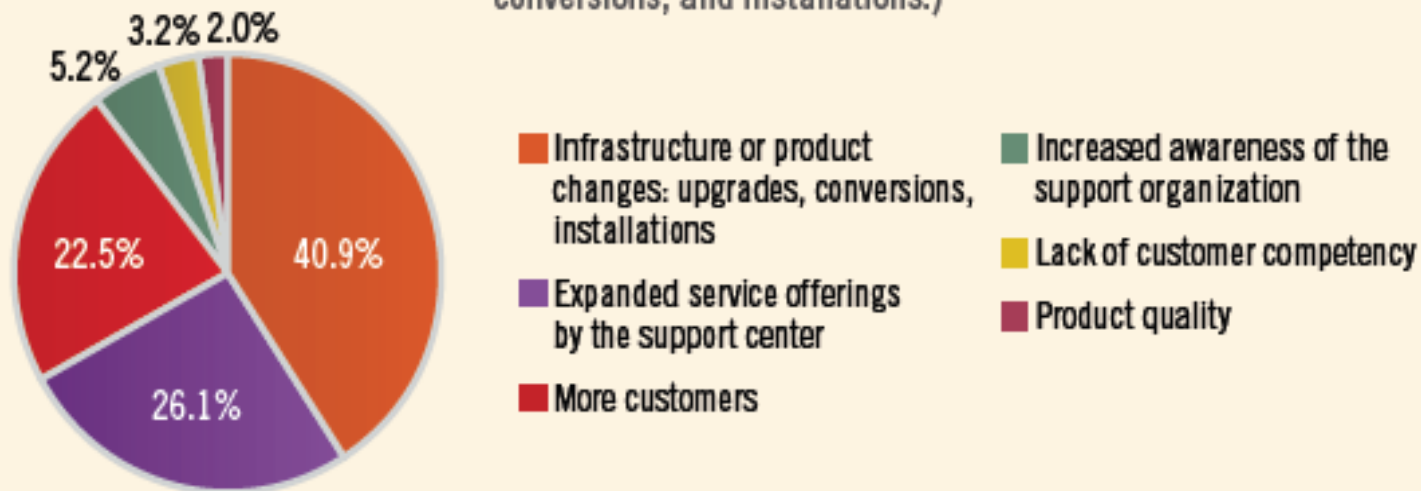
Increased First Call Resolution at the Service Desk

Elimination of underlying Problems reducing Service impacting Incidents

Each Savings category can be defined, calculated and assigned a monetary value based on your business environment

ROI - Baseline Metrics

Why the number of incidents is increasing for some support centers
(67% of support centers say incidents have increased. Of those, 41% believe it is due to changes such as upgrades, conversions, and installations.)



Reduce increases in Incident volume through enhanced Reactive and Proactive Problem Management

Reduced Incident Time / Increased FCR FrontRange ITSM Enterprise



The screenshot displays the FrontRange ITSM Enterprise interface. The main window shows the details for Incident 10771 (Active), with a summary of "email running slow" and a customer name of Marcia S Hendric. The incident is categorized as "Email Service" with a "Performance" category and "Phone" source. The status is "Active" with a priority of 3. A knowledge article titled "Q&A#10056 : How Do I block emails using McAfee Quarantine Manager?" is open in a modal window, providing a step-by-step answer to the question. The article includes a collection of "IT Knowledge" and a category of "Network Software". The interface also shows a search results panel on the right with various incident and knowledge base entries.

Incident: 10771 (Active)
Customer: Marcia S Hendric VIP | Summary: email running slow | Priority: 3 | Cost: \$0.00

Customer Info
Customer Name: Marcia S Hendric VIP
Location: US - Colorado Springs
Email: mhendric@demo.com
Phone: 9256669000

Incident Detail (10771)
Summary: email running slow
Description: Customer complaining Outlook running slow
Status: Active
Service: Email Service
Category: Performance
Source: Phone
Problem:
Impact: Medium
Urgency: Medium
Priority: 3

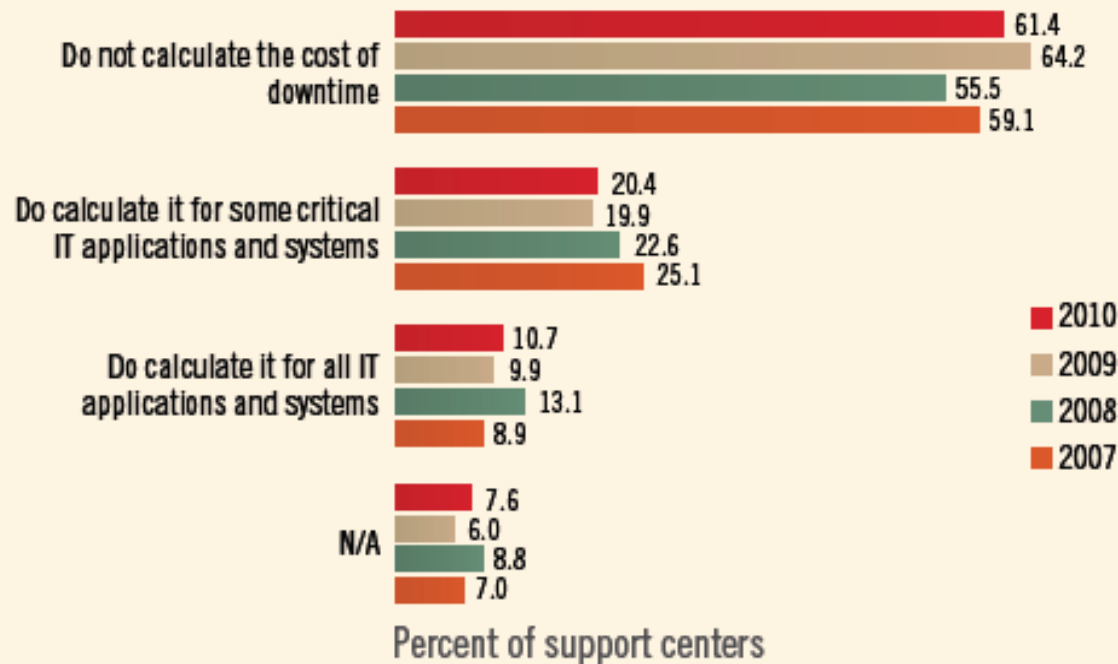
Knowledge Q & A: 10056
Q&A#10056 : How Do I block emails using McAfee Quarantine Manager? (Published)
Question: How Do I block emails using McAfee Quarantine Manager?
Answer:
Step 1. Launch Internet Explorer on the address bar type McAfee server URL
Step 2. Enter your email address and your McAfee Quarantine Manager password and click Log on.(See screen shot below)
Step 3. After you click Log on the screen shot below should come up.
Step 4. Click Your Account ----> Blacklist (See screen shot below).
Step 5. Enter the email address of the person you wish to block and click Add.(See screen shot below)
Step 6. After you clicked Add. Click Apply(See screen shot below)...

Resolution Target SLA: Email Serv
1st Escalation 2nd Escalation

Search Results
email running slow
Incident(10)
10698 : Email problem on Mobile S...
1044 : Email Inbox hangs
10168 : Email issue
10636 : PC is very slow
10571 : email is not working
10403 : outlook
KnowledgeBase(1)
10056 : How Do I block emails using...
Problem(5)
3 : Intranet appears to be down
21 : Network access for shared dri...
90 : T Sprint1 printer keeps breaking
10003 : email client slow
40004 : Email

ROI - Baseline Metrics

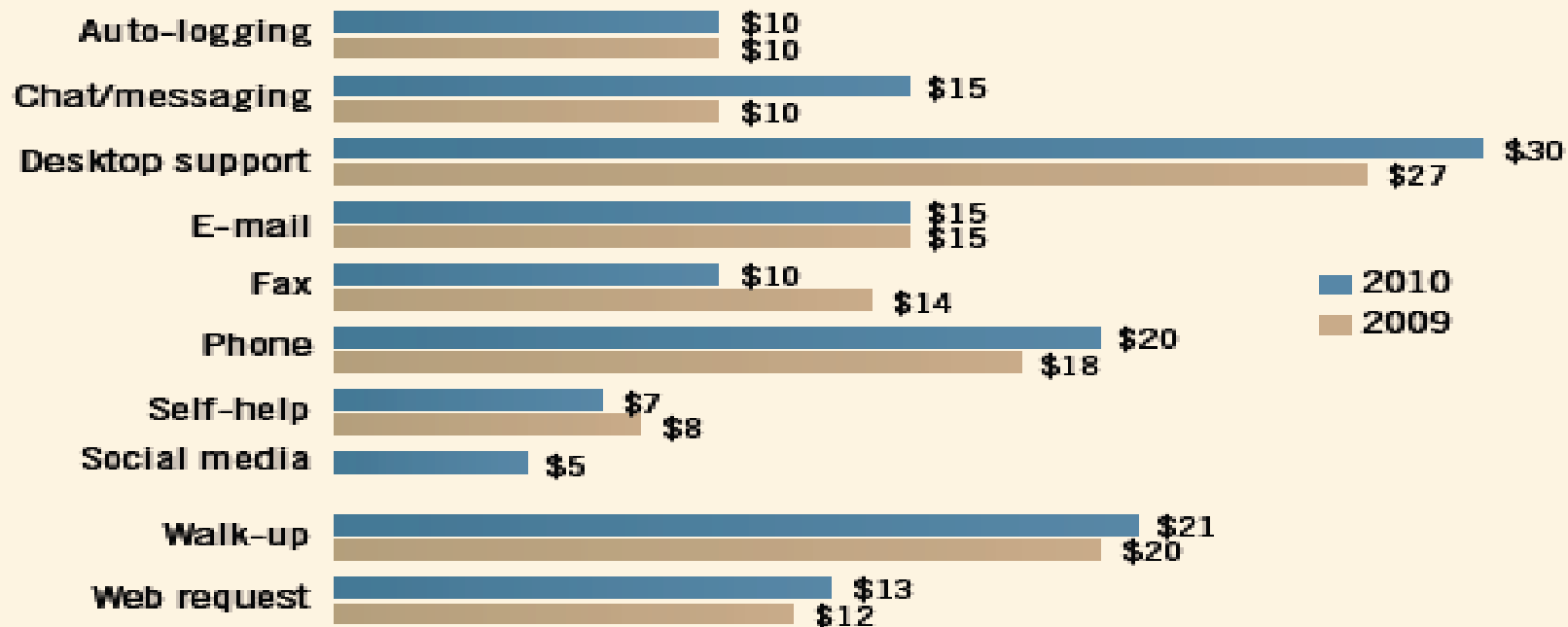
What percent of support centers are calculating the cost of downtime to the business?
(Downtime is the time when any service is unavailable during its agreed service time.)



The biggest single source of Problem Management return is the reduction in Business Downtime

ROI - Baseline Metrics

Median fully-burdened cost for the support center, per incident resolved by each channel (US data only)



Costs for Incident resolution across support channels are increasing..... self-help is still an expanding opportunity

Know your support costs per channel

Cost per Incident - Cost per Call - Cost per Minute

Know your average Incident Handling Times

Track Incident and FCR trends

Track usage of Workarounds, Known Error Resolution and Knowledge

Understand impact on Handling time reductions

Gain agreement on the “per minute” cost of Service downtime within your business

Calculate and report on loss of Service to the Business

Convert these metrics to demonstrate how Problem Management is delivering hard financial savings?



Thank You

Questions?