

Release

Change

Configuration
Management
Database

Service Level
Management

Technology Service Desk

Problem

Incident

Implementing an ITIL Compliant Service Desk



Purpose of the Service Desk

- **Maximize customer uptime**
 - Single point of contact for incoming and outgoing information
 - Optimized triage processes
 - Connected to ITIL Service Support for continuous improvement
- **Eliminate low value tasks in Engineering**
 - Only use Engineering for key initiatives
 - Eliminates duplication of work
- **Managed service levels**
 - SLA compliance & auditing
 - Consistent priority assignments
- **Provide process consistency, independent of the individuals on the team**



Process Maturity Matrix

	0 - Absence	1 - Initiation	2 - Awareness	3 - Control	4 – Integration	5 - Optimization
<i>Description</i>	No evidence of any activity supporting this process.	Ad-hoc activities exists, but are not related with each other: <ul style="list-style-type: none"> • Some policy statements have been made • No documented objectives or plans • No dedicated resources 	Aware of the process, but some activities are incomplete or inconsistent; no overall measuring or control: <ul style="list-style-type: none"> • Driven by the tool rather than being defined separate from the tool • Positions created, but roles and responsibilities are poorly defined 	Process is well defined, understood and implemented: <ul style="list-style-type: none"> • Tasks, responsibilities and authorizations are well defined and communicated • Targets for quality are set and results are measured • Comprehensive management reports are produced and discussed • Formal planning is done 	Input to and output from this process are connected with other well controlled processes; <ul style="list-style-type: none"> • Significant improvements in quality have been achieved • Regular, formal communications between department heads working with different processes • Quality and performance metrics transferred between processes 	Process drives quality improvement and new business opportunities beyond the process: <ul style="list-style-type: none"> • Direct links to IT and corporate policy • Evidence of innovation • Quality management and continuous improvements activities embedded • Performance measurements are indicative of “world class”
Service Support						
+ Service Desk						
+ Incident						
+ Change						
+ Release						
+ Problem						
+ Config						
Service Delivery						
+ SLM						
+ Availability						
+ Capacity						
+ Financial						
+ Continuity						

Items in blue are from the Pink Elephant Process Maturity Level White Paper.

Service Desk Process Maturity Matrix

	1 - Initiation	2 - Awareness	3 - Control	4 – Integration	5 - Optimization
1. Functionality	Various or all staff members receive customer requests	Only specific staff members receive customer requests	<ul style="list-style-type: none"> Provides advice and guidance to customer w/rapid restoration of normal service operations Meets expectations set out in the SLAs 	Produces and initiates management information	Communications and promotes services
2. Incident, CMDB & SLM		Defined	Single point of contact for incoming and outgoing communications	Processes are connected to Change, Problem, Release & CMDB	Customer surveys, process tuning with customer participation
3. Knowledge base / Documentation	Some documents and spreadsheets kept by individuals	Shared folders Requirements being defined	<ul style="list-style-type: none"> Routing matrix Call scripts FCR instructions MAC process 	System based solution	Change and approval processes with audit trails and versioning
4. Communication Systems, Phones, ACD & Email	Individual phones and email addresses	Published phone extension(s), email distribution list	ACD system or phone hunt group implemented	ACD reporting and analysis (basic to comprehensive)	Auditing calls to identify process improvement opportunities
5. Equipment – Service Mgmt App	Manual method (paper, Word, Excel or other)	Basic ticket tracking with some additional features	ITIL compliant application: Incident, Request, Change, Release, Problem & CMDB	Reporting and analysis (basic to comprehensive)	Customer reporting, dashboards and continuous improvement occurring
6. Customer self help methods		Topics defined	Posted and available for customers	Search method and customer communications Live chat system optional	Evidence of use and a percentage of issues being resolved this way
7. Physical Location	Must be inside of IT	Good to be inside of IT	Okay to be outside of IT	Outside of IT	Geographically dispersed, VoIP and video linked

Items in blue are from the Pink Elephant Process Maturity Level White Paper.
All other items are suggested descriptions



Workshop

- Time spent so far (15 min)
- Complete the Organizational Profile Worksheet (50 min)
- Break (10 min)
- Matching the Service Desk to your Profile Worksheet (30 min)
- Define your current positions on the Service Desk Process Maturity Matrix (15 min)
- Q&A (15 min)



Organizational Profile

Number of:	Quantity	Notes
Employees		
Locations supported		Physical facilities
Labs (schools only)		
EIT/TIS Functional Areas		Telecom, Networking, DBAs & etc
EIT Vendors		
Applications supported		
“Support desks” in operation today		
PC refresh cycle target	3, 4, 5 or ___ years	



Organizational Profile

PC Reliability

PC Count by Age	Percent or Qty	Windows OS	Other OS
<=1 year			
>1 and <=2 years			
>2 and <=3 years			
>3 and <=4 years			
>4 years			
Total			

If the average age of the PC is	3 years	4 years	5+ years
Multiply the calls per day times (estimates)	1.1	1.2	1.5



Organizational Profile

Request Demand by Hour

Average Requests	Mon	Tue	Wed	Thur	Fri
7am to 8am	30	10	5	10	10
8am to 9am	20	25	20	15	15
9am to 10am	25	20	30	20	20
10am to 11am	20	20	15	25	25
11am to 12pm	15	10	10	30	20
12pm to 1pm	20	10	10	10	10
1pm to 2pm	20	25	25	15	15
2pm to 3pm	25	25	20	10	10
3pm to 4pm	30	10	10	10	10
4pm to 5pm	15	10	10	10	10
5pm to 6pm	5	5	5	10	5
Total per day	225	170	160	165	150

Use this layout to identify peak times and resulting peak time staffing requirements

For today, estimate 1 call / month / user = _____ divide by 20 = _____ average requests per day



Organizational Profile Staffing Calculations

Avg Talk Time	3 minutes	4 minutes	5 minutes	6 minutes
# of Techs required				

CC Modeler used to estimate. Need to factor in PTO, Vacation and training day coverage, 35sf per Tech, add an Admin Tech per ~7, \$1K/year in training, cell phone, PC, home VPN & PC



Organizational Profile Support Demand

Customer work hours

	# of People to be Supported by the Service Desk	Department Name(s)	Vendors required for support
Starts at 6am			
Starts at 7am			
Starts at 8am			
Stop at 5pm			
Stop at 6pm			
Off hours			
Other			



Organizational Profile Complexity Mapping

Who provides your IT service? (Check all that apply)

- Central IT Staff
- External Service Provider
- Program Staff
- State agency

For the Service Providers in the prior question, who are the users of this service? (Check all that apply)

- Agency Staff (State employees or contractors)
- Employees or contractors from one or more additional state agencies
- External Service Providers
- Public

Which functions does your EIT/TIS group provide? (Check all that apply)

- A/V Setups
- Application Support
- Conference Room setups
- Networking
- Security
- Telecom
- Desktop Support
- Other, please list _____



Organizational Profile Systems & Infrastructure

Service Management Software

Mfg & Product Name	
Plans (keep, replace & when?)	
Reporting capabilities	
Configuration data base	Y / N
Change management	Y / N
Problem management	Y / N
Release management	Y / N

Service Desk Phone System

	Individual phones	Telephone “hunt group”	Automated Call Distribution (ACD)
Mfg & Model			
Plans (keep, replace)			
Purchase price / annual			



Organizational Profile Staff Skills Inventory

How many people do you currently have in your EIT/TIS organization per these levels?

Level 1: Entry level position responsible for call receipt, routing, problem diagnosis and some problem resolution and escalation	
Level 2: Higher skill position generally requiring some level of certification, problem resolution over the phone or at the desk, and problem escalation	
Level 3: Highly skilled network engineers, server administrators and DB administrators, top level of escalation	



Organizational Profile Activity Classification

What types of requests do you receive today?

	Simple	Moderately Complex	Complex
Percentage			
Yes or No:			
Accepting and Logging	Y / N	Y / N	Y / N
Referring/escalating	Y / N	Y / N	Y / N
Tracking and Reporting	Y / N	Y / N	Y / N
Resolving and Closing	Y / N	Y / N	Y / N



Organizational Profile Support Methods

- How does your Service Desk provide support to customers? (Check all that apply)
 - On Line Self Service
 - Telephone/IVR
 - Remote Desktop
 - Online Interactive
 - Face to Face
 - Other

The information we just covered will refine your earlier estimates.



Organizational Profile Incident Priority Definitions

Incident Priority Matrix Example (bhrs = business hours)

Priority	System Level	Response	Resolution
6 - Emergency	Major loss of a mission critical system or Service, loss of access to a customer Group which performs work critical to the business.	10 min	4 bhrs
5 – High	Incident with a critical system or service affecting \geq 10 customers	15 min	8 bhrs
4 - Medium	An incident affecting an individual or a loss of service for 1-10 customers on critical business functions or an outage for any 1 customer	30 min	16 bhrs
3 – Low (standard)	An incident affecting an individual or a loss of service for 1-10 customers on non-critical business functions	30 min	24 bhrs
2 - Scheduled	A scheduled request for new installs, changes, moves or upgrades.	2 bhrs	40 bhrs
0 - Project	Service request for a project that will exceed 2 weeks to complete.	2 bhrs	Custom

Adjust to suit your organization. Note that this matrix has a direct relationship to cost.



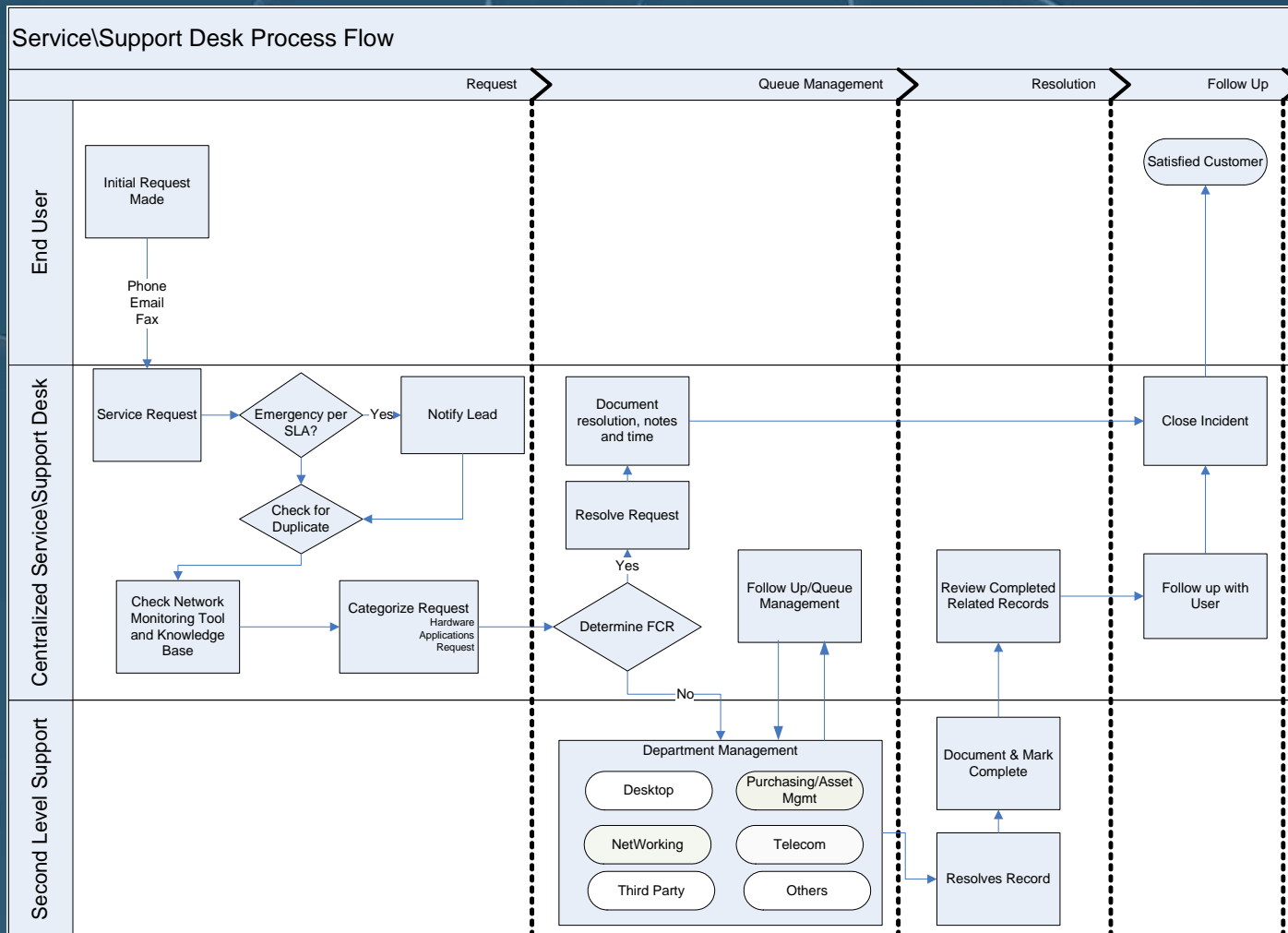
Break

10 minutes

After the break, we will discuss
Swim Lanes, Call Routing Matrix and Scripts.

Matching your SD to your Profile

Incident Management Swim Lane





Matching your SD to your Profile Hiring / Staffing

- As technical candidates typically do not usually possess customer skills, a comprehensive training approach is required to prepare them to function efficiently at a Service Desk:
 - Job Descriptions (Summary, Functions, Qualifications & Experience)
 - Comprehensive job orientation
 - Pre-defined training plan
 - General (telephone and listening skills, time management, thinking, writing, typing, stress management and customer service skills)
 - Technical
 - Team Building
 - Incident Management
 - Knowledge Management



Matching your SD to your Profile

Quality / Compliance Audits

	Daily	Weekly	Monthly	Quarterly	Annually
Starting Out	Average time to answer	# of Abandoned Calls	# of Escalations	Staff Absences	Health Check
Established	Average Call Time	Resolution Times	# of Re-opened Tickets	Customer Satisfaction Surveys	Health Check
Process Mature	Quality Audits	Agent Availability Rates	Repeat Incidents		Health Check



Matching your SD to your Profile

Establishing the Primary Call Scripts

EXAMPLE

1. Thank you for contacting the Technology Service Desk
2. This is *NAME*
3. Who am I speaking with?
4. Thank you, may I have your PC number?
5. Thank you, how may I help you today?
6. Are you able to login to the local workstation?
7. Are you able to access the Intranet?
8. Are you able to ping our service providers DNS servers?
9. Is there more than one application affected? (Identify and record names of applications)
10. Do you know if other users are affected and in which locations?
11. Thank-you, I have captured the details for this call and a service ticket is being created to resolve your request. Your ticket # is _____.
12. May I assist you with anything else today?
13. Check the IP Monitor - Is it reporting any outages?
14. If not reporting any outage, can we ping the IP address listed on the IP Monitor?
15. After the call:
16. Verify that all of the Incident Creation Actions are complete.
17. The results of this information must be included in the Notes section of the Work Order.
18. Service Desk Supervisor must approve this incident before assigning to a Technician.
19. Route to: _____

Matching your SD to your Profile

Establishing the Call Routing Matrix

EXAMPLE

Topic	Issue	Maximo Priority	Ticket Template Number	Failure Code	Maximo Classification Tickets\PSA\	Owner/Owner Group or Routing	C F E o C X n F i n E s	Direct Financial impact
IFAS	Password Reset	2			APPMGMT\PROBLEM	Tom McGucken		Yes
Internet	Updates	2			APPMGMT\PROBLEM	Information Delivery for Content or EIT_BIWEB if broken		No
Ip Addresses	Settings Changed	2				EIT_Security		No
VPN	Request	2			NETWORKING\VPN	Send VPN form to Requestor and open WO for EIT_SECURITY Requestor faxes Completed form to Security at 861-2077		No

How to begin creating your scripts and routing matrix:

- ❑ What types of calls do you receive?
- ❑ How many functional groups do you have in EIT?
- ❑ What does 2nd level support need to know to resolve the issue?
- ❑ Who resolves the issue?
- ❑ What priority does the request receive?



Matching your SD to your Profile Metrics and Reporting

- Average time to answer
- Average Call time
- # of dropped/abandoned calls
- # of escalations
- Customer satisfaction surveys
- Agent availability rates
- Resolution times
- Reopened tickets
- Ticket handling/work duration
- Repeat Incidents
- Failure Codes
- Staff Agent Absences
- Quality Audits, response times being met, routing is accurate



Matching your SD to your Profile

Additional Topics for Review

- VIP Strategy
- Escalation method
- Marketing/Communication Strategy – draft email for CIO to send to all
- Within SLM, OLAs with 2nd level EIT for coverage and response times to match the SLAs with the customers



Workshop

- ☑ **Introduction (15 min)**
- ☑ **Complete the Organizational Profile Worksheet (50 min)**
- ☑ **Break (10 min)**
- ☑ **Matching the Service Desk to your Profile Worksheet (30 min)**
- ☑ **Define your current positions on the Service Desk Process Maturity Matrix (15 min)**
- **Your Goal to achieve on or before the next CMPP event**
 - Achieve 1 or more steps forward in each row of the Maturity Matrix



Sarasota County Status

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Resources

- Help Desk Institute
 - Certifications (SCA & CSR), Metrics & Industry Benchmarking www.thinkhdi.com
- Staffing calculator www.kooltoolz.com
- Setting up a Service Desk
 - Executives Guide by Robert Last www.thinkhdi.com/publications/focusBookSeries/archive.aspx
- Service Catalog & SLAs www.scgov-eit-intranet.net/servcat
- CMPP Forums www.cmpp.net/forum
 - Service Desk, Change, CMDB, SLM
- ITIL 3.0
 - Released 05/30/07
- Customer Survey Tool www.surveymonkey.com
- Process Model www.igrafx.com

Various



Good Luck!

- A Service Desk implementation is a project, with staged deliverables and stage reviews:
 - Adopt a phased implementation approach
 - Involve your Customers and ask them what they need
 - Involve/consult your support staff
 - Identify quick wins to implement first
 - Constantly measure progress
 - Don't expect too much too soon
 - Realize that it's hard work – don't give up
- To introduce and maintain a successful Service Desk:
 - Customer requirements are understood
 - Investment is made in training for customers, support teams and service desk staff
 - Service objectives, goals and deliverables are clearly defined
 - Service levels are practical, agreed and regularly reviewed
 - The benefits are accepted by the business



Thank you!

Q&A

www.vitil-it.com