Reduce IT costs and improve your IT service

How to <u>Jump Ahead</u> to Next Generation IT Service Management!

Why You Should Model Your Systems Management Strategy on Advanced Mainframe Service Management Practices

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Objective:

- To help you plan your next generation IT systems management strategy
 - By showing you how the distributed systems management model is broken (add capacity/add people)
 - By showing you how to fix this broken model
 - Using <u>IT service management</u>
 - By emulating what mainframe managers are doing today... (already virtualized/provisioned — now managing IT services)
 - By reviewing various products and services that you may someday use to move into service management

Agenda

- The Situation
 - The current IT distributed management model cannot be sustained
 - Cost, lost productivity; lost revenue; and lost opportunity
- Fixing this Situation: IT Service Management
 - Manage IT as a collection of services
 - Security, Risk, Compliance Services; Service Availability and Performance Management Services; Asset Management Services; Service Delivery and Process Automation Services ...
 - Common Dashboard Visualize, Control, Automate...
- Examples of Service Management Environments
- Summary Observations

The Situation

- The current IT distributed computing model calls for constantly adding more people as capacity expands
 - People are expensive (salary, benefits, sick time, etc.)
 - Labor costs are now nearing 50% of data center cost of operations — and as more people are added, this percentage is rising!
 - People make errors
 - Lost productivity; lost revenue; and lost opportunity

The current model in most IT shops calls for adding more people as capacity increases. This model cannot be sustained...

Typical Datacenter Costs

Management/Labor

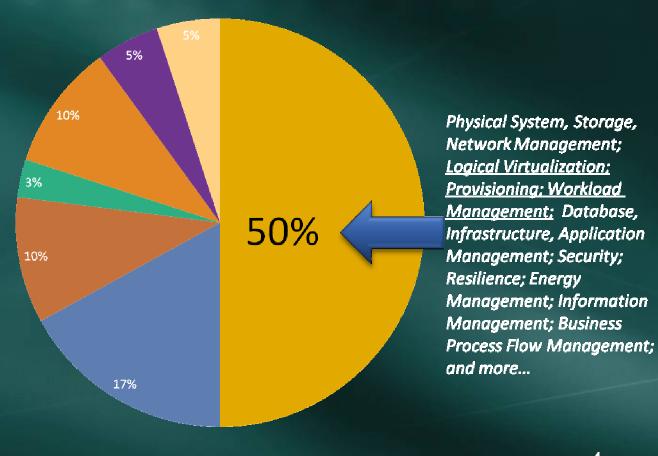
■ Real Estate

■ Finance Charges

Systems/Storage/Network Energy

Redundancy

Consultantcy



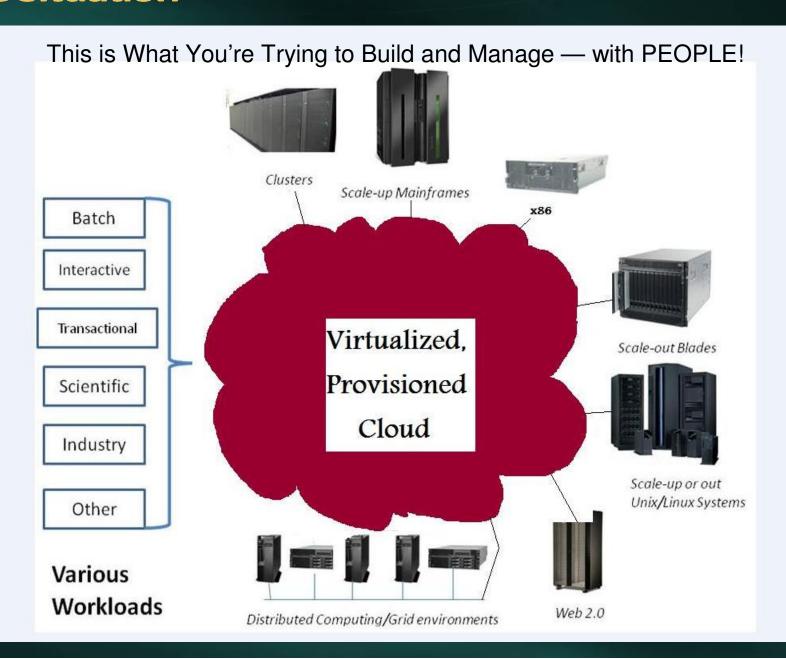
The Situation

- Distributed systems managers are still focusing on virtualization and automated provisioning while mainframers are way beyond that...
 - Mainframers are focused on <u>managing services</u> to deliver better IT quality of service that is more aligned with business needs at lower cost to their constituents

Recent e-mail from a mainframe data center director:

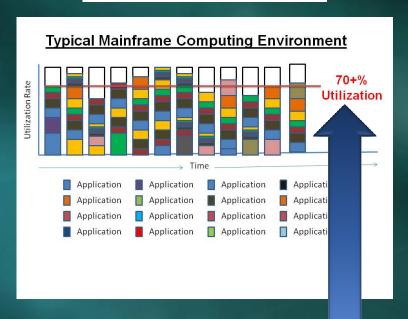
"The [research paper that you recently wrote] has raised some eyebrows within the organization... people internally had no idea the impact we are having".

The Situation

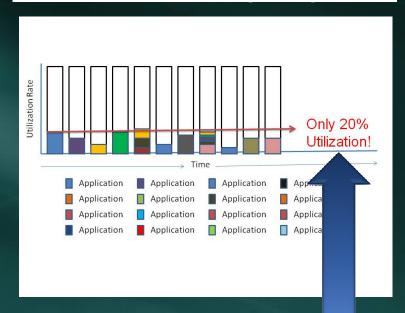


Mainframers Are Already Way Beyond You — They're Managing Services!

The Mainframe World



The Distributed Computing World



Mainframers already have fully virtualized/provisioned environments and are now moving to automated service management.

Distributed Systems execs are way back in the virtualization/provisioning days.

It will be years before they can focus on cutting IT management costs using service management tools!

- IT service management is exactly as its name implies: a way to manage a collection of IT services
 - Formal definition can be found at www.itil.org
- IT service management software:
 - Automates redundant, repetitive IT physical and logical system management tasks
 - Integrates those tasks into a single group of common services (such as availability services, or storage services, or risk/compliance/security services, etc.)
 - Then provides a dashboard view of how those integrated tasks are performing

Service management: The elements

Visibility of

Key elements and services

(e.g. Assets, server, storage, network, and virtual / logical elements and relationships for configuration, availability, security and performance)

Control of

IT Policy to assure service delivery and compliance

(e.g. correlation of resources against desired compliance patterns)

Automation of

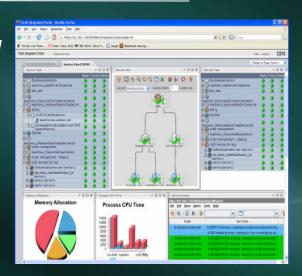
Datacenter processes from element run-books to broad provisioning and compliance scenarios

(e.g. Industry specific process standards for Enterprises, Tecos or Utilities)

Service Managemen t

Integrated Service Management Portal

- Single integrated console for all operations and management tasks
- Flexible Presentation (Web 2.0) supports
 Portlets, HTML, and lightweight interfaces
- Integrated Single Sign-on



Systems status

Systems view

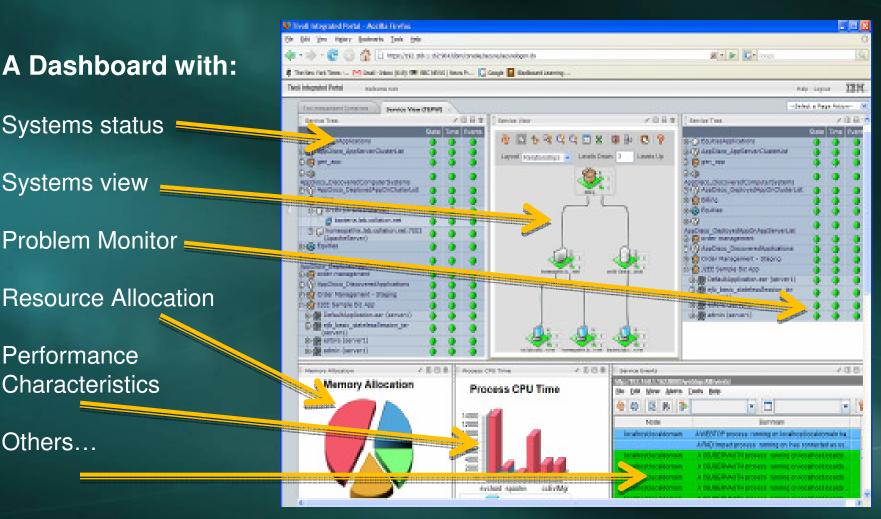
Performance

Others...

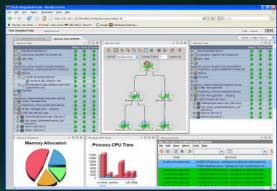
Characteristics

Problem Monitor

Example of a service management environment



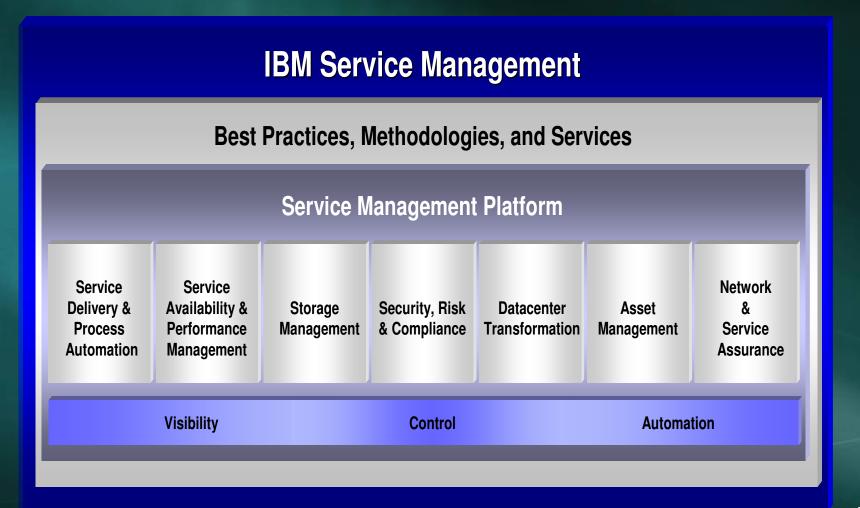
Don't confuse physical and virtualized systems management with service management environments



- Service management is far beyond the management of physical/virtual resources
 - Example: the management of security <u>services</u> includes:
 - Authorization services
 - Access management (guarding access points)
 - Control of additional data overhead (monitoring/tracking data, reporting, etc.)
 - Software licensing monitoring (compliance management)
 - And more...

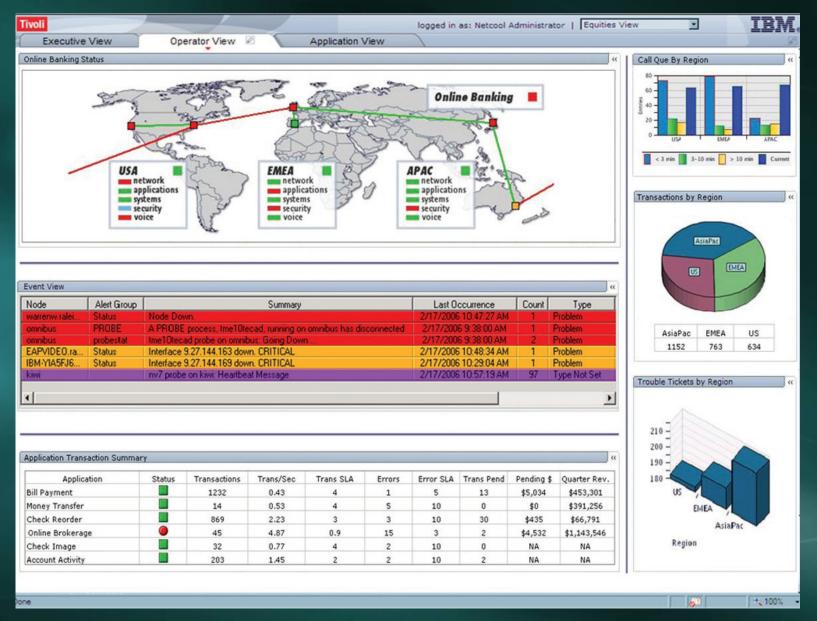
Distributed systems environments manage these as discrete, disunified efforts...

Examples of service management suites



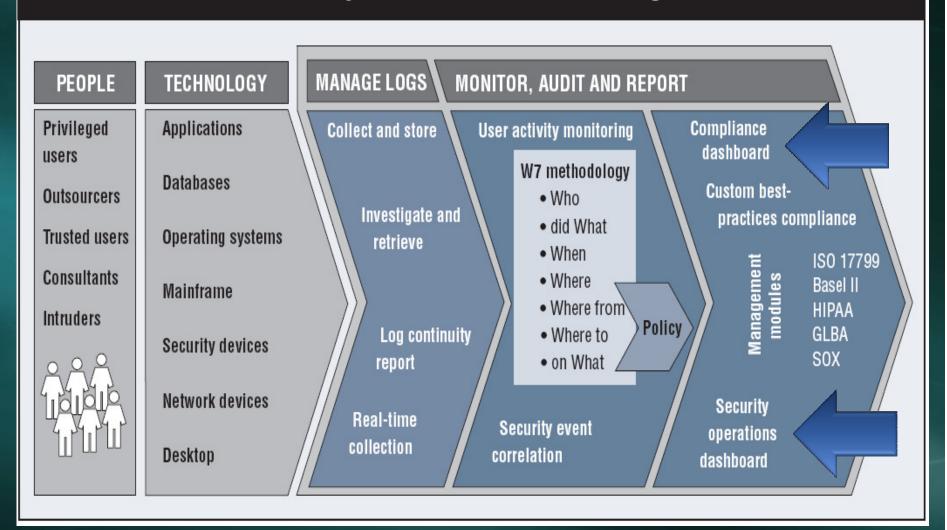
Examples:

- Service Availability and Performance Management
 - Manage the availability and performance of your infrastructure, applications and business services
 - Products that can be used to build your Service Availability and Performance dashboard
 - IBM Tivoli Business Service Manager Provides enterprise, public sector and service provider organizations with advanced service and process visibility in targeted, real-time dashboards.
 - * IBM Tivoli Netcool/Impact
 Provides a common platform for data access that circumvents organizational boundaries. With data from virtually any source, you can correlate, calculate, enrich, deliver, notify, escalate, visualize and perform a wide range of automated tasks.
 - IBM Tivoli Netcool/OMNIbus Consolidates complex IT and network operation management tasks. Improves service availability and resiliency with real-time service management for data centers, network operations centers and IT domains.
 - IBM Tivoli Composite Application Manager Helps increase the performance and availability of business-critical applications. It provides real-time problem detection, analysis and repair to help maintain the availability and performance of applications.
 - * IBM Tivoli Monitoring
 Helps you optimize IT infrastructure performance and availability. Use this system monitoring software to manage operating systems, databases and servers in distributed and host environments.



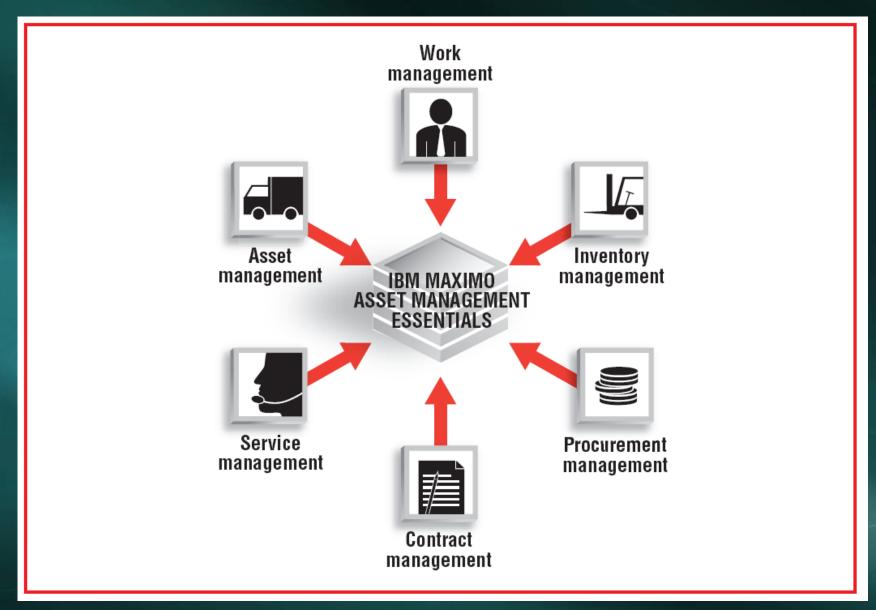
- Examples (cont'd):
 - Security, Risk and Compliance Management
 - Products that can be used to build your security dashboard
 - IBM Tivoli Security Policy Manager Strengthens access control, facilitate compliance and support operational governance across the enterprise.
 - Tivoli Security Information and Event Manager Provides centralized log management, event correlation, policy compliance dashboard and a reporting engine.
 - IBM Tivoli Identity Manager Automates internal controls that govern your user access rights.
 - IBM Tivoli Access Manager for Enterprise Single Sign-On Automates sign-on and access to your enterprise applications to reduce costs and risk
 - IBM Tivoli zSecure Suite Mainframe security administration, compliance and audit family of solutions.

Tivoli Security Information and Event Manager



Examples (cont'd):

- Asset Management: an integrated approach for managing assets throughout the lifecycle from procurement to operations to retirement
 - IBM Maximo Asset Management An EAM software system that provides comprehensive support for your asset, maintenance, resource and parts supply chain management needs.
 - IBM Maximo Mobile Work Manager A mobile asset and work management software solution that enables maintenance and operations technicians to work with IBM Maximo data and processes in the field with mobile devices using various remote communication methods.
 - IBM Maximo Spatial Asset Management Enables users to capture, analyze, and display assets, locations, and work orders in a geospatial perspective.
 - IBM Maximo Calibration
 A fully integrated part of IBM Maximo Asset Management, and used to calibrate tools & measurement equipment, and standards to optimize the quality of products produced.



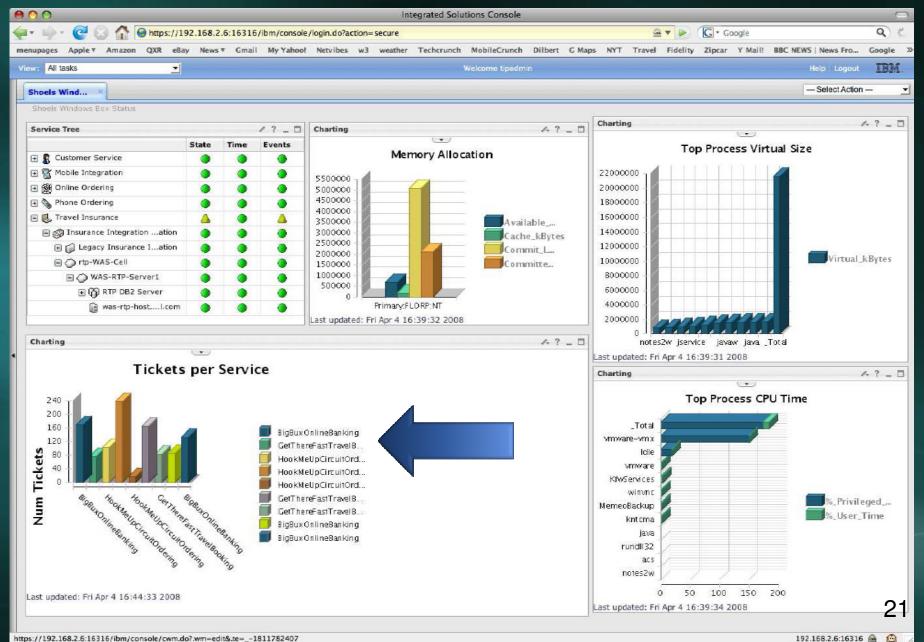
Examples (cont'd):

Storage Management Solutions

- Advanced Storage Provisioning Automate cross discipline storage provisioning tasks using workflows. Build custom automation packages to support data center best practices.
- Application Protection Secures business critical application data for a wide variety of databases, mail programs, ERP solutions, and application servers, ensuring reliability and data integrity.
- Backup and Recovery Protects data by storing backup copies on offline and offsite storage, and employs multiple smart-data techniques to make data backups.
- Business Continuity Service Level Protection
 Companies need high data availability and quick recovery from downtime.
- <u>Disaster Preparation</u> Creates a disaster recovery plan containing detailed recovery steps and computer scripts to recover your company's most critical asset.
- IBM TotalStorage Virtualization Reduce the complexity and costs of managing your SAN-based storage
- Managed Archive Keeps copies of active or inactive data for a specified amount of time on offline storage. Ideal for long-term storage for regulatory or bookkeeping requirements.
- Remote Office Data Protection Meet the challenges of protecting and recovering important data in remote and branch offices, quickly, automatically and costeffectively.
- Storage Resource Management Storage Resource Management tools can help reduce the complexity of managing storage environments by centralizing, simplifying and automating storage tasks.
- Workload Management Automates, monitors and controls job scheduling across your entire IT infrastructure and integrates with your ERP, CRM and e-business solutions.

Examples (cont'd):

- Service Delivery and Process Automation
 - Tivoli Provisioning Manager Provides automated provisioning, improved resource utilization and enhanced IT service delivery.
 - Tivoli Change and Configuration Management Database Provides an enterprise-ready platform for storing deep, standardized data on configurations and change histories to help integrate people, processes, information and technology.
 - Tivoli Application Dependency Discovery Manager Provides complete, detailed application maps of business applications and supporting infrastructure, including cross-tier dependencies, runtime configuration values and complete change history.
 - IBM Tivoli Service Request Manager Enables service efficiencies, reduces disruptions, streamlines service desk operations, improves customer satisfaction, and reduces costs by unifying key service support and asset management processes.
 - IBM Tivoli Workload Scheduler Enables automated workload management and monitoring across the enterprise, featuring a single console, self-healing capabilities, real-time alerts and reports.
 - System Automation Protects business and IT services with end-toend high availability, advanced policy-based automation, and single point control for heterogeneous environments.



- Clabby Analytics advocates the concept of a System z as a SOA/Service Management/Security Hub
 - IBM Tivoli Service Management Center for System z (or SMCz for short)
 - Provides a single point of control for managing IT systems functions as well as business process flows
 - Visibility into the health of IT systems operations and resources (system, network, and storage management)
 - Mapping to business process flows (key performance indicators, and business dashboards)
 - Control of IT resources (asset and license management, security management)
 - Automation of IT management functions (such as systems and infrastructure management) This strategy provides management automation, systems/process integration, and monitoring functions all from a dashboard driven interface that runs on IBM System z

SMCz is a strategy that provides management automation, systems/process integration, and monitoring functions — all from a dashboard driven interface that runs on an IBM System z.

Imagine using a System z as a SOA, security virtualization hub!

Summary Observations

What IT Automation Does

- Automates rote/repetitive tasks
- Reduces errors
- Improves response time (helping to meet service level agreement requirements)
- Lowers skill set requirements (simpler to use tools/utilities mean that less skilled individuals [and therefore less costly individuals] can perform management tasks)
- Frees-up staff to work on higher-level problems

And it is MEASURABLE!

Summary Observations (cont'd)

- The impact of NOT buying IT service management tools...
 - Labor intensive IT management; errors; poor service
 - Too many people in the process yields broken process flows
 - Inefficiencies that have a direct impact on the enterprise bottom line in terms of increased SG&A and lost profitability
- The impact of applying IT service management tools
 - Fewer people needed to manage ever-growing IT environments
 - Improved Service
 - Precious IT time free-up to focus on more on business issues and less on operational issues

Summary Observations

Summary Observations (cont'd)

- IT Service Management is not the wave of the future — it's time is NOW
 - It will help IT management control costs
 - By automating rote functions
 - By reducing skill requirements
 - By freeing-up resources
 - It will also make IT service providers more profitable
- Your management needs to hear and understand this message
 - Automating IT management will drive down costs while fixing the broken "add capacity/add people" model

Q&A