



ON DEMAND BUSINESS™ | IBM Software Group

“Take Back Control”

IBM Service Management

A better way to manage the business of IT

Tivoli. software



Norman Wilkinson
Service Management Leader
IBM Tivoli Software
UK, Ireland & South Africa

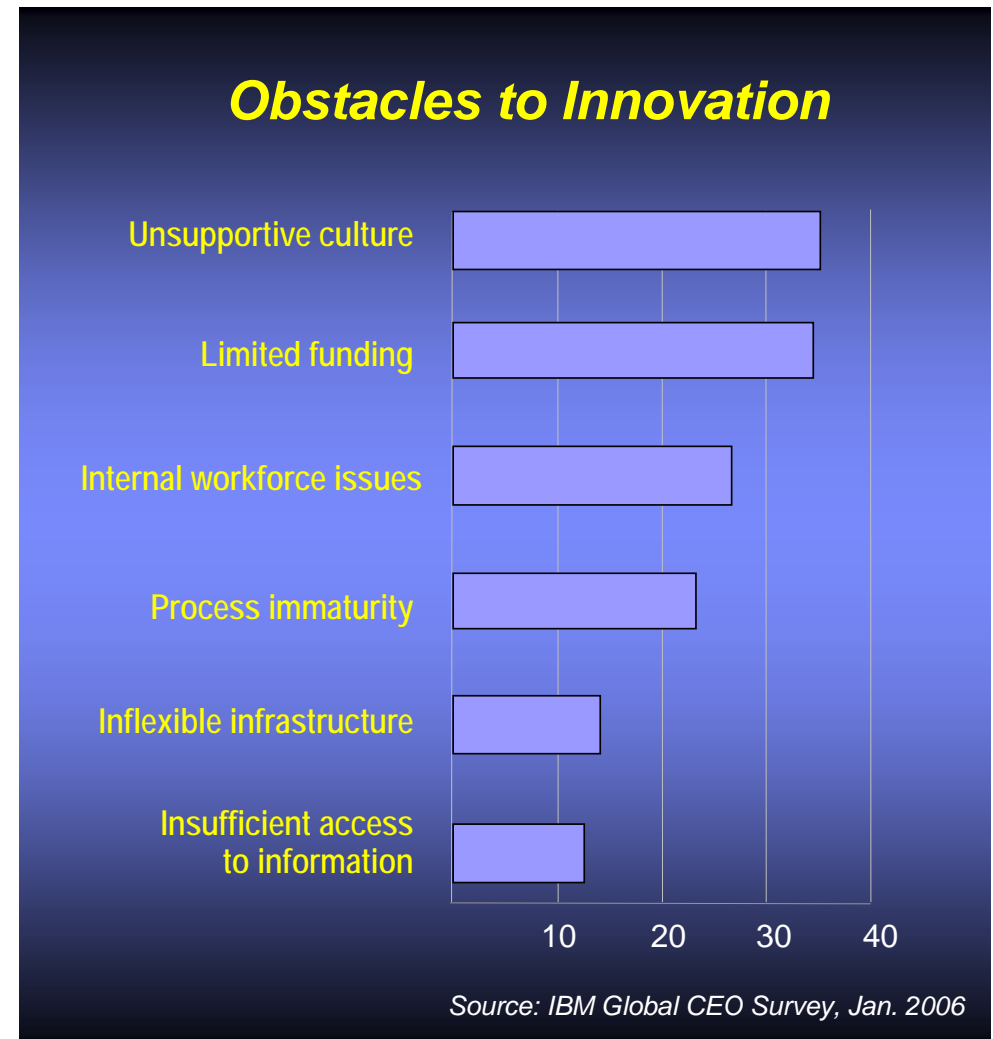


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Take Back Control with IBM Service Management

Today's challenges

- Growing Complexity
- Rapid, Constant Change
- Escalating Costs
- Regulatory Compliance
- Lack of Service Context



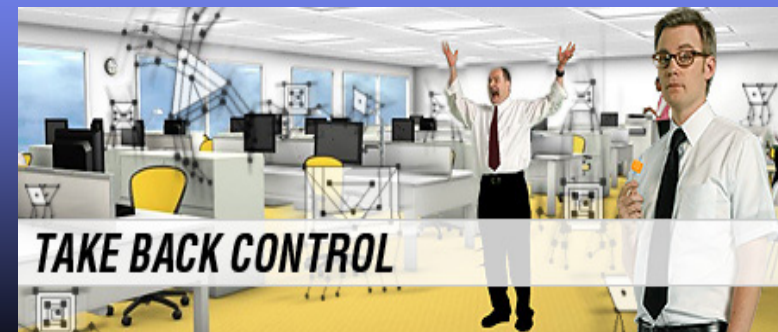
Take Back Control with IBM Service Management

Today's challenges

- Growing Complexity

Obstacles to Innovation

- Disparate technologies
- Inflexible infrastructures
- Acquisitions
- Legacy
- International or global reach



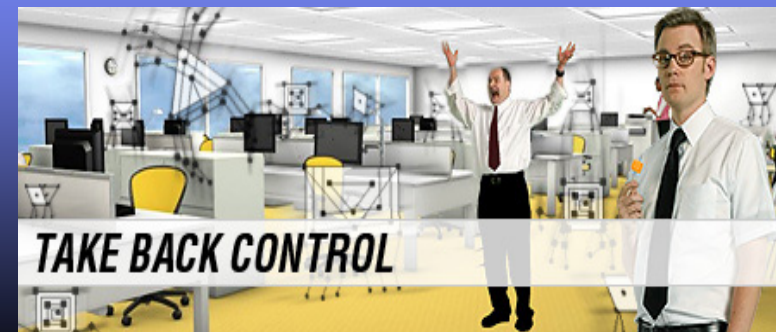
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Today's challenges

- Rapid, Constant Change

Obstacles to Innovation

- e-Business shift in routes to market
- Demand for instant on-line transactions
- Open competition – service differentiates
- Customers are IT aware
- Shift from Product to Customer focus

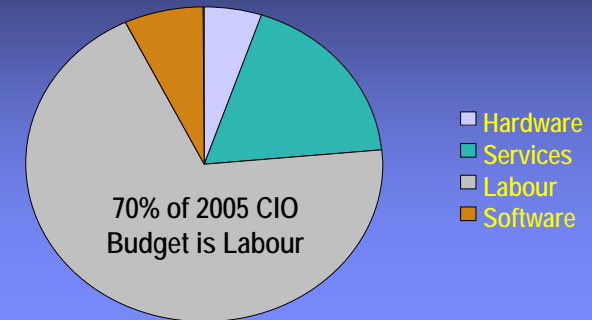


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Today's challenges

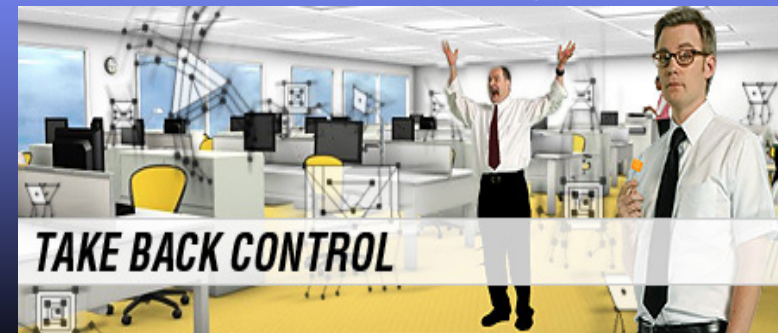
- Escalating Costs

Obstacles to Innovation



Operations will be 73% of CIO labour budgets by 2008
Application development will decline at -10% CGR to 2008

Source: Tivoli Commissioned IDC Study 2005



Take Back Control with IBM Service Management

Today's challenges

- Escalating Costs



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Today's challenges

- Regulatory Compliance

Obstacles to Innovation

- Increasing security requirements
- Increasing audit requirements
- Data retention and lifecycle impact



Take Back Control with IBM Service Management

Today's challenges

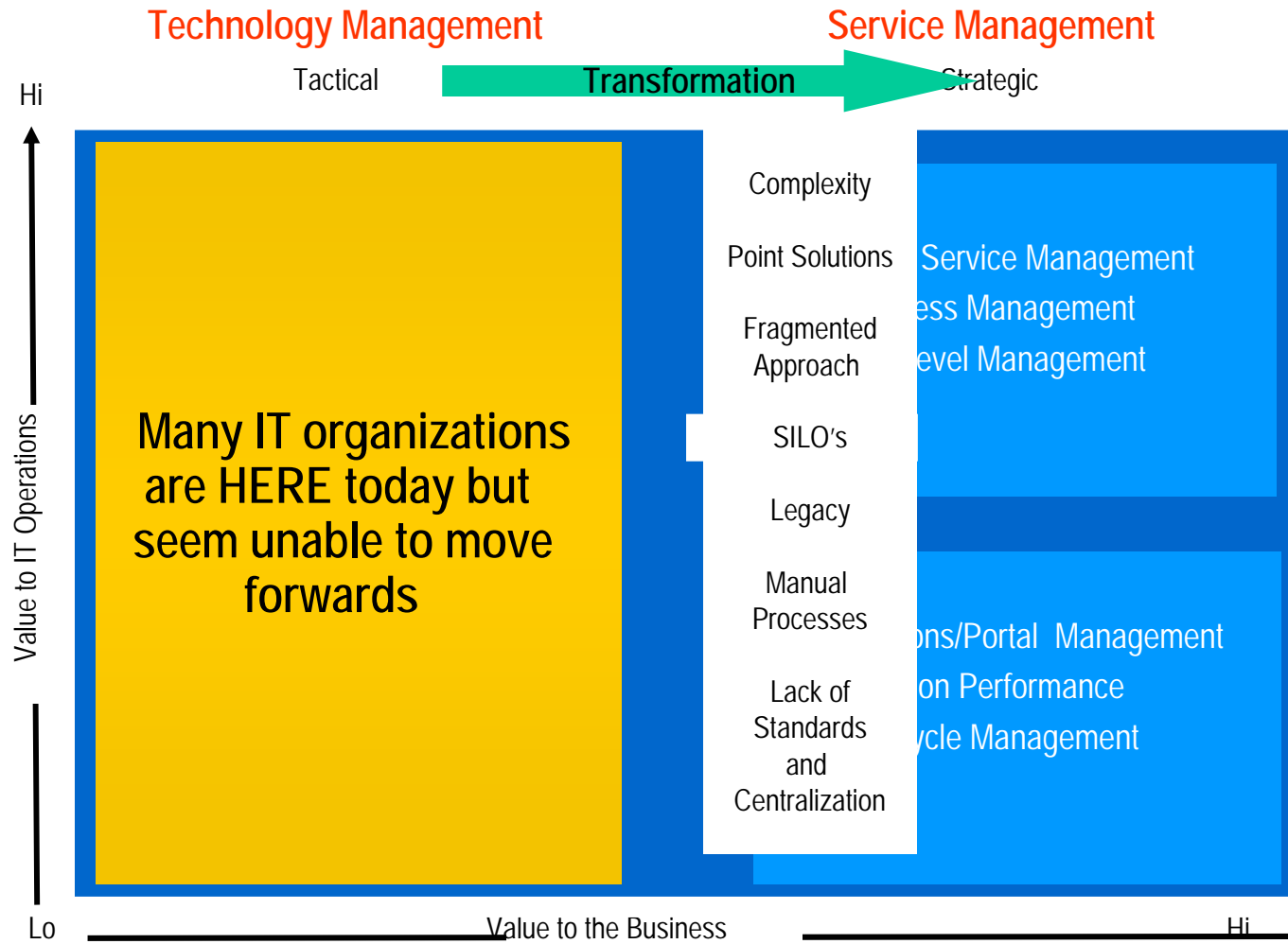
- Lack of Service Context

Obstacles to Innovation

- Culture and organization
- Process maturity
- Poor management information
- Collaboration between Technology silo's
- No means of measuring service against business KPI's



Take Back Control with IBM Service Management



Take Back Control with IBM Service Management

The drive towards value



IT

VALUE

BUSINESS

IT efficiency & productivity gains
 Centralization
 Standards
 Integration
 Service Management culture
 Best Practices
 Utilization improvement
 Process Automation

IT aligned and responsive to business
 Focus on service
 Manage and measure by service
 Optimization through automation
 High availability & performance
 Compliance assurance
 Value for money
 Service = Expectation

Customer retention
 Customer acquisition
 Response to change in the market
 Response to new opportunities
 Time to Market
 Routes to Market
 Competitive advantage

Cost Efficiency
 Scalable model
 Ability to fund innovation

Partnership & Trust
 Mutual value

Agility to prosper from change
 Focus on growth not operation
 Returns on Investment

Take Back Control with IBM Service Management

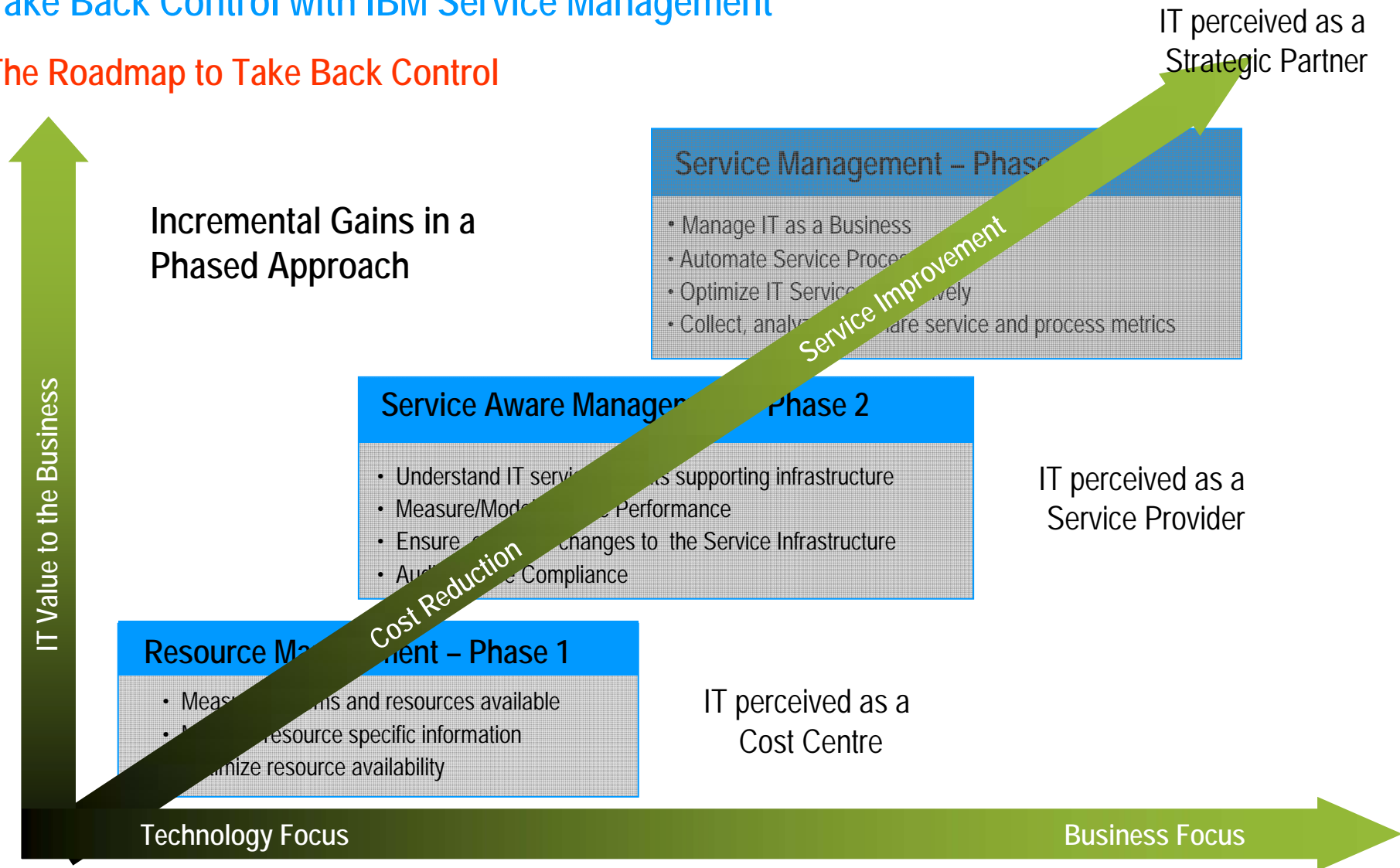
The Roadmap to Take Back Control



- Reduce Costs – align labour to technology effectively
- Manage Complexity – high visibility and availability
- Align IT to the Business – become service and value aware
- Manage Application Performance - the Customer Experience
- Automate service processes – optimized and in control

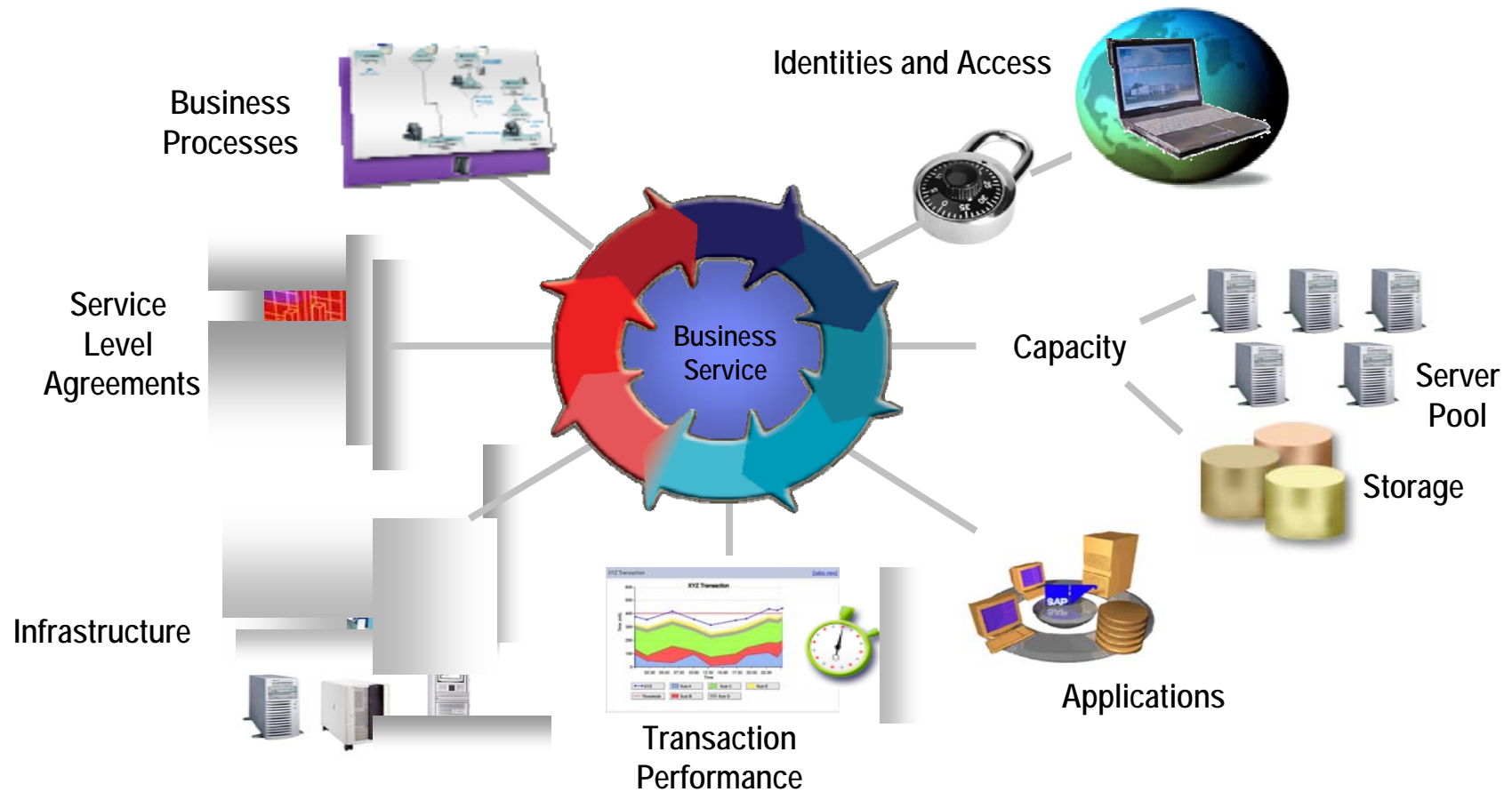
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The Roadmap to Take Back Control

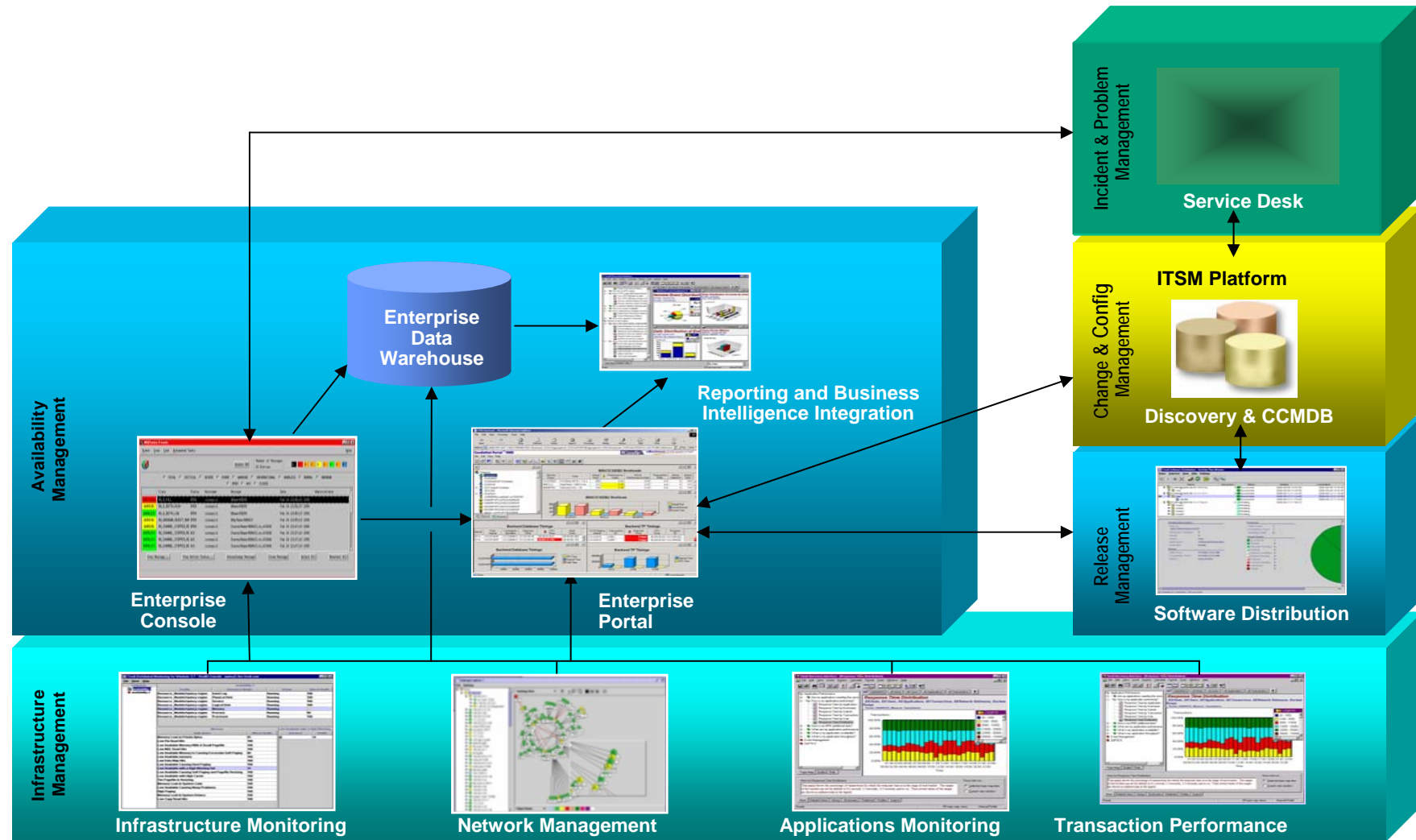


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What lies beneath a Business Service

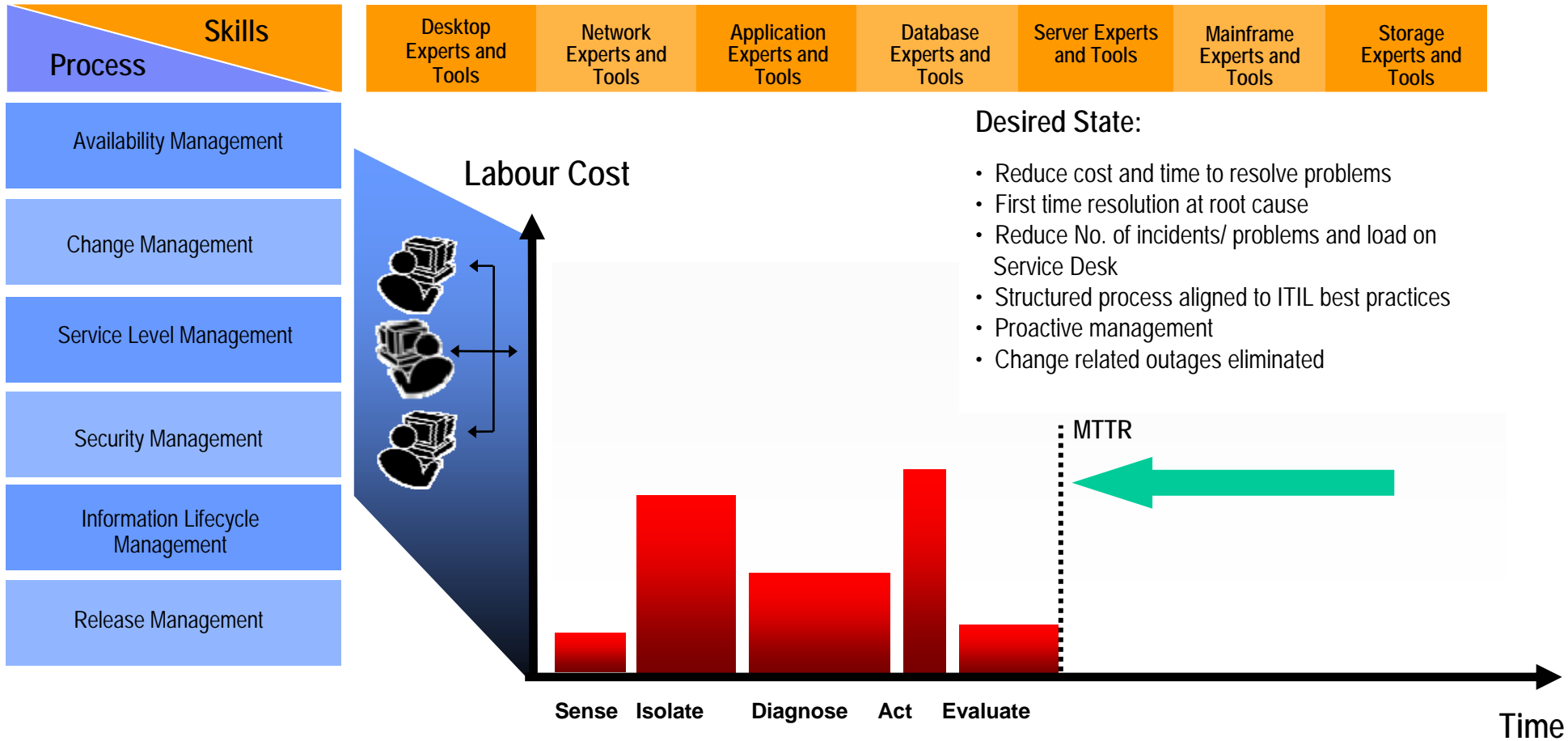


Phase 1: Resource Management - Build on your existing infrastructure management tools



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Managing Cost and Responsiveness across IT Silos

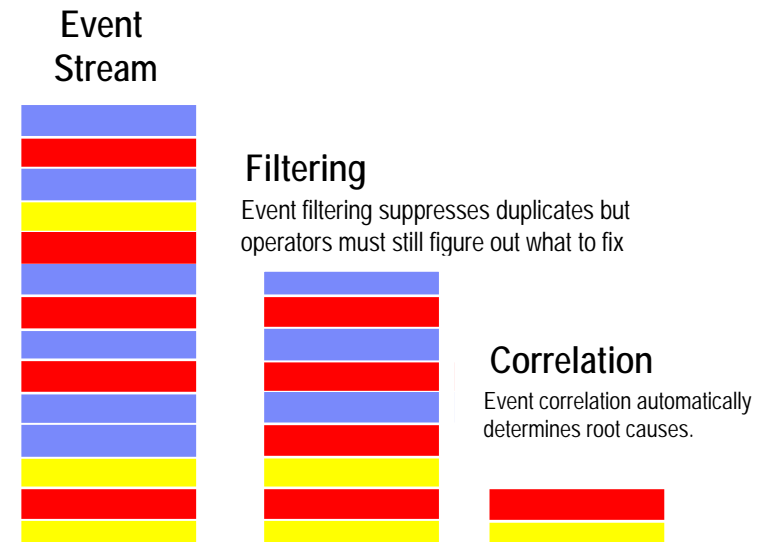


Take Back Control with IBM Service Management

Tivoli Enterprise Console - Event Management

- Operator response centre for management of events coming from a variety of sources
- Rules-based engine for correlating and analyzing events
- Proactively acts to address situations *before* they become problems
- Accelerates problem resolution by guiding support to the relevant problem
- Reduces the number of problems to deal with
- Escalation and Notification capabilities

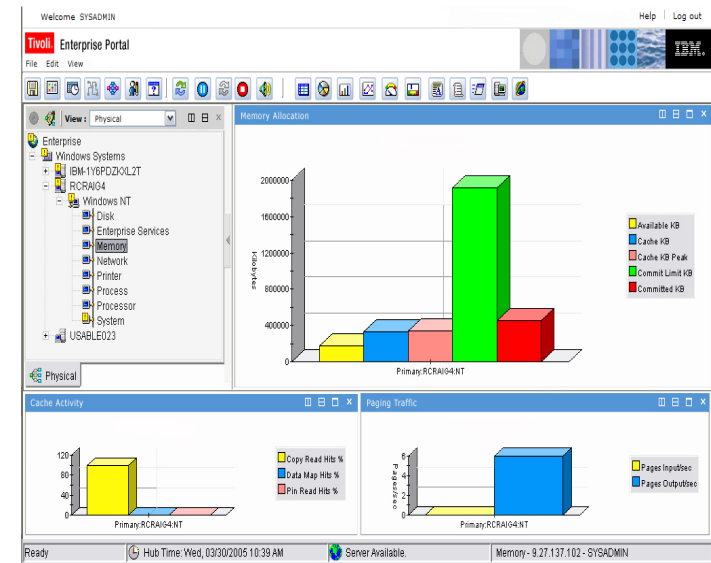
- Fewer operators can handle larger environments
- Lower reliance on skilled/experienced operators
- System performance & availability are improved
- Reduces Total Cost of Ownership



Take Back Control with IBM Service Management

Tivoli Enterprise Portal – end to end management from a single, central point

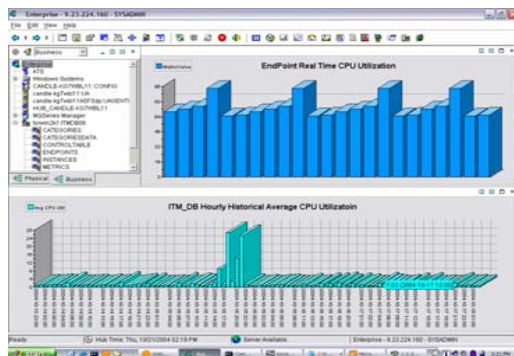
- Integrates multiple Tivoli management products under a common GUI
- Adds personalization, event and status management, workflow automation, expert advice, 3rd party integration and more...
- Access to all IT components from one place
- Effective and productive working environment for individuals
- Better leverage of technical specialists and promotes collaboration
- Improves efficiency and reduces time to resolve common system problems and outages



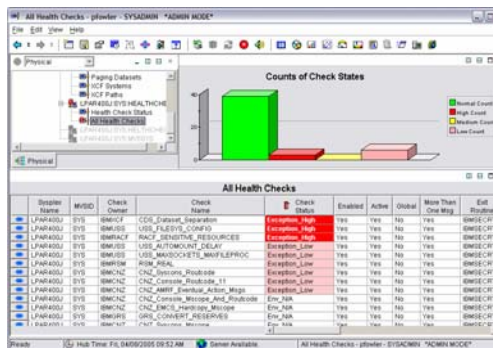
... Situation Analysis .. Expert Advice Graphical views of Infrastructure ... Policies & Workflow ... 3270 Browser External Tools

Take Back Control with IBM Service Management

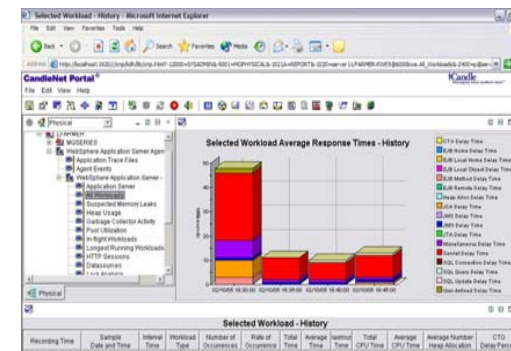
Create Multiple Customized Composite Application Workspaces



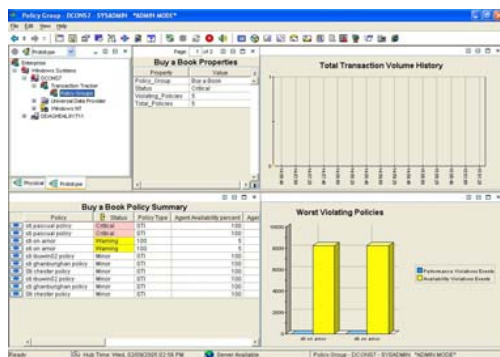
Operating Systems & MW



Native z/OS Health



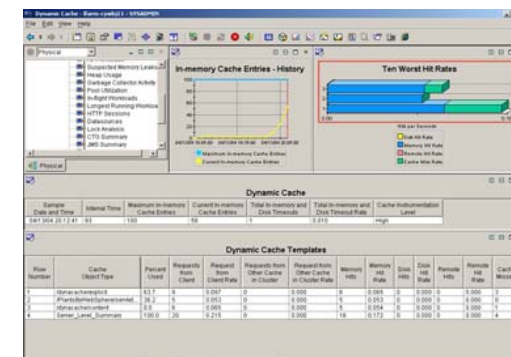
WS & J2EE Applications



End to End Transactions



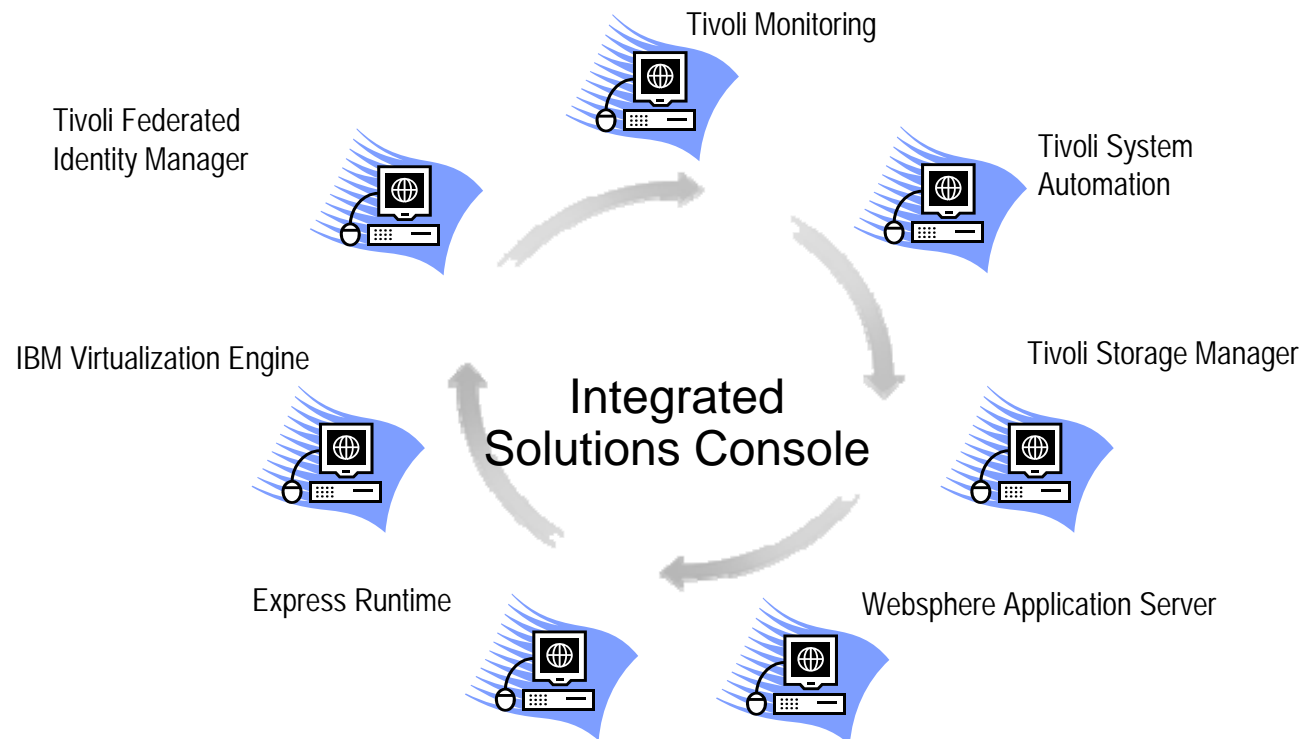
WBI Infrastructure



Databases

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The Tivoli Enterprise Portal is a member of the ISC Family of Solutions – A Common Systems Administration initiative to evolve all product administration under a common, standards-based systems administration approach.



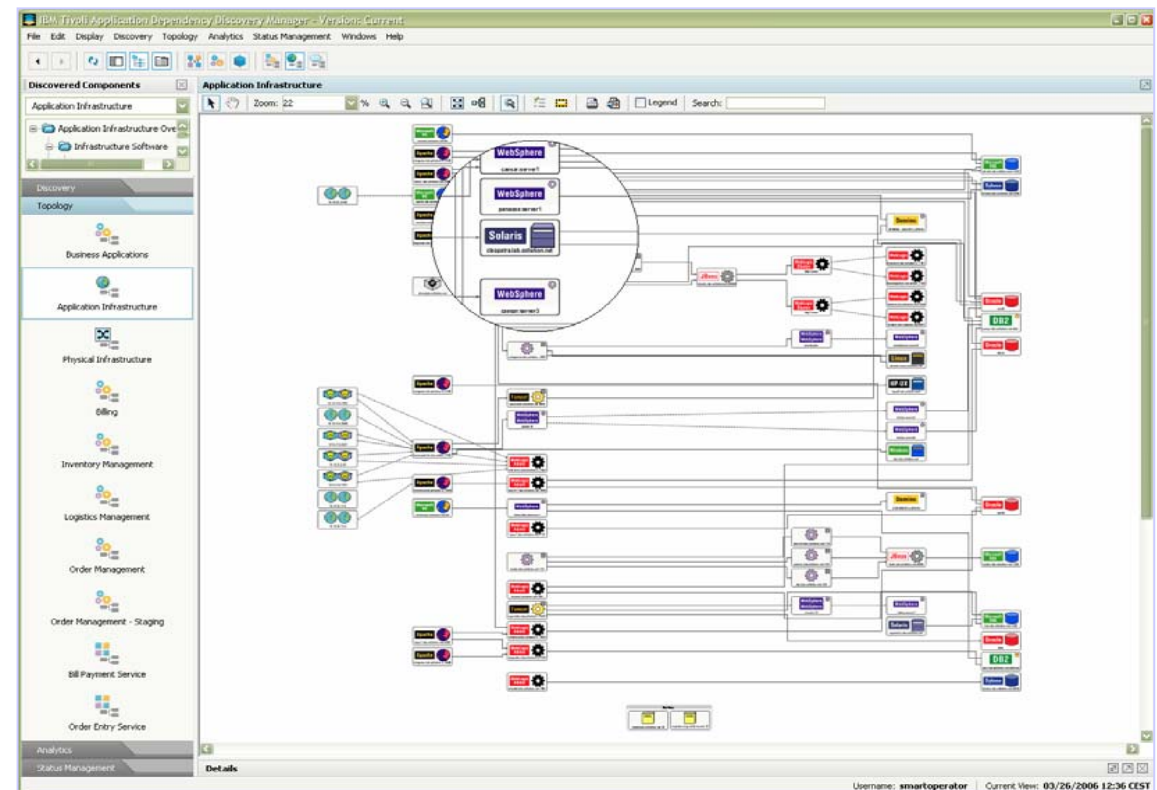
- Decreases training and required skills needed for the day-to-day management of IT
- Standardizes leading self-managing capabilities across IBM IT solutions
- Reduces IT operations and management costs

Take Back Control with IBM Service Management

Discovery of infrastructure components and applications

- Visibility of assets (CI's)
- Relationships between components

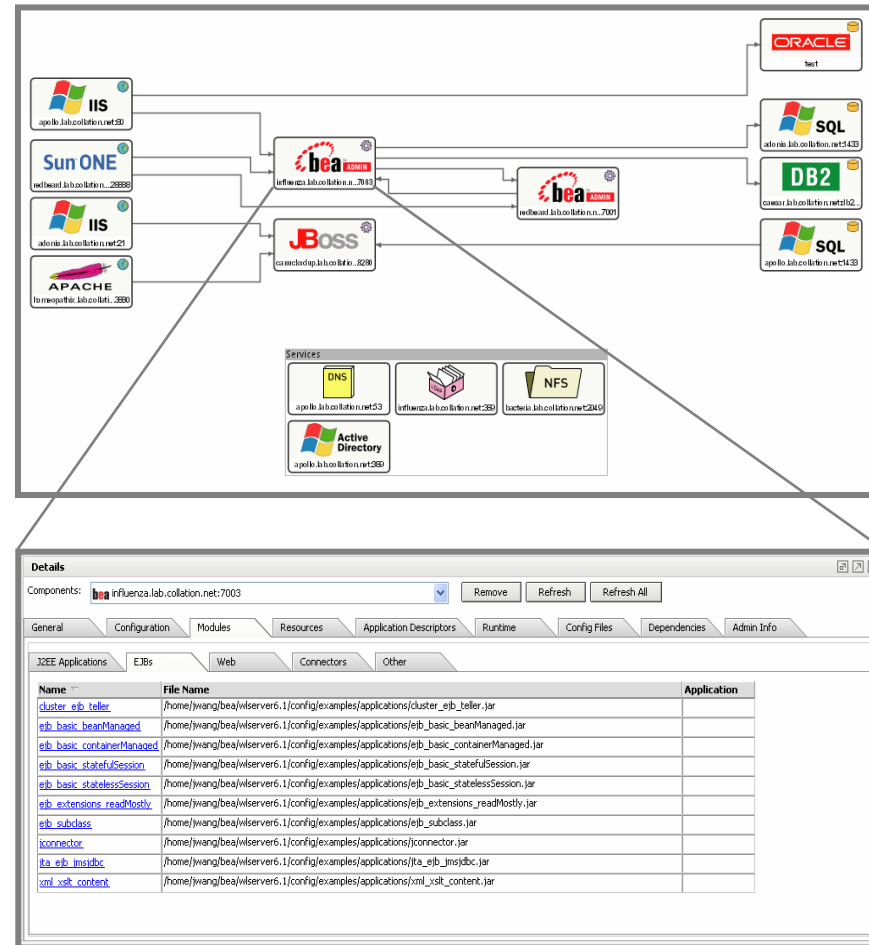
Tivoli Application Dependency Discovery Manager (TADDM)



Take Back Control with IBM Service Management

Discovery of infrastructure components and applications

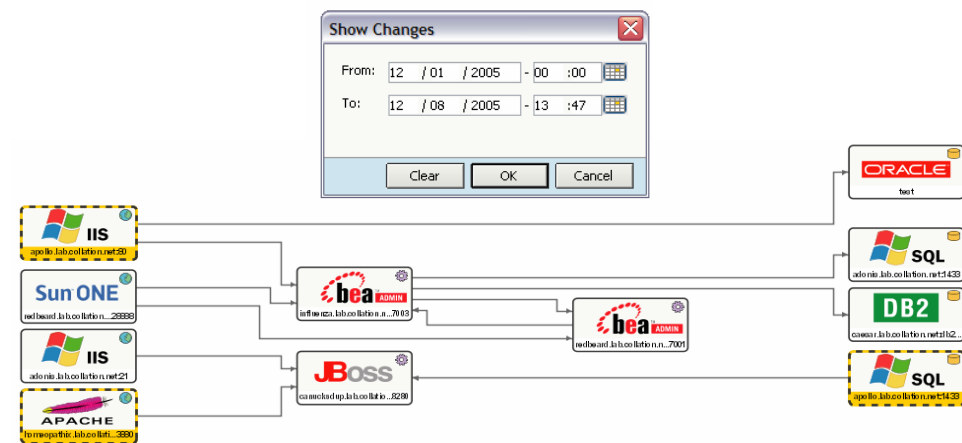
- Visibility of assets is crucial
- Relationships between components
- Deep configuration details



Take Back Control with IBM Service Management

Discovery of infrastructure components and applications

- Visibility of assets is crucial
- Relationships between components
- Deep configuration details
- Change detection and reporting



80% of service outages are caused by CHANGE
Gartner

Type	Component	Change	Date	Attribute	Old Value	New Value	Id
Apache	homeopathix.lab.collatix	Updated	12/04/2004 15:01 PST	appDescriptors		/usr/local/apache/appd	13342
Apache	homeopathix.lab.collatix	Updated	12/04/2004 15:01 PST	appDescriptors		/usr/local/apache/appd	13342
ApacheWebContainer	homeopathix.lab.collatix	Updated	12/04/2004 15:01 PST	ApacheWebContainer	/usr/local/apache/	/usr/local/apache	13342
ApacheWebContainer	homeopathix.lab.collatix	Updated	12/04/2004 15:01 PST	ApacheWebContainer	15	20	13342
ApacheWebContainer	homeopathix.lab.collatix	Updated	12/04/2004 15:01 PST	ApacheWebContainer	88	100	13342
ProcessPool	homeopathix.lab.collatix	Updated	12/04/2004 15:01 PST	homeopathix.lab.collatix	/usr/local/apache/bin/	/usr/local/ap	13420

Take Back Control with IBM Service Management

Discovery of infrastructure components and applications

- Visibility of assets is crucial
- Relationships between components
- Deep configuration details
- Change detection and reporting
- Comparisons against standards

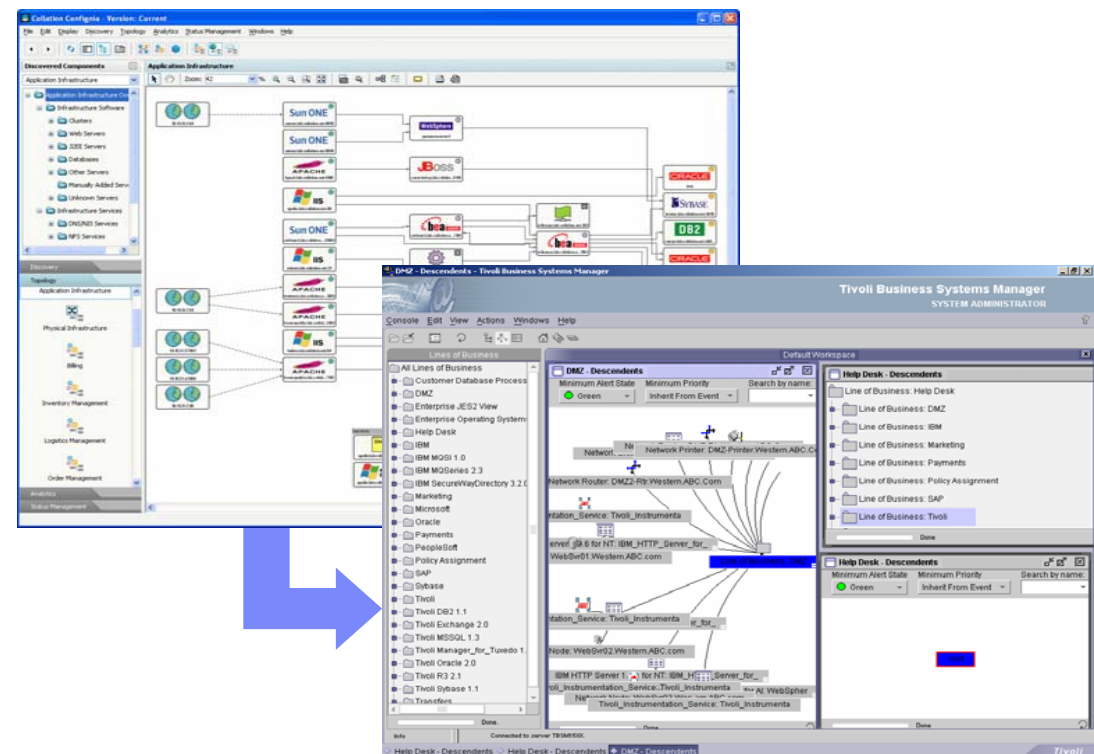
The screenshot displays the IBM Service Management interface. At the top, a topology diagram shows a network of components including Sun ONE, Apache, BEA, DB2, Oracle, and SQL. A red circle highlights a specific Apache component in the diagram. Below the diagram, a table titled 'Component Configuration Results' provides detailed configuration information for three instances of the Primary SAP component across different locations: oregon.lab.company.net, indiania.lab.company.net, and missouri.lab.company.net. The table lists various attributes such as Port Number, Config File, Size, Checksum, Product Version, Host System, and Router details.

Component	oregon.lab.company.net:3880	indiania.lab.company.net:3880	missouri.lab.company.net:3880
Primary SAP	oregon.lab.company.net:3880	indiania.lab.company.net:3880	missouri.lab.company.net:3880
Port Number	3880		9090
Config File			
Size	37457		35057
Checksum	gXRmPNd368MOotCA2MWKA==	BpFYqBQ7Mxc3yqF58sr4SA==	FwFcqNHiAMJea+NglieMQ==
Product Version	Apache/1.3.26 (Unix)		Apache/1.3.27 (Unix)
Host System			
Num CP Us	1		2
File Systems			
Memory Size	1.5GB		2.0GB
Functions			
Router			
Default Route			
Next Hop			
Dot Notation	10.10.31.1		10.10.10.1
OS Running			
Model	SUNW,UltraAX-42		SUNW,Sun-Fire-280R
CPU Speed	500 Mhz		900 Mhz
Name	oregon.lab.company.net:3880	indiania.lab.company.net:3880	missouri.lab.company.net:3880
Product Name	Apache/1.3.26 (Unix)		Apache/1.3.27 (Unix)
Process Pools			
Containers			
Config Contents			
Httpd.conf			
Size	37457		35057
Checksum	gXRmPNd368MOotCA2MWKA==		FwFcqNHiAMJea+NglieMQ==
Modules			
Name	washington.lab.company.net	california.lab.company.net	illinois.lab.company.net

Take Back Control with IBM IT Service Management

Discovery of infrastructure components and applications

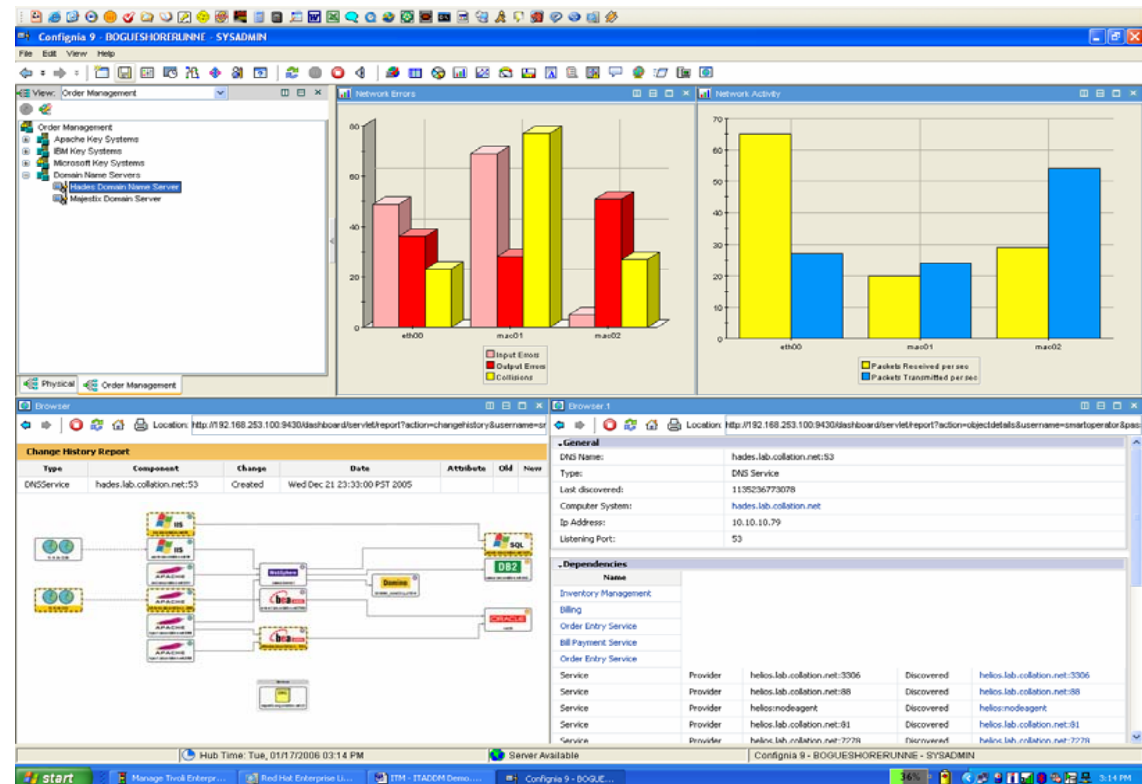
- Visibility of assets is crucial
- Relationships between components
- Deep configuration details
- Change detection and reporting
- Comparisons against standards
- Populates CCMDB and Business Service Views



Take Back Control with IBM Service Management

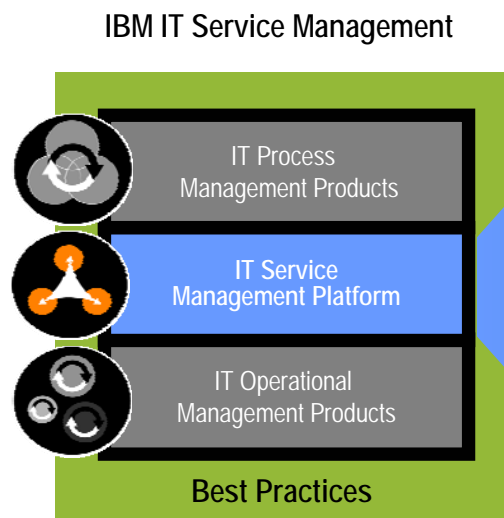
Discovery of infrastructure components and applications

- Visibility of assets is crucial
- Relationships between components
- Deep configuration details
- Change detection and reporting
- Comparisons against standards
- Populates CCMDB and Business Service Views
- Use inside TEP and launch in context from CCMDB



Take Back Control with IBM IT Service Management

IBM Service Management - An Open, Standards-Based Configuration Platform based on proven IBM technology



Configuration Management Database

- Open, federated model – shares data across silos
- Proactively manages data currency and accuracy
- Centralized, authoritative source of data

Workflow Engine

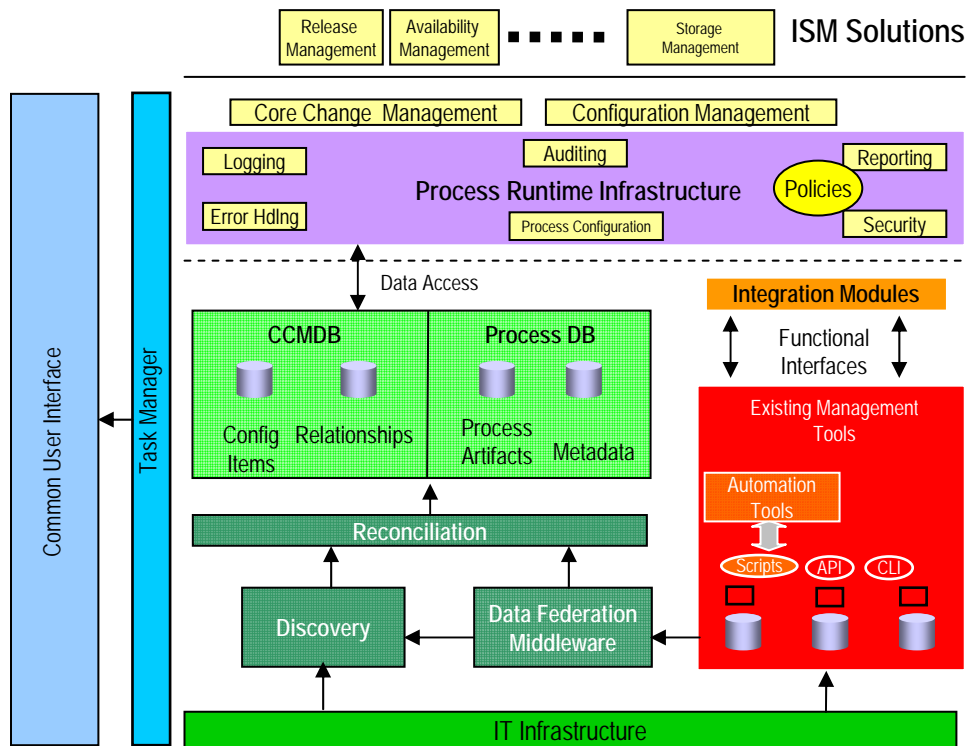
- Improves collaboration and process automation
- Process modeling and simulation
- Change and Configuration Management included
- Real-time monitoring and reporting

Policy Integration

- Enforces compliance with internal and regulatory requirements

Take Back Control with IBM Service Management

CMDB or Not?



A true CMDB needs to:

- Rationalize the same instance of a Configuration Item (CI) or component that might come into the CMDB from multiple sources
- Bring multiple data sources into a coalesced view that represents relationships across components
- Use approved changes for updates and identify changes that are not approved
- Illustrate logically or physically the peer-to-peer and hierarchical relationships between CIs

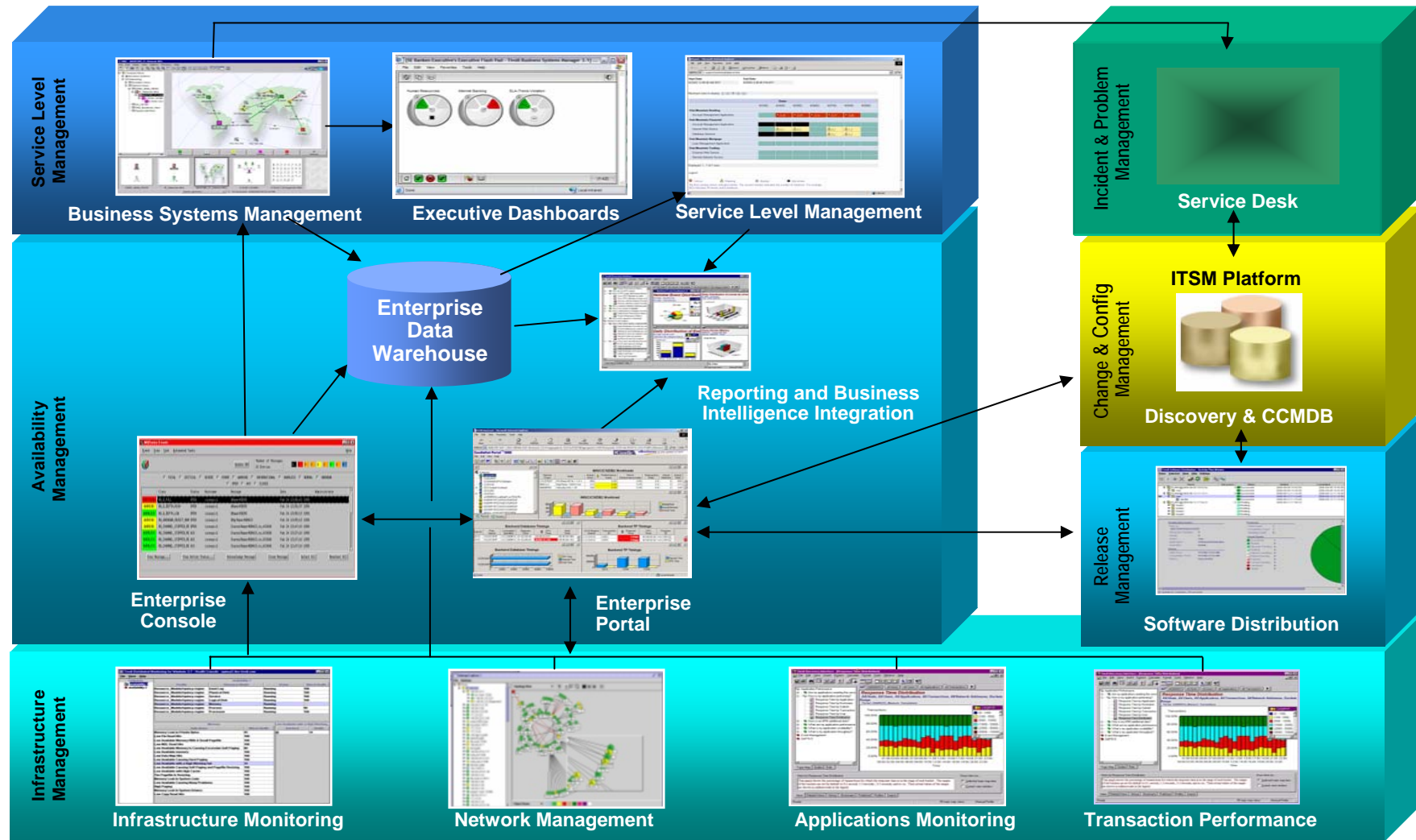
Source: Gartner report "CMDB or Configuration Database: Know the Difference" 13 March 2006

Take Back Control with IBM Service Management

CCMDB – Why it is different

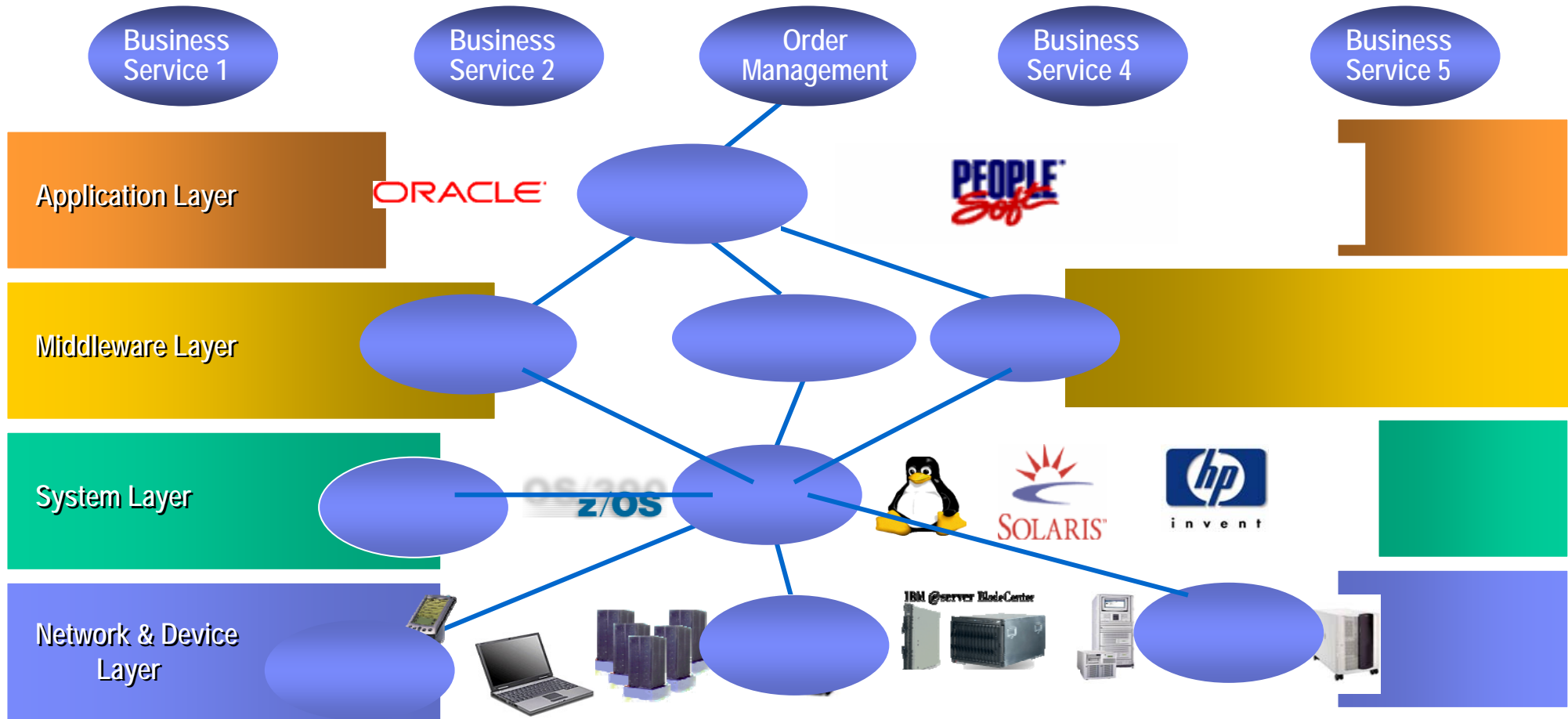
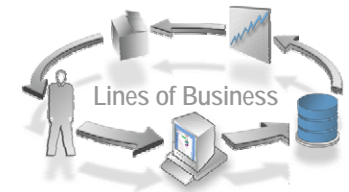
	Service Desk or CDB	Standard CMDB	Tivoli CCMDB
• Incident and Problem Tracking	✓		
• Logging of Known Errors	✓		
• Escalations	✓		
• Resource and Relationship Auto-discovery		✓	✓
• Resource Reconciliation		✓	✓
• Data Federation		✓	✓
• Data Synchronization		✓	✓
• Operational Management Product Integration		✓	✓
• Change History		✓	✓
• Out-of-the-Box Reports		✓	✓
• Process and CI Relationships			✓
• Accurate Change and Configuration Management			✓
• Standards-Based Process Modeling / Runtime			✓
• Automated Policy Enforcement Through Process			✓
• Standards-Based APIs for Application Interface			✓
• Process Aggregation and Bottleneck Analysis			✓
• Highly Available CMDB			✓
• Tooling			✓

Phase 2: Service Aware Management – Operational Management Products



Take Back Control with IBM Service Management

Aligning IT to the Business – the vertical stack



Take Back Control with IBM Service Management

Discovery of infrastructure components and applications

- Visibility of application composition – software and hardware
- Dependencies and relationships
- Enables views of business services to be dynamically maintained


The screenshot displays the IBM Tivoli Application Dependency Discovery Manager interface. The main window shows a dependency graph with various components like WebSphere, Oracle, DB2, and Seleris. A details pane at the bottom provides a table of application components.

Application	Deployed	File Name	Use Metadata From Binaries	Enable Distribution	War Classloader Policy	Classloader Mode	Name	Modu
DefaultApplication	true	\$(APP_INSTALL_ROOT)\caesar\DefaultApplication.ear	false	true	MULTIPLE	PARENT_FIRST		Defaul
MDISamples	true	\$(APP_INSTALL_ROOT)\caesar\MDISamples.ear	false	true	MULTIPLE	PARENT_FIRST		Incren

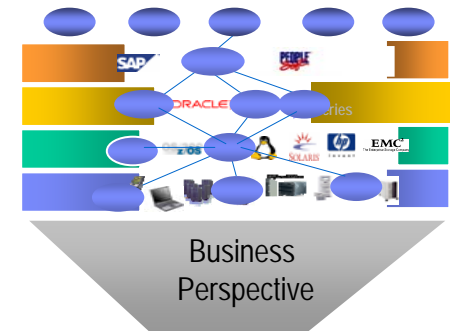
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Aligning IT to the Business – Understand Business Impact

Order Management – Statistics for 1 month
(SLA Threshold is 99.9% availability)



Component	Downtime (min : secs)	% Availability
Microsoft IIS Server	0:00	100.000
Microsoft SQL Server	4:32	99.990
Microsoft Windows Server	7:54	99.982
Lotus Domino AIX Server	6:00	99.986
IBM AIX MQ Server	0:00	100.000
Apache Web Server	8:64	99.980
HP Procure Switch	69:12	99.840
CISCO Switch	9:88	99.977
Composite Effect/ User Experience	105.50	99.750



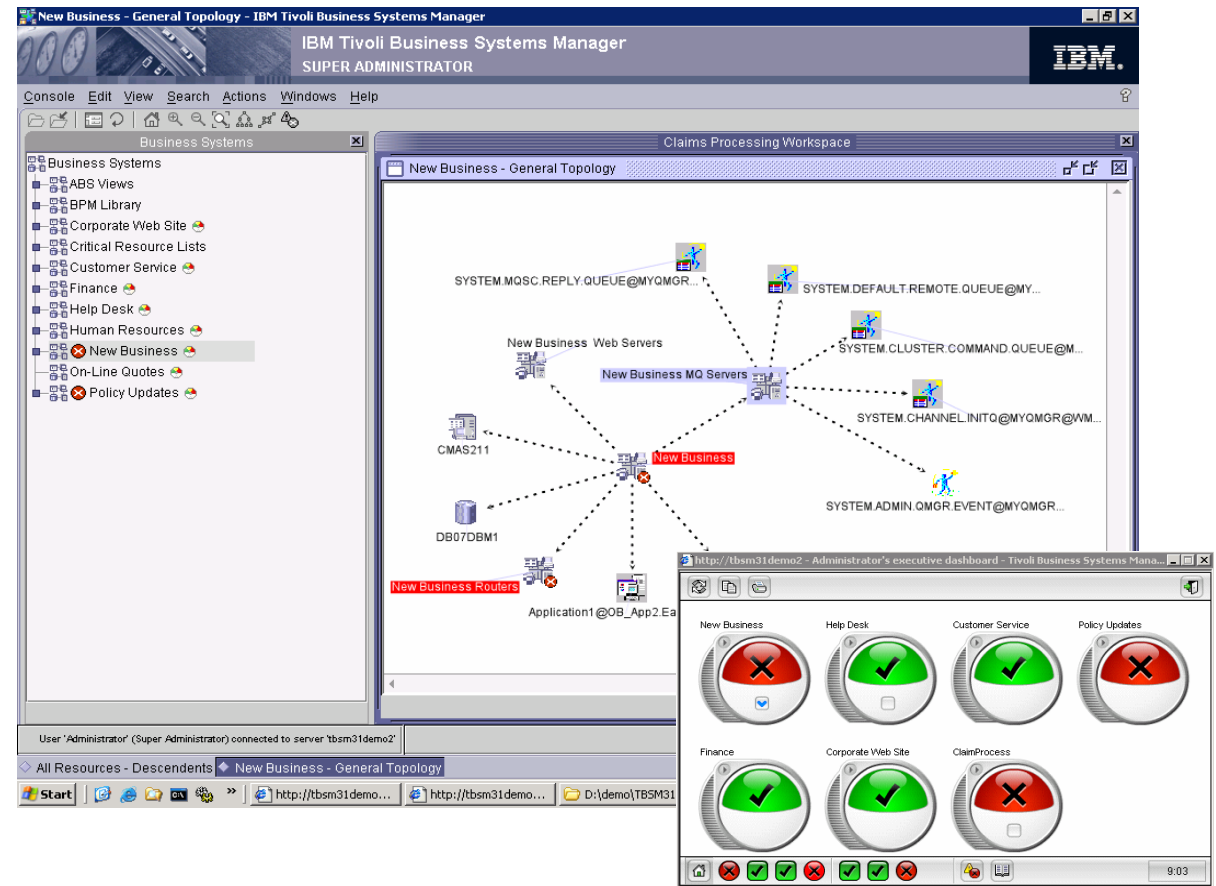
“The business cannot sustain these outages”

Take Back Control with IBM Service Management

Aligning IT to the Business – Service Views

- Visualize problem alerting by Business Service
- Real-time business impact management
- Link with Service Level Management tools
- Manage Trouble Tickets and links with Service Desk function
- Move from Reactive to Proactive
- Executive Service Dashboards

Tivoli Business Systems Manager (TBSM)



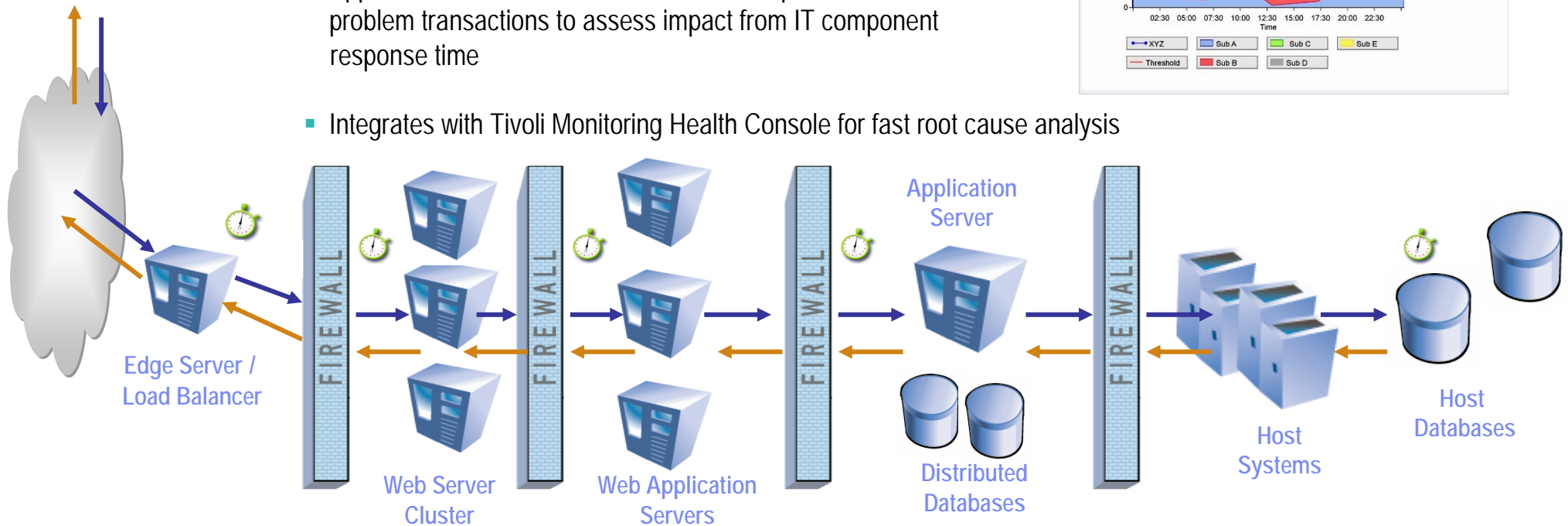
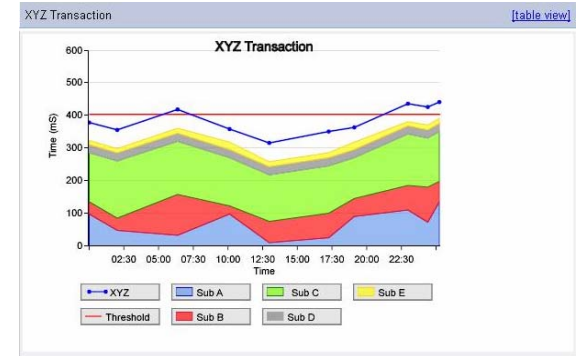
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Understand and manage the customer experience

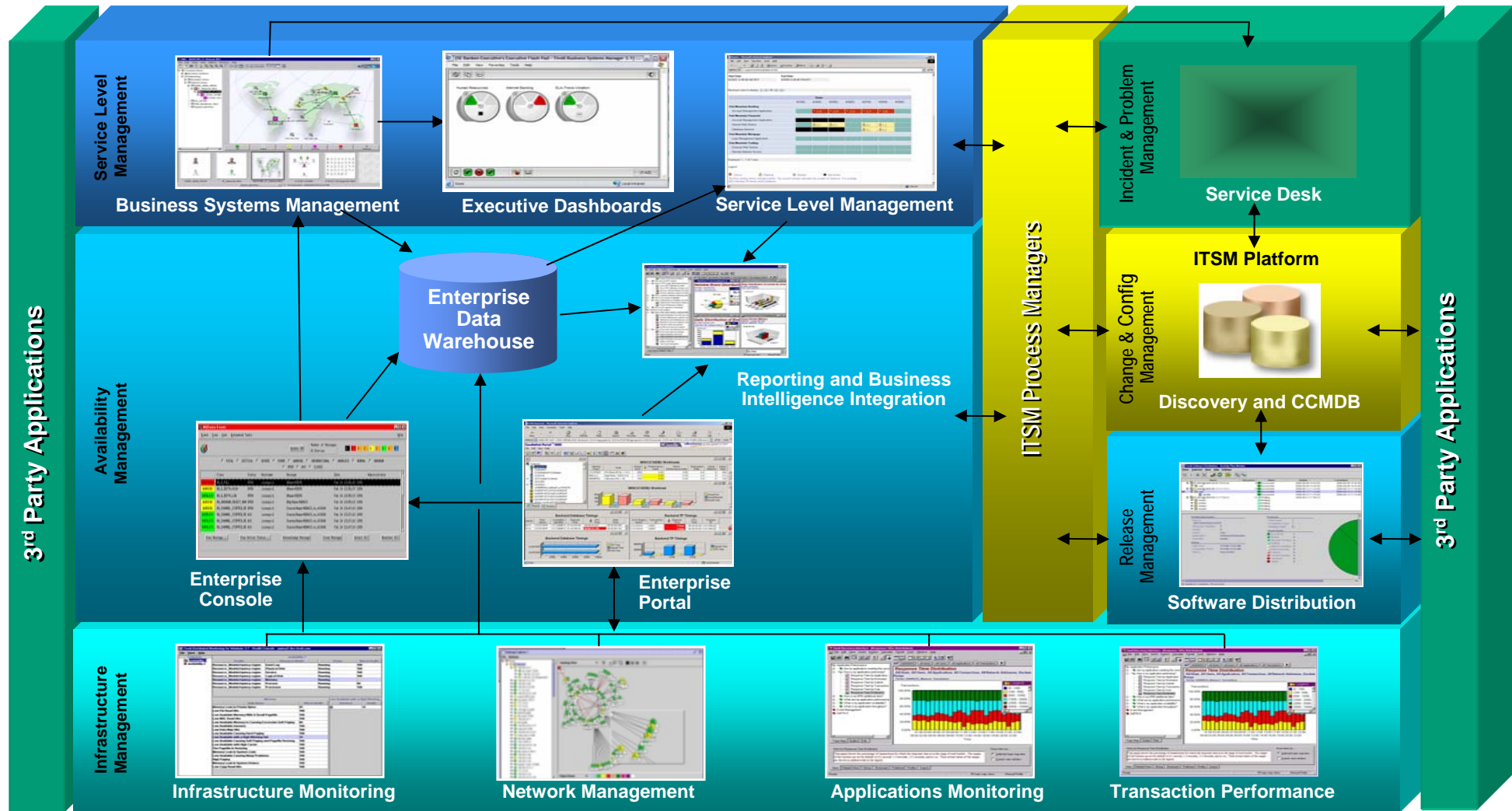


- Combines simulated and actual user transactions to identify performance problems
- Application instrumentation enables decomposition of problem transactions to assess impact from IT component response time
- Integrates with Tivoli Monitoring Health Console for fast root cause analysis

Tivoli CAM for Response Time Tracking



Phase 3: IBM Service Management – Process Automation



Take Back Control with IBM Service Management

Service Management Process Automation – What to do?

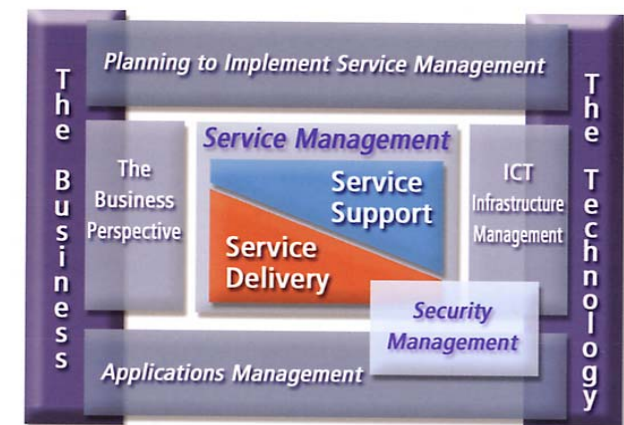


Information Technology Infrastructure Library

ITIL is a suite of publications that define a set of process based best practices for managing complex IT environments. They are applicable to all IT organizations. ITIL is the world's most widely accepted approach to IT Service Management.

ITIL Goals:

- Align IT services with the current and future needs of the business and its customers
- Improve the quality of the IT service delivered
- Reduce the long term cost of service provision



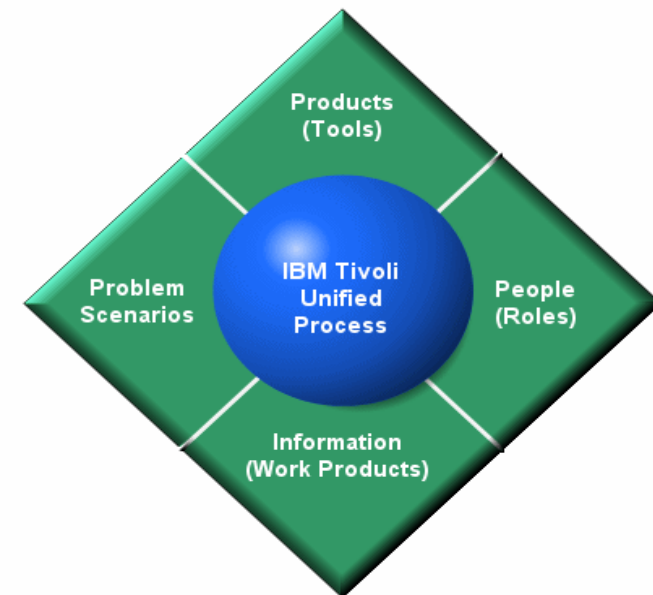
ITIL publication set

Take Back Control with IBM Service Management

Service Management Process Automation –How to do it

IBM Tivoli Unified Process (ITUP) and ITUP Composer

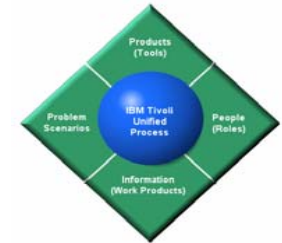
- Detailed diagrams and descriptions of IT Service Management processes
- Based on industry best practices
- A complete, cohesive process model:
IBM Process Reference Model for IT (PRM-IT)
- Strongly aligned to ITIL and can be mapped to other process models such as CoBIT, eTOM, Six Sigma, CMMI, ISO 17799
- Web-based Tools Mentor



Makes ITIL Actionable!

Take Back Control with IBM Service Management

Service Management Process Automation – ITUP



Walkthrough Scenarios

- Analyze impacts
- Automated provisioning of storage
- Automatic response to outage
- Base-lining applications
- Consolidate licenses
- Ensuring back-ups
- Manage software compliance
- New availability requirements
- Order entry slows down
- Prioritizing incidents
- Provisioning a laptop
- Resolving slow response on a SOA app
- Rolling out software
- Running an IT Service SLA for a new application
- User needs access.....

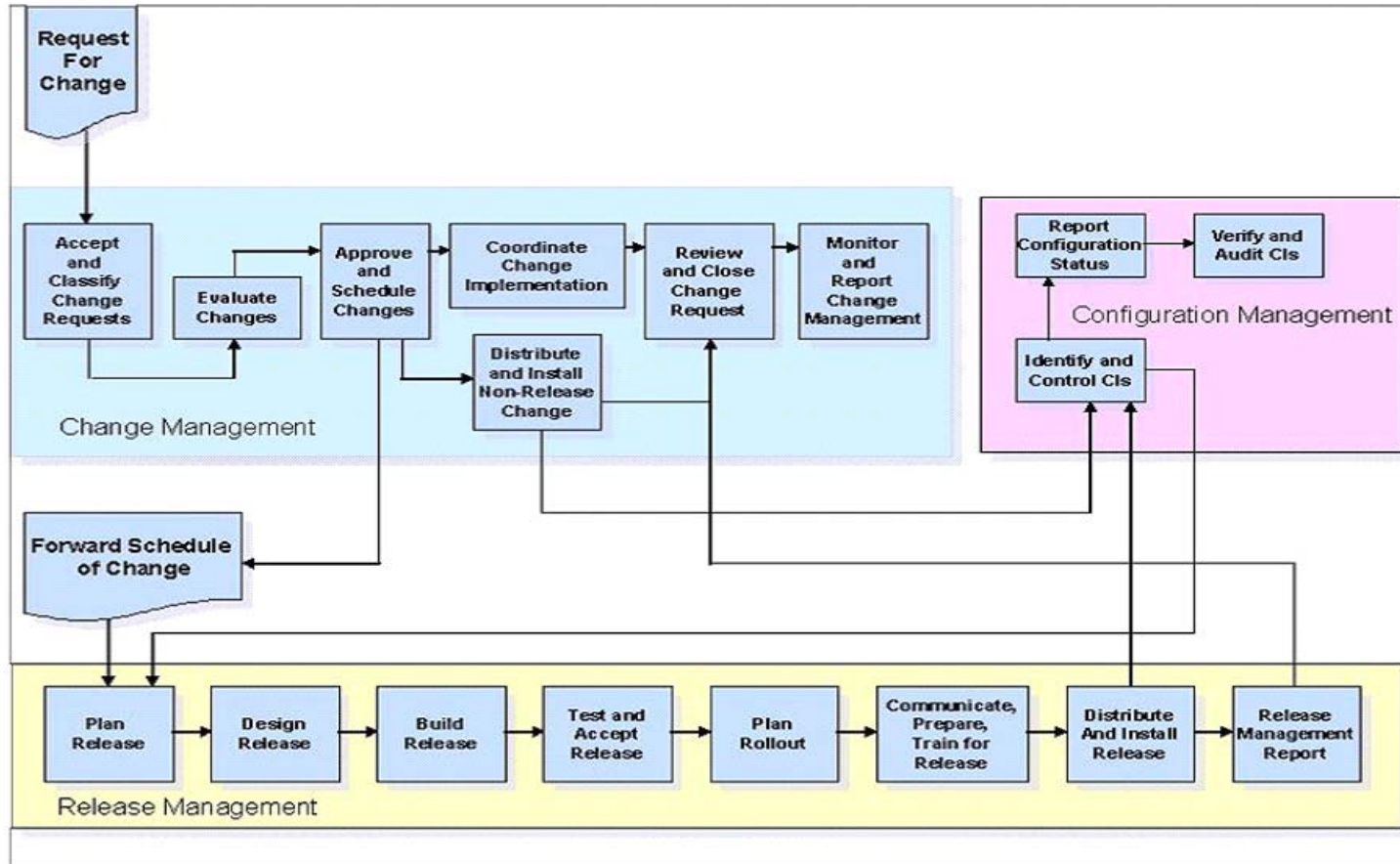
Release Management Example

People 	Release Manager	Release, Conf, App Developers, Web Engineers, Sys Admin, Event, Ops	Release, App Developers, Web Engineers, Sys Admin, Event, Ops	Release, Web Engineers, Sys Admin	Release Manager	Release, Sys Admin, Ops, Config, Web Engineers	Release Manager
	Release Manager	Release Assignee	Release Tester	Release Assignee	Release Communicator	Release Distributor	Release Manager
Process 	Plan Release	Design and Build Release	Accept Release	Plan Rollout	Communicate, Prepare, and Train for Release	Distribute and Install Release	Evaluate Release Management Performance
Information 	Request for Change Release Plan and Definition	Release Package	Release Package	Roll-out Plan	Release Communications	Implemented Release	Release Evaluation
Technology 	IBM Tivoli Configuration Manager	IBM Tivoli Configuration Manager, IBM Tivoli Enterprise Console	IBM Tivoli Configuration Manager	IBM Tivoli Configuration Manager, IBM Tivoli Provisioning Manager	IBM Tivoli Configuration Manager, IBM Tivoli Provisioning Manager	IBM Tivoli Configuration Manager, IBM Tivoli Provisioning Manager	IBM Tivoli Configuration Manager

Free Download: <http://www-306.ibm.com/software/tivoli/features/it-serv-mgmt/itup/overview.html>

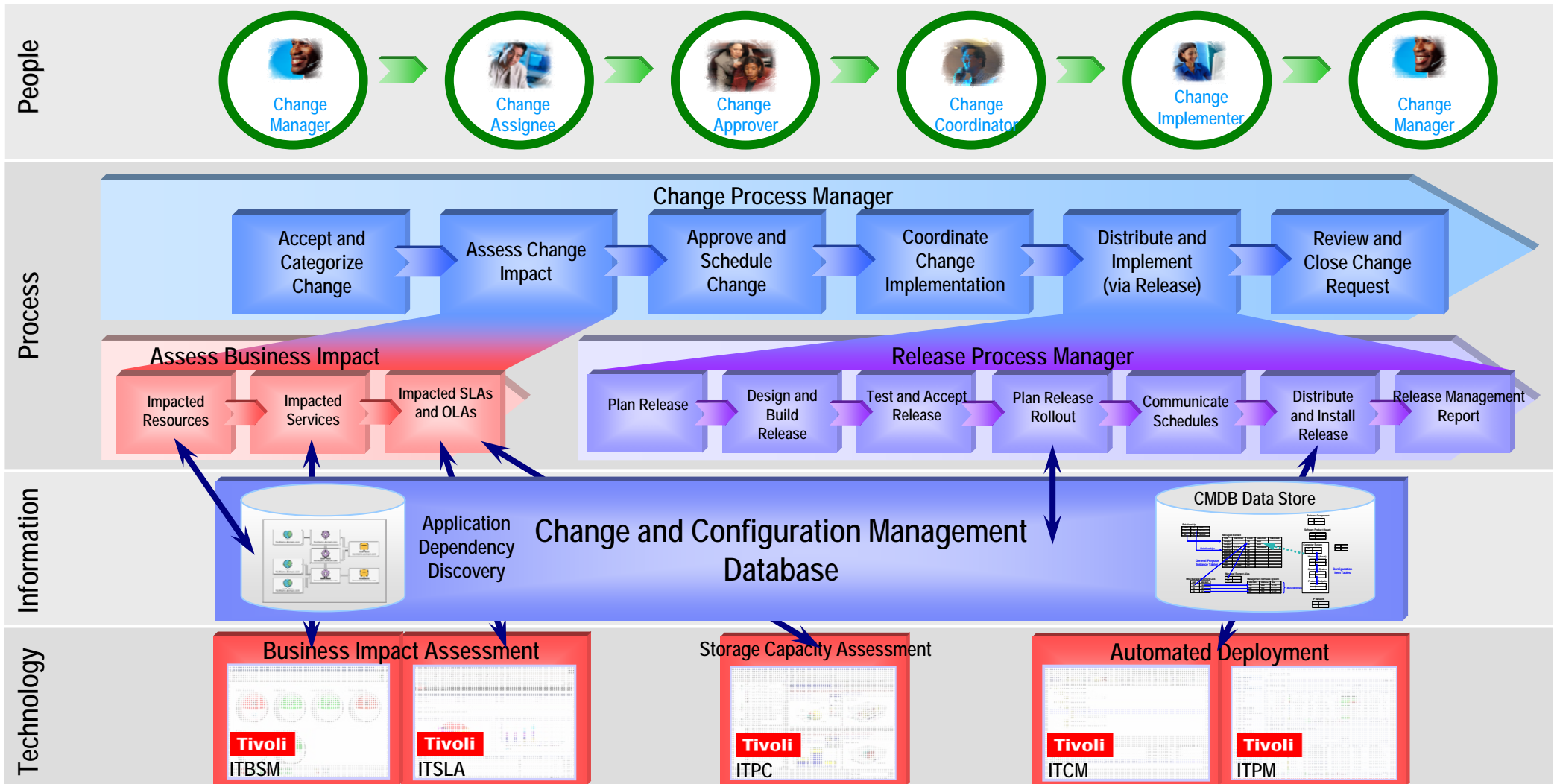
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Phase 3: Service Management Process Automation



Take Back Control with IBM Service Management

Phase 3: Service Management Process Automation



Take Back Control with IBM Service Management

Phase 3: Service Management Process Automation

- Change Management
- Configuration Management
- Release Management
- Availability Management
- Storage Management
- Capacity Management
- Workload Management
- Service Level Management
- Asset Management
- Security Management
- Service Continuity Management

The screenshot displays the IBM Integrated Solutions Console (ISC) interface for managing Request for Change (RFC) items. The main window shows the details for 'RFC 8: DB2 Storage Upgrade', which is in an 'Accepted' state. The description is 'Upgrade to storage for DB2 server to support new BILLING application'. A table below the description lists the workflow steps: 'Create' (submitted 6/13/06), 'Accept & Categorize' (accepted 6/13/06), 'Assess Minor' (started 6/13/06, ended 6/28/06), 'Approve and' (started 6/28/06, ended 7/23/06), and 'Coordinate C' (started 7/23/06, ended 8/2/06). Below this, a 'Key Information' section shows the RFC is 'Accepted' and 'Minor'. At the bottom, a Gantt chart visualizes the timeline of these activities from July 11 to August 24, 2006.

Take Back Control with IBM Service Management

ISM Process Managers Build Business Value of IT

- Common (ISC) portal interface
- Role-based
- Automated workflow
- Manage CI's effectively
- Discovery auto feeds
- ITIL, ITUP, Custom Process templates invoked according to parameters
- Enforces process discipline
- Integrated with CCMDB
- ITIL processes aligned to technology

The screenshot shows the 'Create RFC' form in the Tivoli IT Service Management console. The browser window title is 'Integrated Solutions Console - Microsoft Internet Explorer'. The address bar shows a URL starting with 'http://9.180.180.164:9081/wps/myportal/'. The page header includes 'Tivoli IT Service Management' and navigation links like 'My Portal', 'Administration', and 'ISC'. The left sidebar contains a navigation menu with categories like 'My ITSM Tasks', 'Configuration Management', 'My Tasks', 'Reporting', 'Process Management', and 'ITSM System Administration'. The main content area is titled 'Create RFC' and contains the following fields and sections:

- Description:** Fill out the fields below and click the submit button to create/edit a request for change.
- Create/Edit Request For Change(RFC)**
- *Group:** Generic Changes
- *Type:** Generic Minor Change
- *Title:** DB2 Storage upgrade
- Description of Change:** Upgrade to storage for DB2 server to support new BILLING application
- *Requester:** opsadmin
- *Category:** Select One -->
- *Desired completion:** A calendar widget showing June 2006.
- Extended Attributes:** List of Extended Attributes for the Selected Rfc Type
- Buttons:** Submit, Cancel

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Take Back Control with IBM Service Management

Focus on initiatives that deliver value today and contribute to the 'Big Picture'

Top-Down Approach

- Strategically driven as a major Service Improvement Programme
- Broad front of attack
- Culture changing with enterprise impact
- Time-to-Value is slow

Bottom-Up Approach

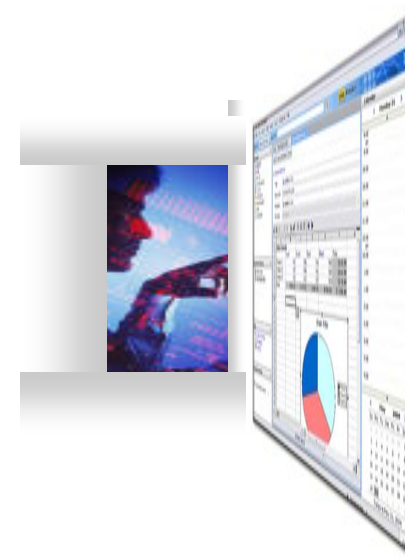
- Tactically driven but strategically aligned
- Vertical Stack approach
- Specific focus on 1 – 2 critical business services
- Prototype then replicate to other business services
- Time-to-Value is fast



Take Back Control with IBM Service Management

IBM as a strategic
Service Management Partner





“Take Back Control”

IBM Service Management

A better way to manage the business of IT

Questions

Thank
You