



LAYMAN & LAYMAN



Use of Measurement in IT Services

PSM Conference
August 2012

Session Objectives

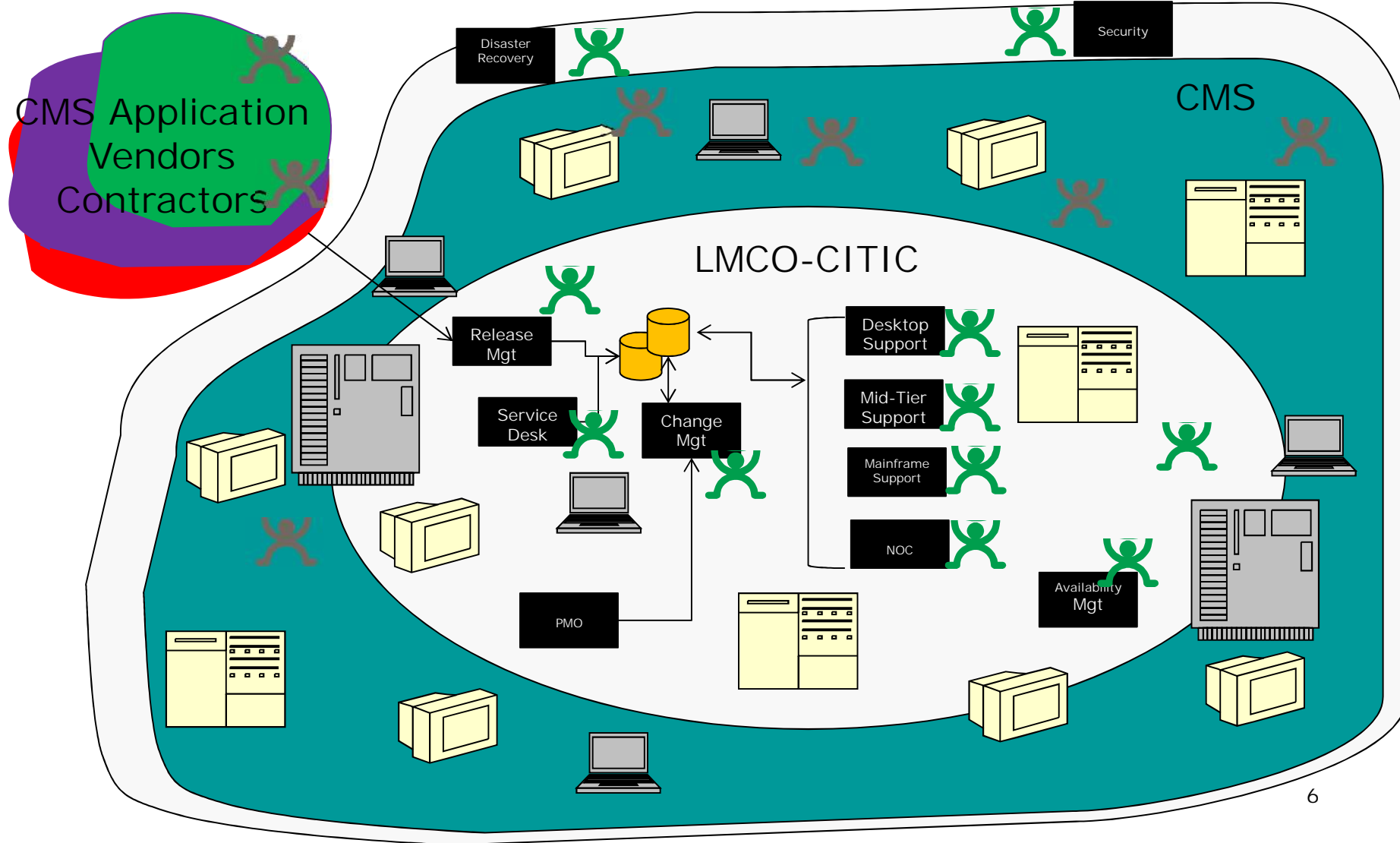
- ❑ Show how one services organization has leveraged measurement and embedded it into their culture
- ❑ See how external (SLAs) and internal (workload management and profitability) measurement needs drive services measurement
- ❑ Introduce CMMI for Services and explore measurement practice connections
- ❑ Share how measurement drives management, resulting in superior service and satisfied customers

Agenda

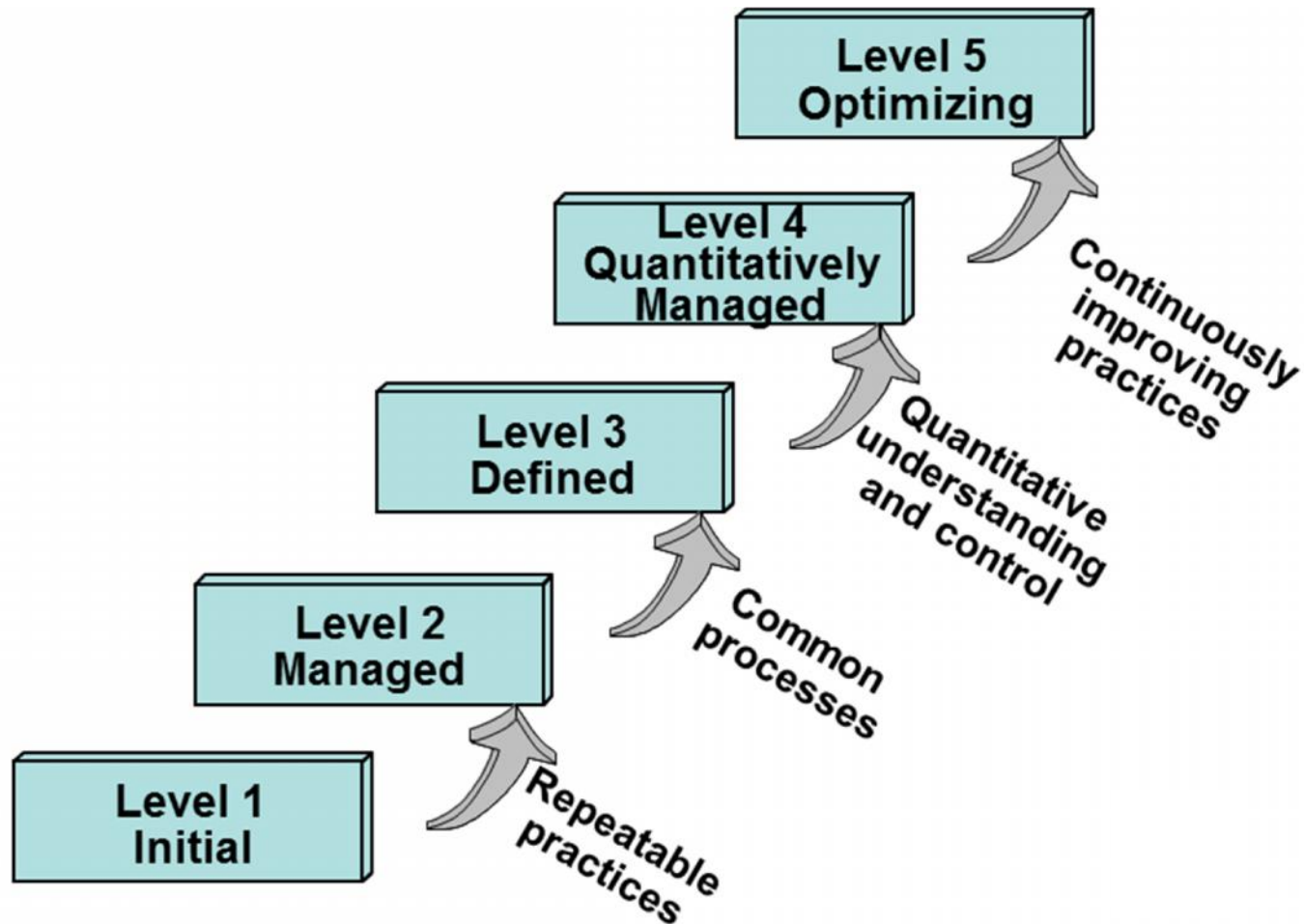
- ❑ CITIC - Program Overview
- ❑ Use of CMMI for Services
- ❑ Service Measurement Plans & SLAs
- ❑ Monitoring Actual Performance against Plans
- ❑ Being Proactive - Prediction & Modeling
- ❑ “Built-in” Measurement
- ❑ Summary
- ❑ Q&A



CITIC Service System



CMMI for Services



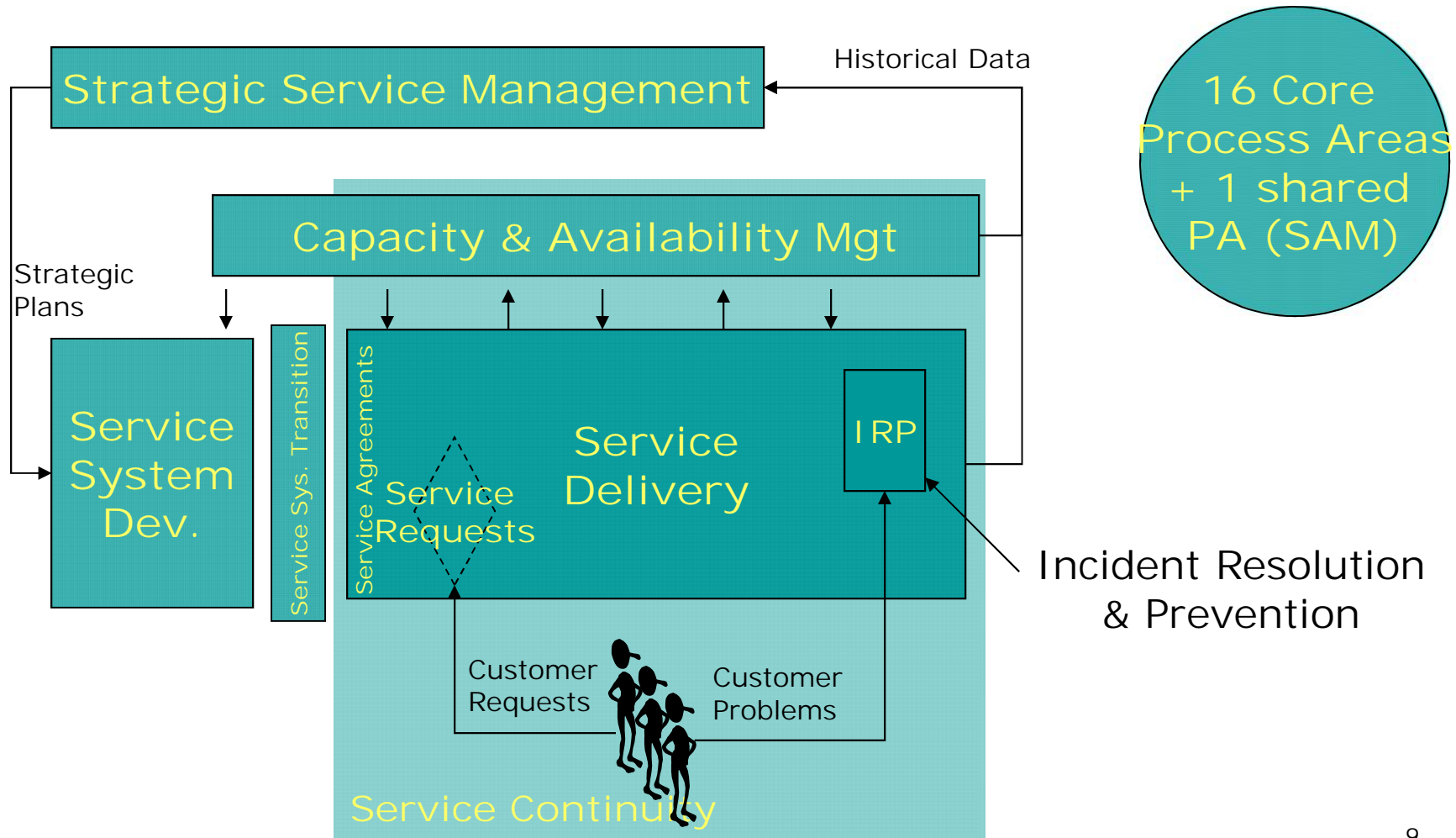
* PA Addition

Services vs. Development

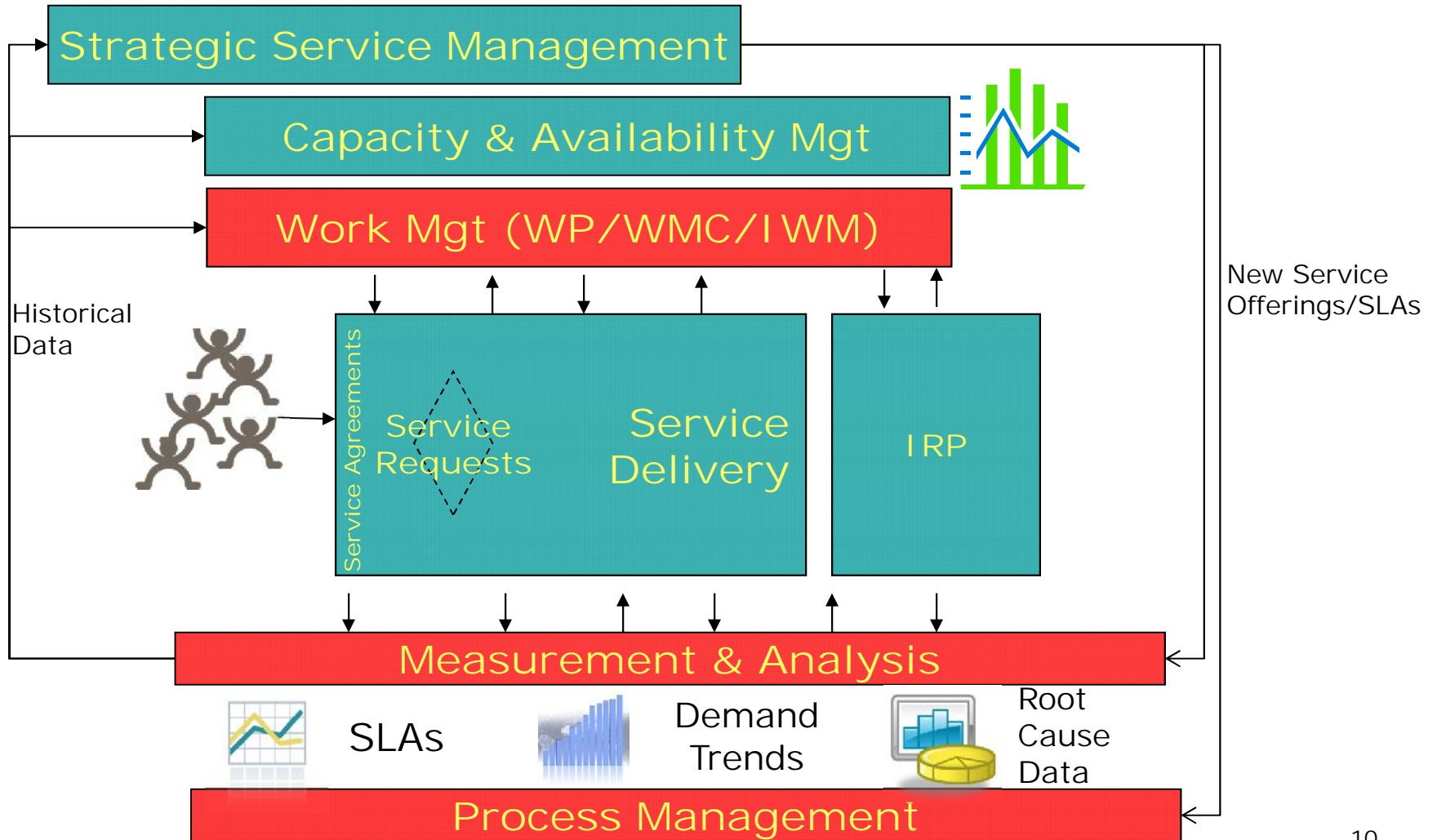
- ❑ Services imply on-going relationships governed by service agreements.
- ❑ Services are delivered through the operation of a service system (people, process, tools).
- ❑ Services are simultaneously produced and consumed.
- ❑ Services have a different business rhythm.



CMMI for Services in Context



Measurement in CMMI-SVCs



Service Measurement Plans & SLAs

- ❑ Availability
- ❑ Return to Service
- ❑ Notification
- ❑ Severity of Service Outages
- ❑ Response Time
- ❑ AMDs (Adds/Moves/Deletes)
- ❑ Information Recovery
- ❑ Production and Scheduling
- ❑ Abandoned Calls
- ❑ Queue Management
- ❑ First-call Problem Resolution
- ❑ Outage Notification

Metrics Data Collection Methodology Plan (MDCMP)



- Metric number and name
- Metric description
- Data sources
- Measurement processes
- Computation of the standards
- Measurement interval
- Reporting interval

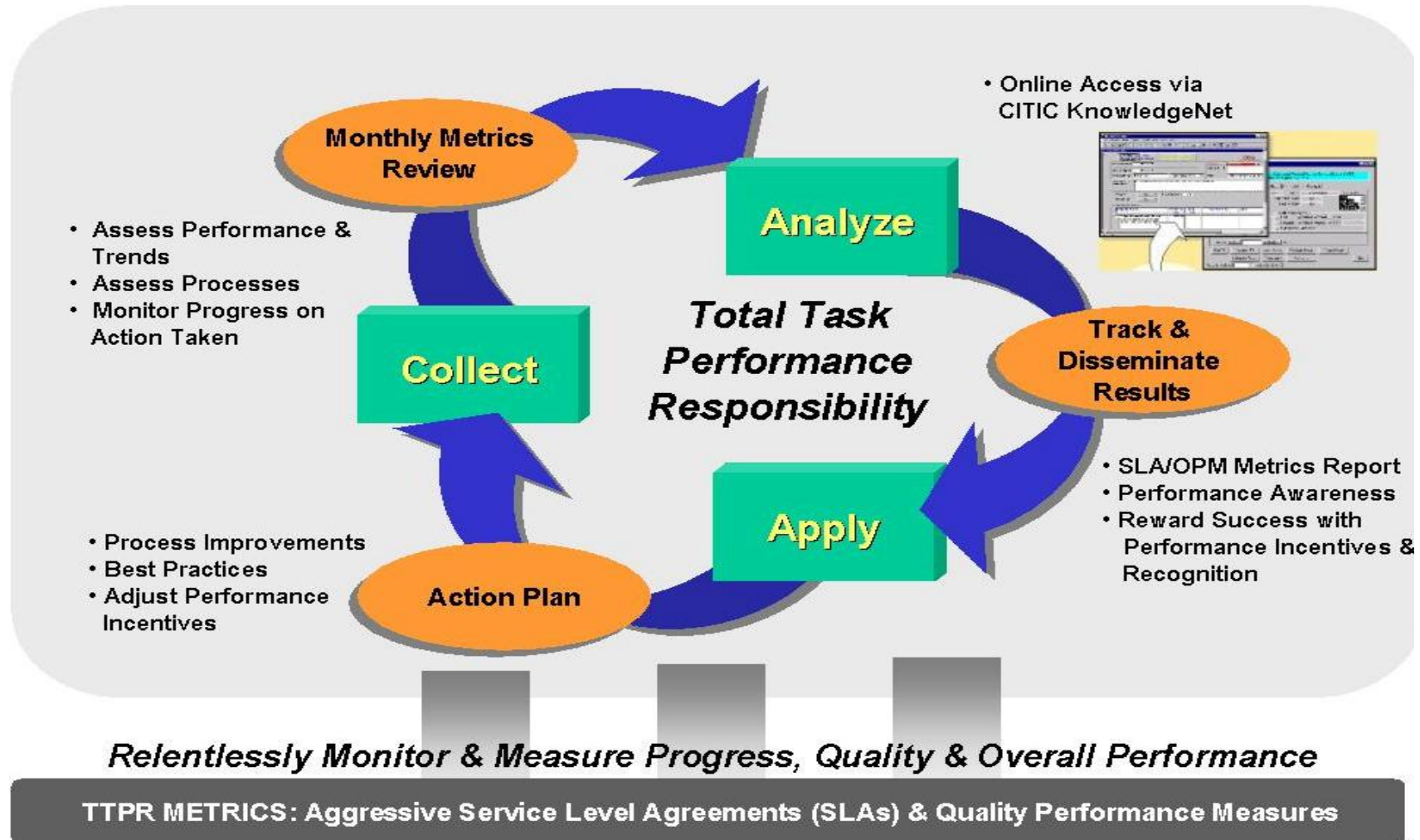
...plus...

Quality Performance Measurements (beyond SLA obligations)

Including:

- Overall Management Effectiveness
- Contract Program Management
- Operations Support
- Technical Support
- General Support
- Management Planning
- Security Management
- Quality Assurance and Risk Management
- Responsiveness to local and special needs
- End User Communication

Monitoring Actual Performance against Plans



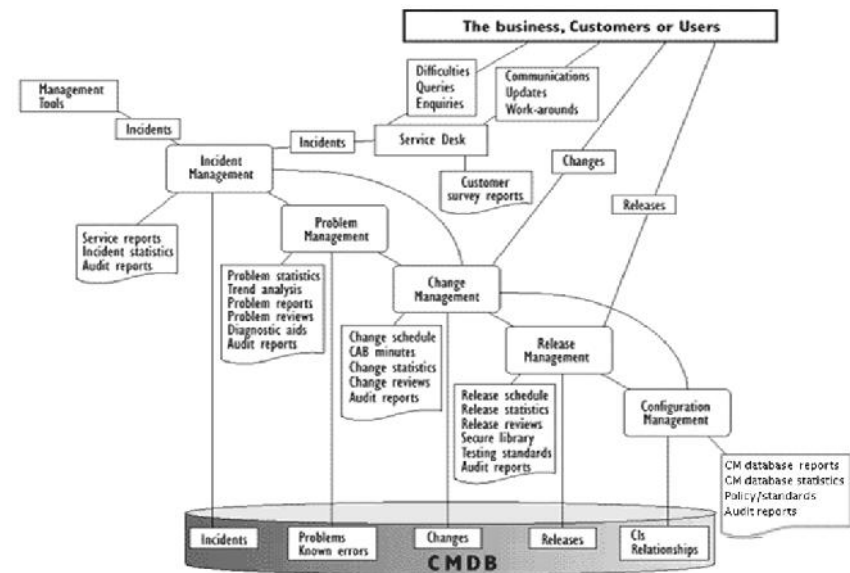
Automation is Key

Infrastructure Management Systems

- Remedy

- ACD

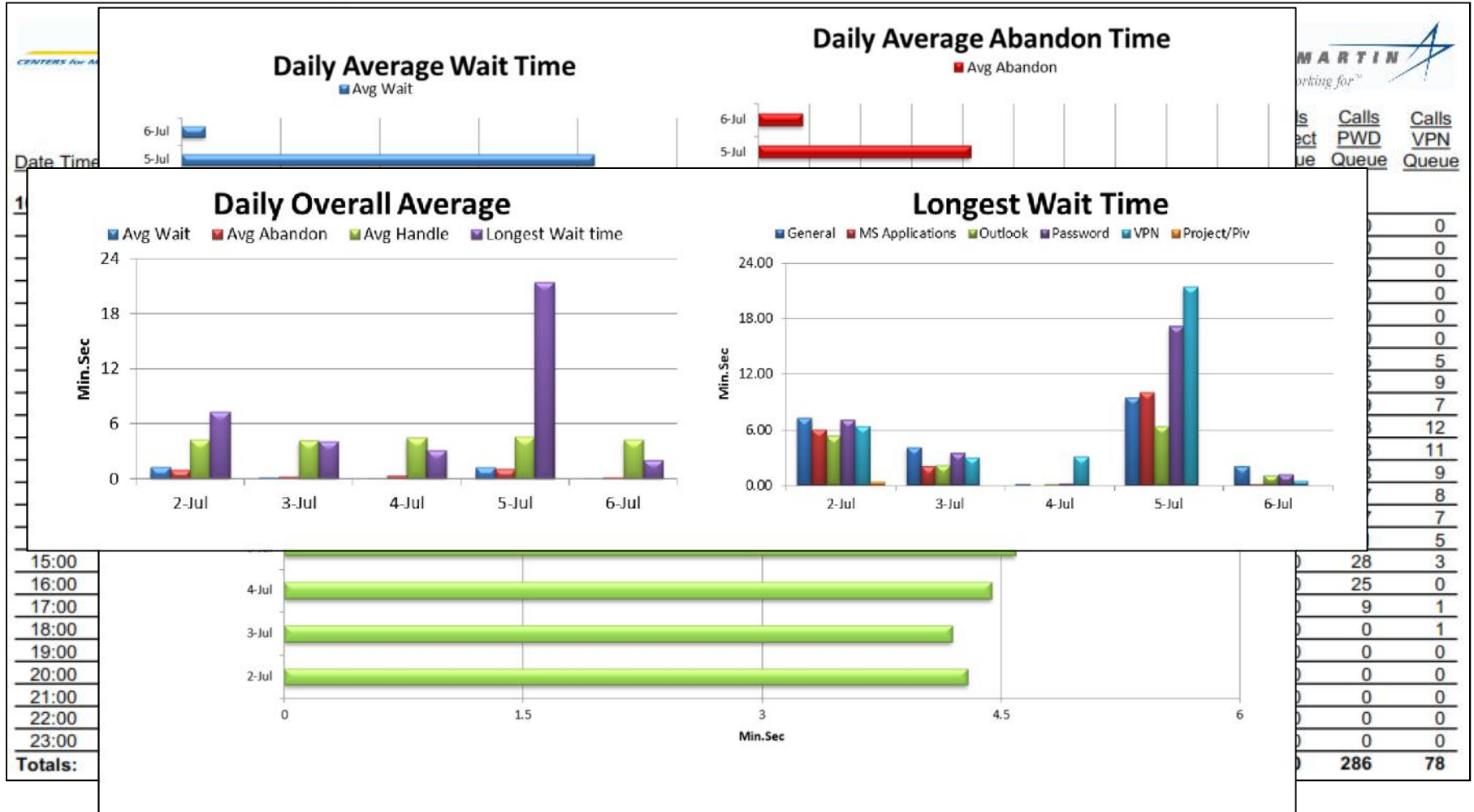
(Automated Call Distribution)



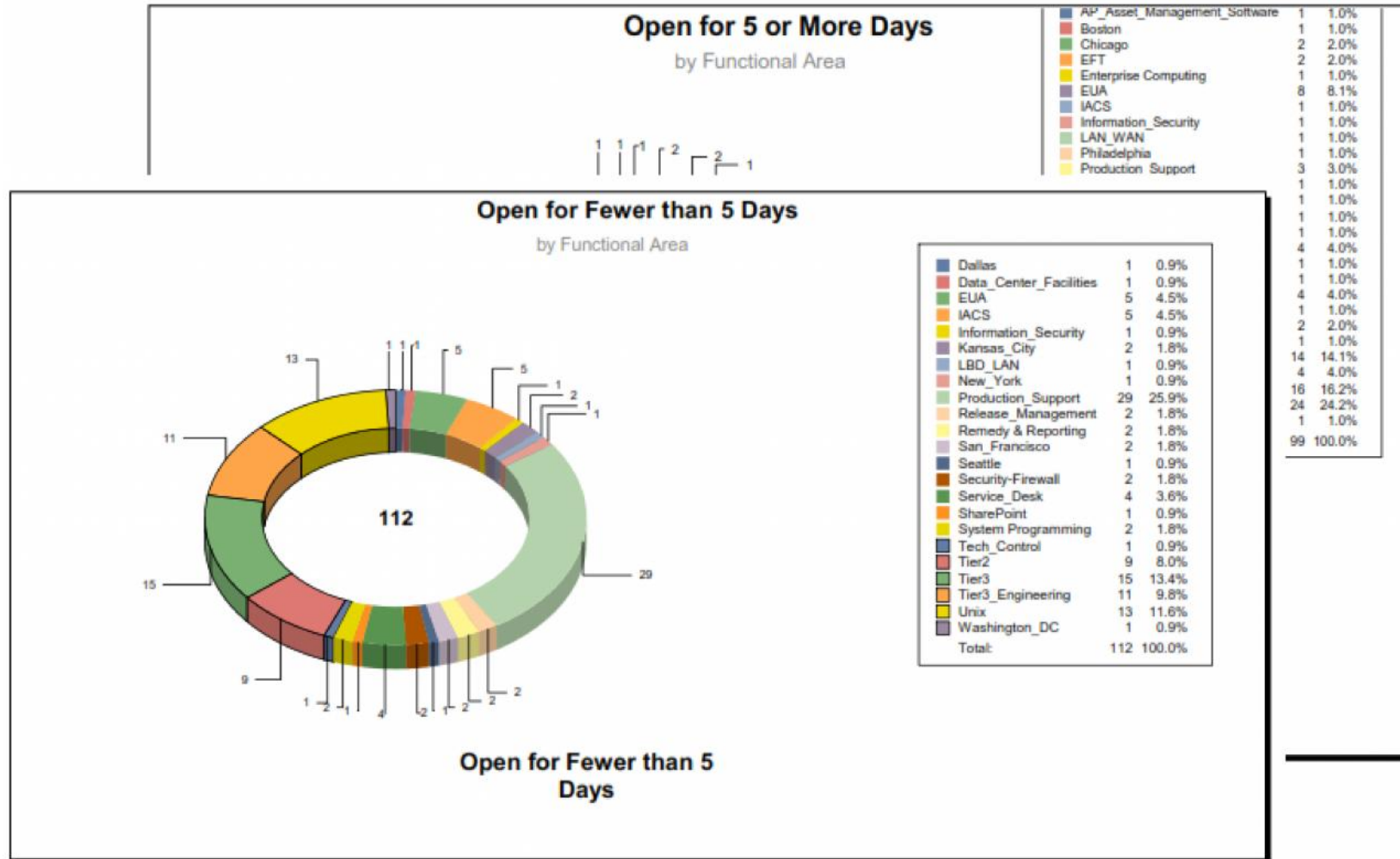
Infrastructure Monitoring Systems

- Tivoli, ITM, OMEGAMON, Remote Control, Configuration Manager, Data Warehouse, Enterprise Console, NetView, Composite Application Manager, Symantec, Enterasys Host Intrusion Detection (HID), Tripwire, Trend Micro Deep Security NetBackup, ESM, SAN, Hitachi High Command, Backup Exec, Windows Server Update Services (WSUS), VMware Update manager (VUM). Virtual Center, HP Insight Manager, EMC Navisphere, BellMonitor, Windows Domain Controllers, CA-Vantage.

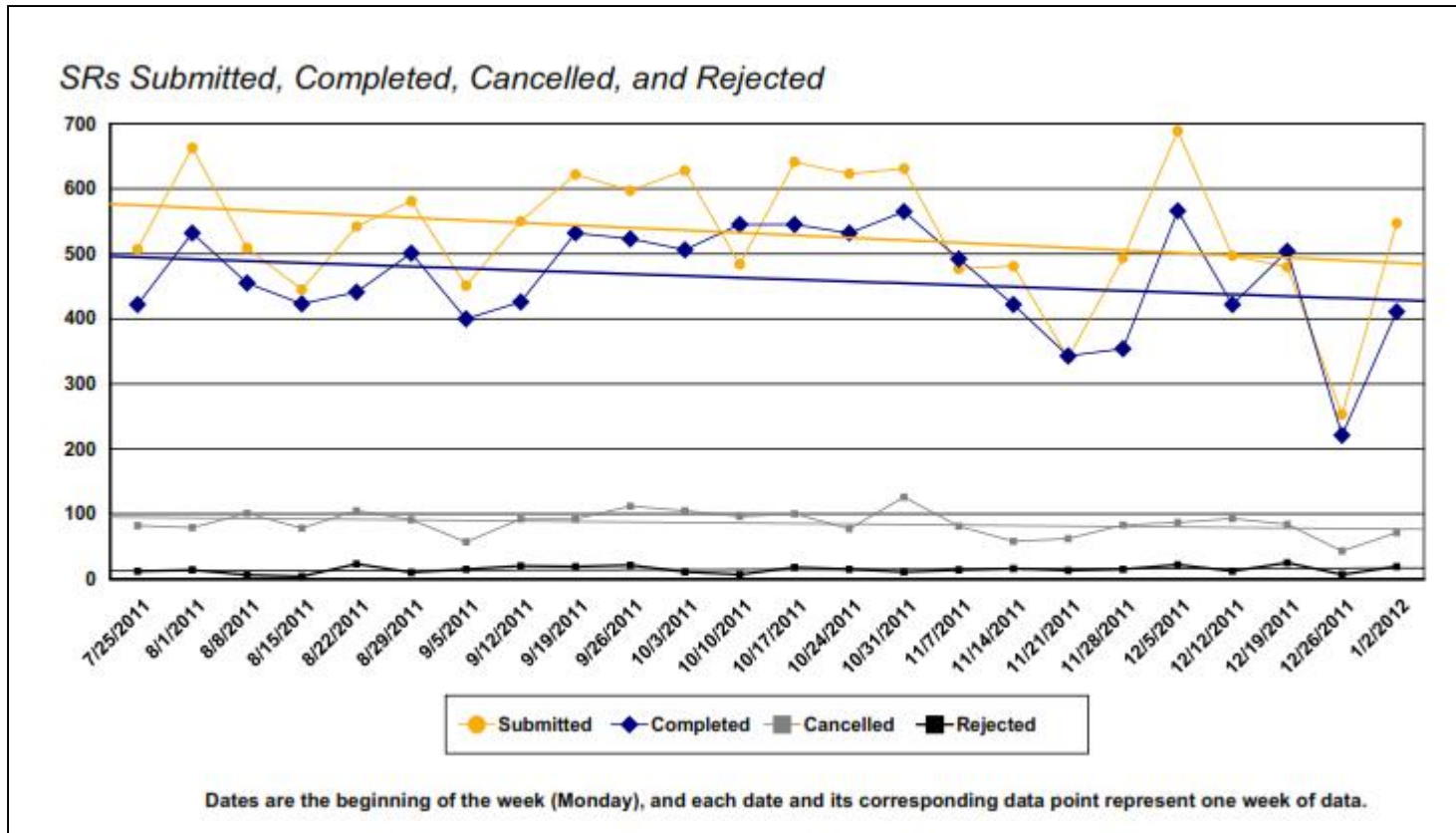
Examples-1



Examples-2



Examples-3



Examples-4

Milestones

Milestone

Prod Build Complete

TRB Complete

O&MM Complete

Receive Approval from TRB for ORR

ORR Complete

CITIC Contractor Conversion to New Client

O&M Handoff Complete

Obtained Sign Off by the GTL on the Form

Project Closed

Last Week Tasks (1/8/12)

Task Name

Conduct End User Training Sessions

Deploy Uninstall package of old VPN Client to Pilot Users

Current Tasks (1/15/2012 - 1/21/2012)

Task Name	Start Date	Finish Date	Status	Notes
Conduct End User Training Sessions	8/31/2011	2/17/2012	Green	
Deploy Uninstall package of old VPN Client to Pilot Users	10/28/2011	1/31/2012	Green	Karen Shields approved restart Special Needs users....

Project Current Phase: Implementation

Funding Source: 301

Issues

Risks

Risk	Status	Description	Mitigation
Cisco ASA 8.4.2 Code Bug Issues	(3) Closed	The required ASA code 8.4.2 will need to be tested after the release in June 2011. Any issues, bugs, or incompatibility found in ASA code could delay the project schedule. Ongoing issues with code related to the single sign-on capabilities with the IPSec protocol. LM has recommended that CMS use SSL vs. IPSec which would change the scope of this effort.	<p>LM is working with issue as a bug for the 7/11/11 - LM has recommended that engineering code be delivered to LM by official Production release 2011; CMS would like VPN solution.</p>
Delay in AnyConnect Client Installations - User Availability	(3) Closed	Installations may be delayed due to the availability of the end user on the network.	Users will need to be receive the new software.
End User Resistance to New Interface	(3) Closed	<p>There may be some resistance from the users to learn a new interface.</p>	<p>Lockheed Martin multiple delivery model transition.</p>
Delay in Cisco ASA 8.4.2 Code Release	(3) Closed	Project schedule may be delayed if Cisco postpones the release date for the required ASA code (currently	LM is working closely with accurate timeframe

Task Name	Start Date	Finish Date	Status	Notes
Deploy Uninstall package of old VPN Client to Pilot Users	10/28/2011	1/31/2012	Green	Karen Shields approved restart Special Needs users....

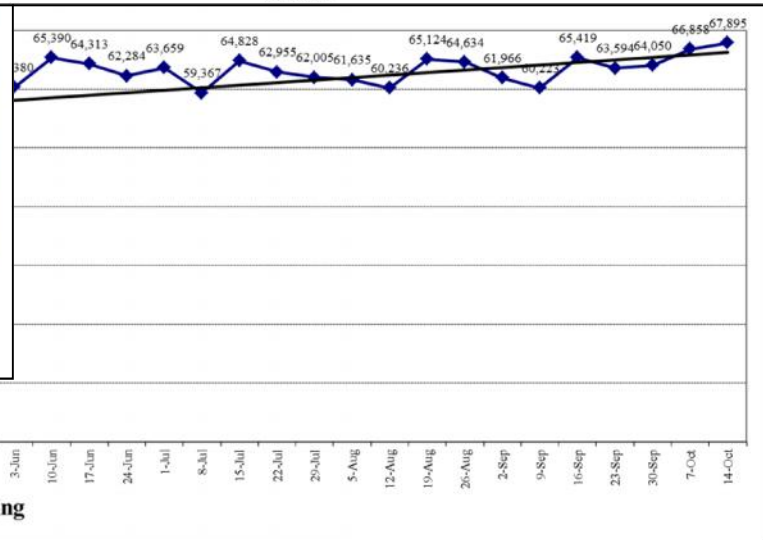
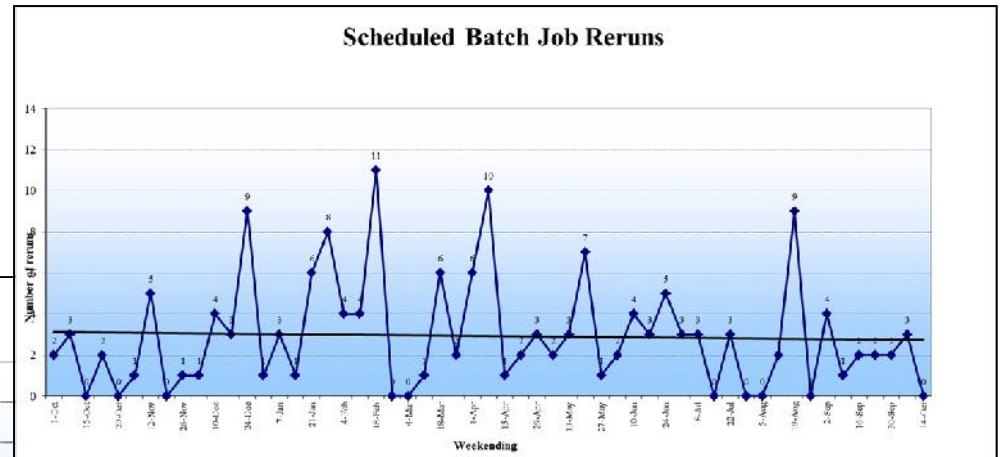
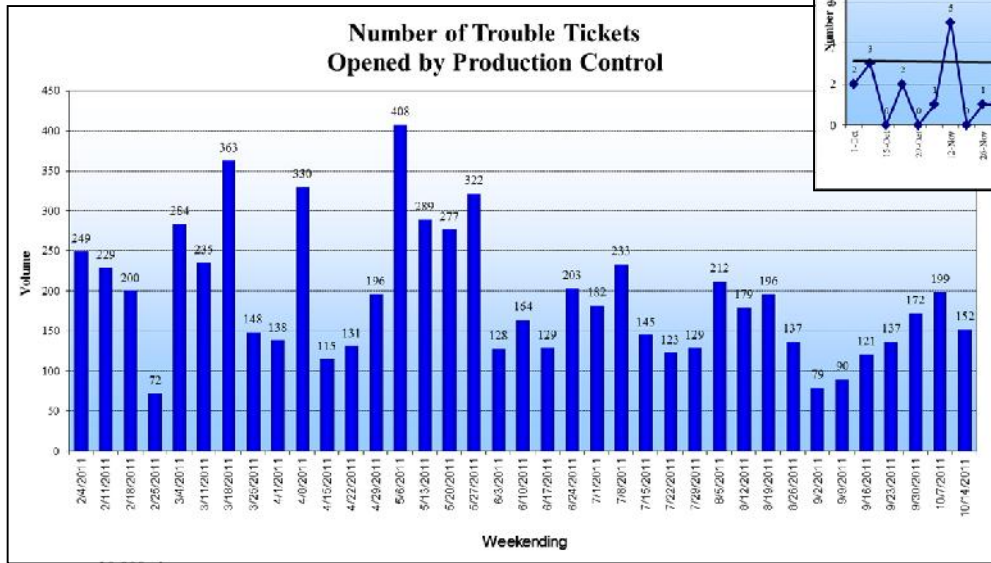
Project Lead: Christopher Russell

Funded Amount/NTE: 301

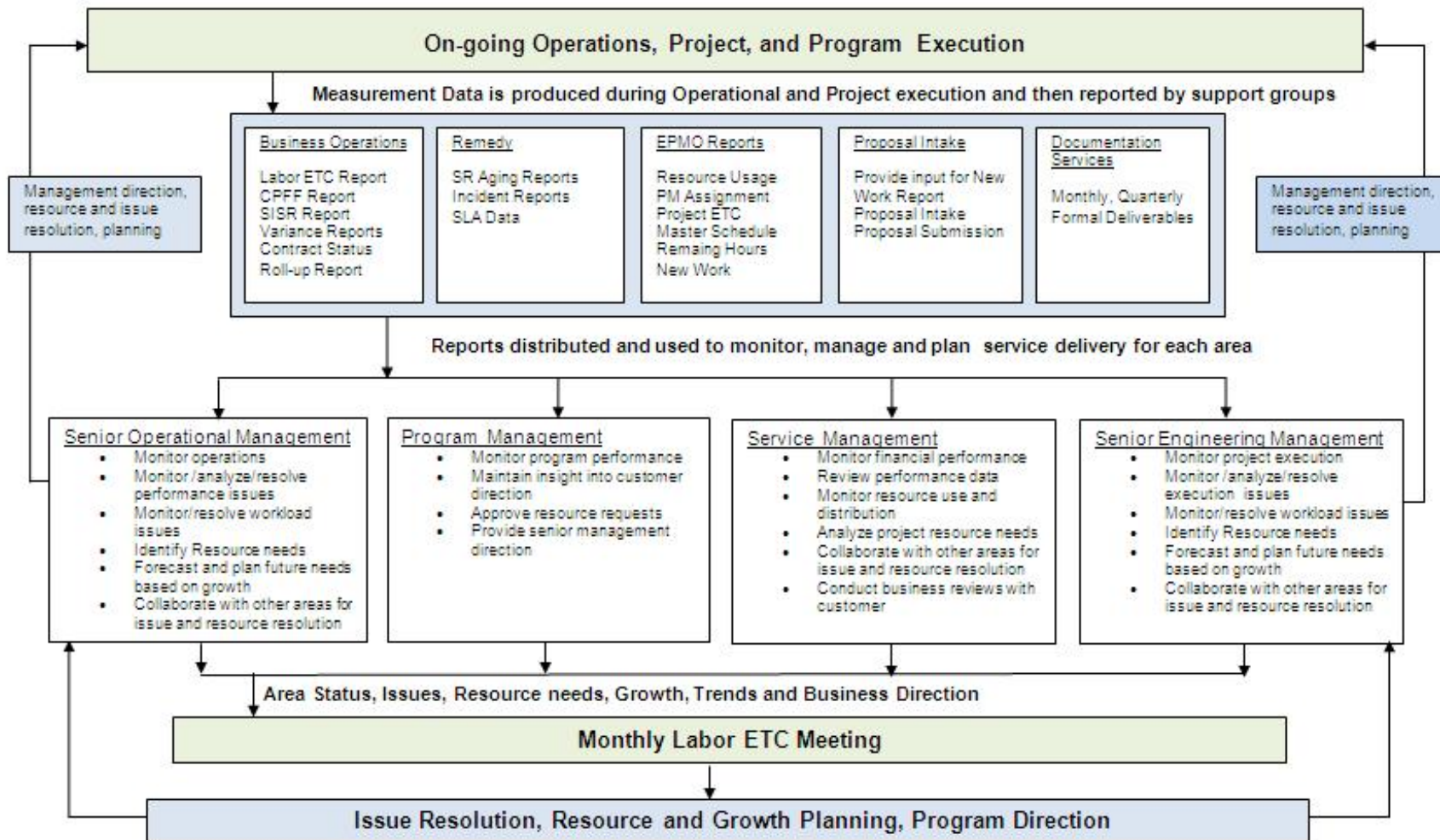
3. Procurement of 3 FIPS licenses utilizing 301 funding - Approved and currently in procurement.

4. Roll out AnyConnect Client to CITIC LM staff - Initial email sent to contract on 1/9/12.

Examples-5



The “True Up” Process



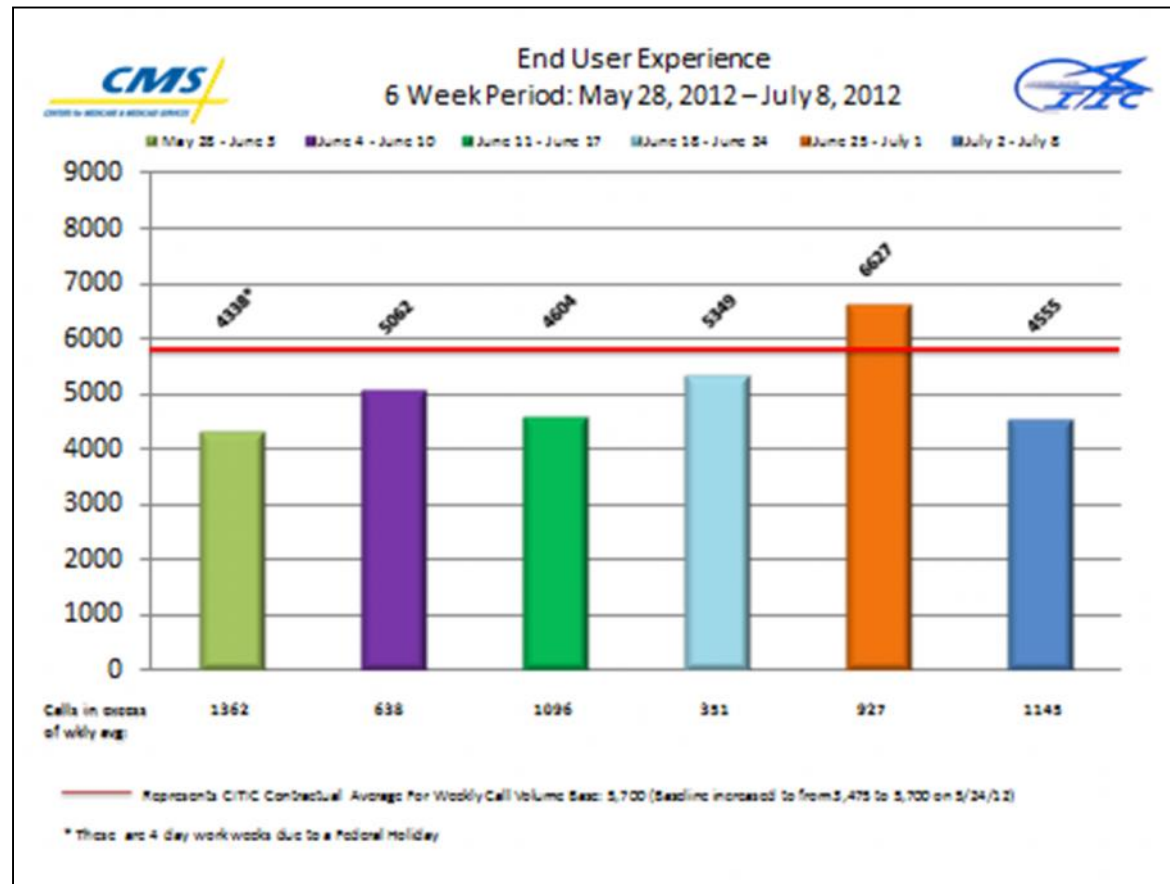
Being Proactive - Prediction & Modeling

- Examples:
 - Executive Support Services (a part of Desktop Support) used CMS Executive Staff increases and time/call to request an increase in funding/staff
 - Service Desk uses hourly & day-of-week call logs plus call times to drive staffing plans and work schedules
 - Server replacement project

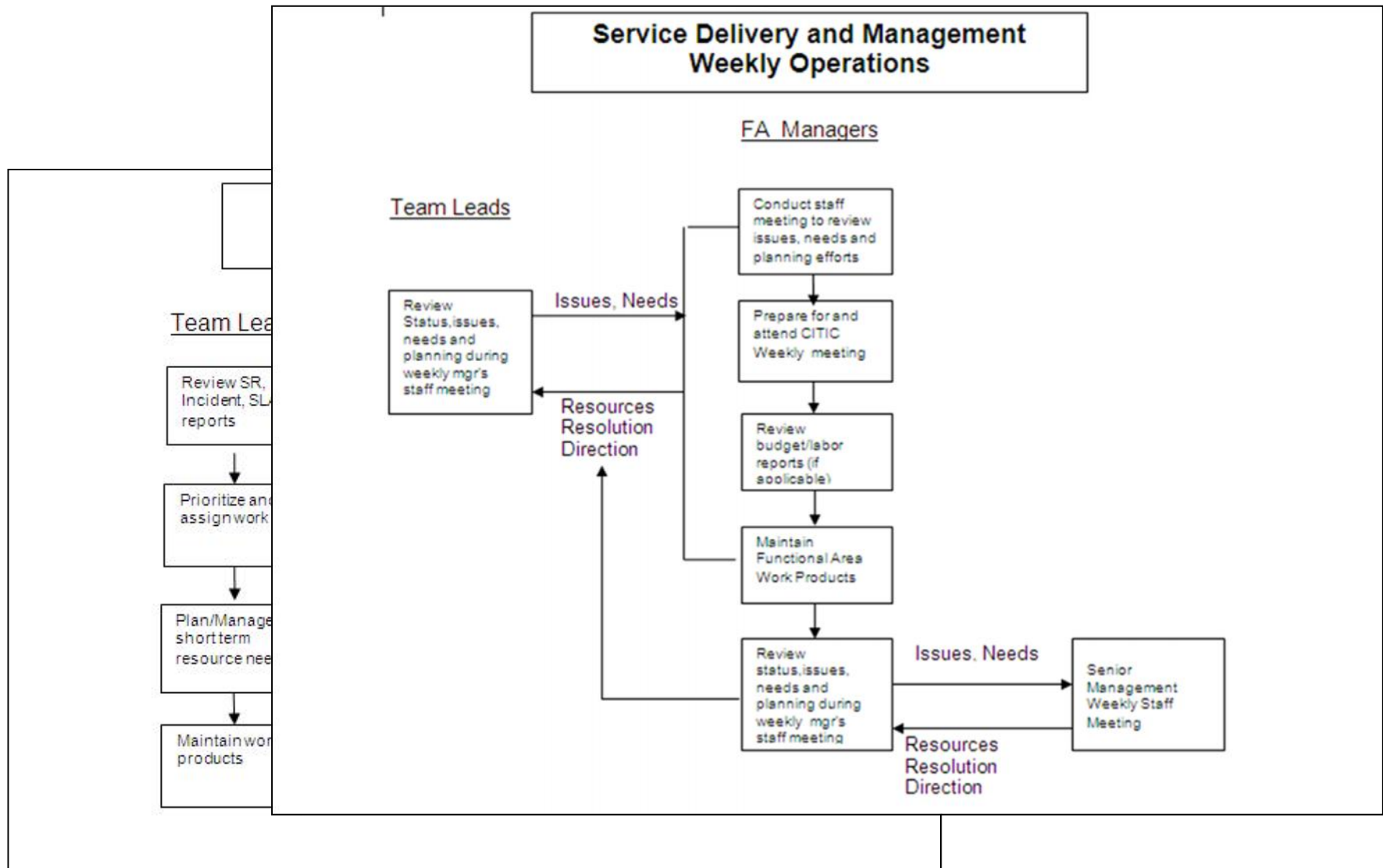
- Key inputs to true up process:
 - Historical performance data (volume, trends, response times)
 - Staff productivity/unit cost rates
 - Data Center modeling; projected growth
 - Evaluation of resource requirements for new applications
 - Considerations of the evolution of hardware and software products (301 improvements)
 - Analysis of the interaction of all these drivers

True Up – Service Desk

- Call Statistics (Volume, Calls/FTE, Min/Call)
- Staffing (Actual Hours/FTEs, Overtime)
- Projected Needs (Application & Project Roadmaps)
- Financial Performance (Staff Costs, Contract \$\$, Profit Goals)



“Built-in” Measurement-2



Examples of Correction Actions

- ❑ Call for volunteers
- ❑ Temporary staff augmentation
- ❑ Cross-training and cross-functional assignments
- ❑ True-ups



Summary

- Consistent use of “objective information” with client has forged a true partnership
 - client’s level of trust has dramatically increased over life on contract
- In the beginning, SLAs were used for reward and punishment...
 - NOW SLAs are no longer tied to \$\$, yet still reported to support proactive management of the CMS IT infrastructure



Questions or Comments?



**Thank
You**