ON DEMAND BUSINESS™ | IBM Software Group

IBM

"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

e business software

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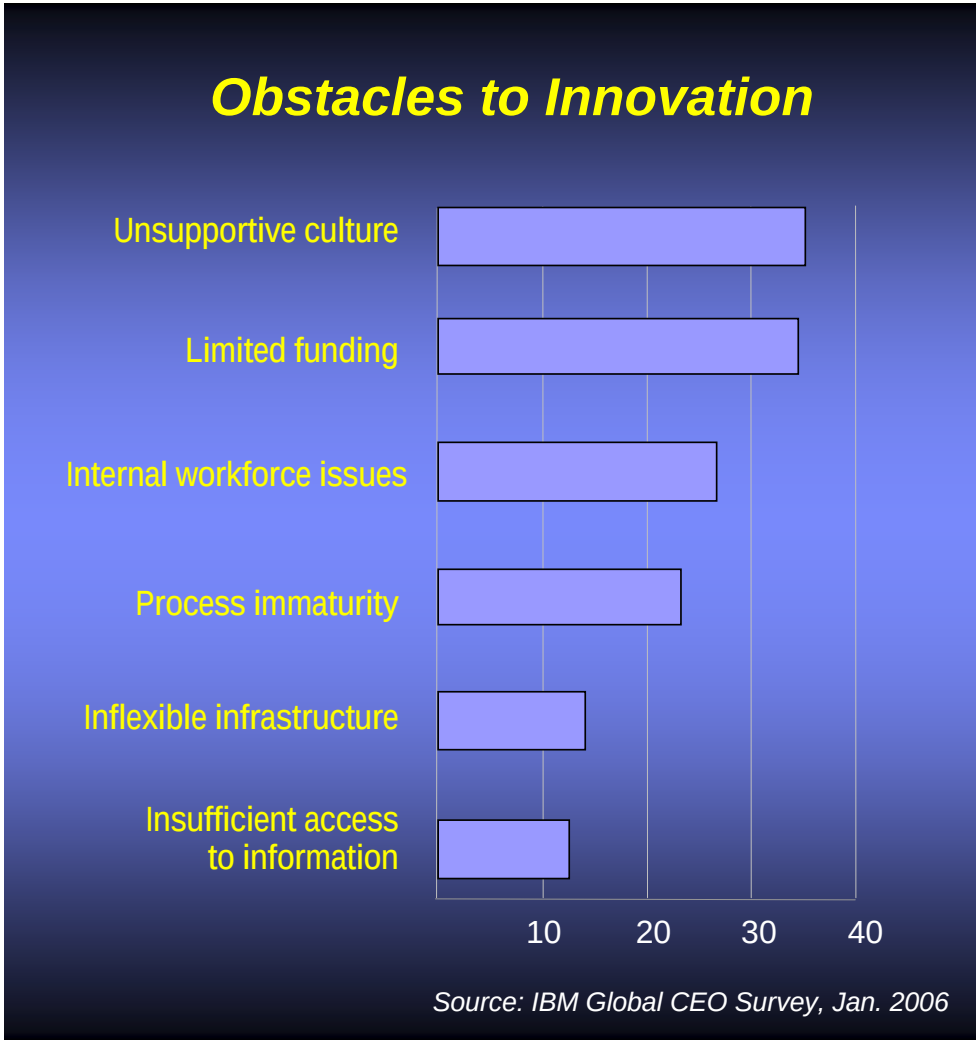
Take Back Control with IBM Service Management

Today's challenges

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



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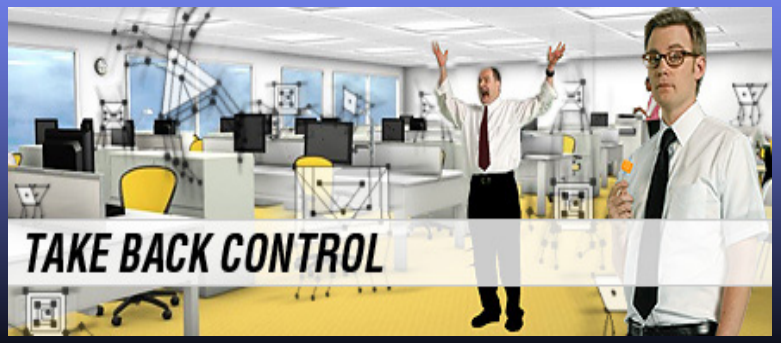
Today's challenges

- 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

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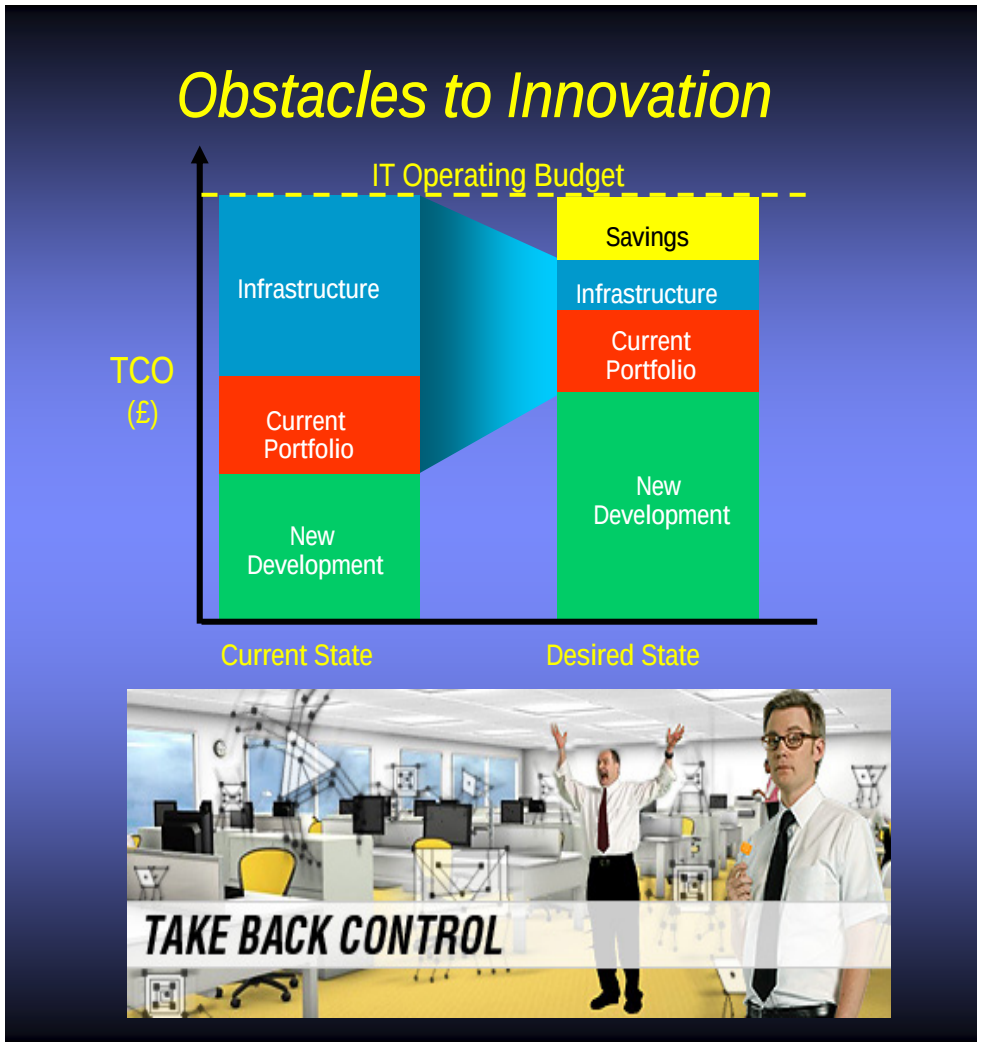
Take Back Control with IBM Service Management

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

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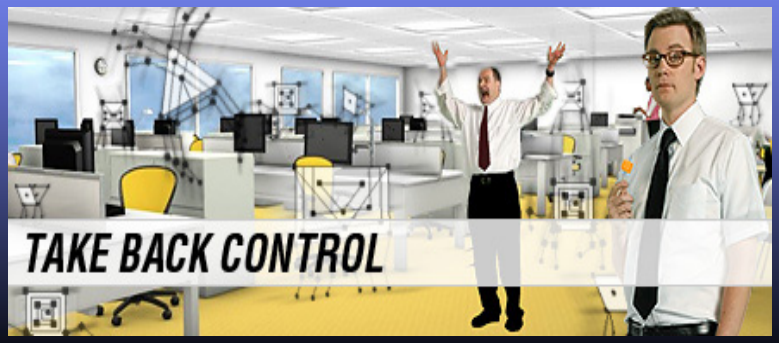
Today's challenges

- 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



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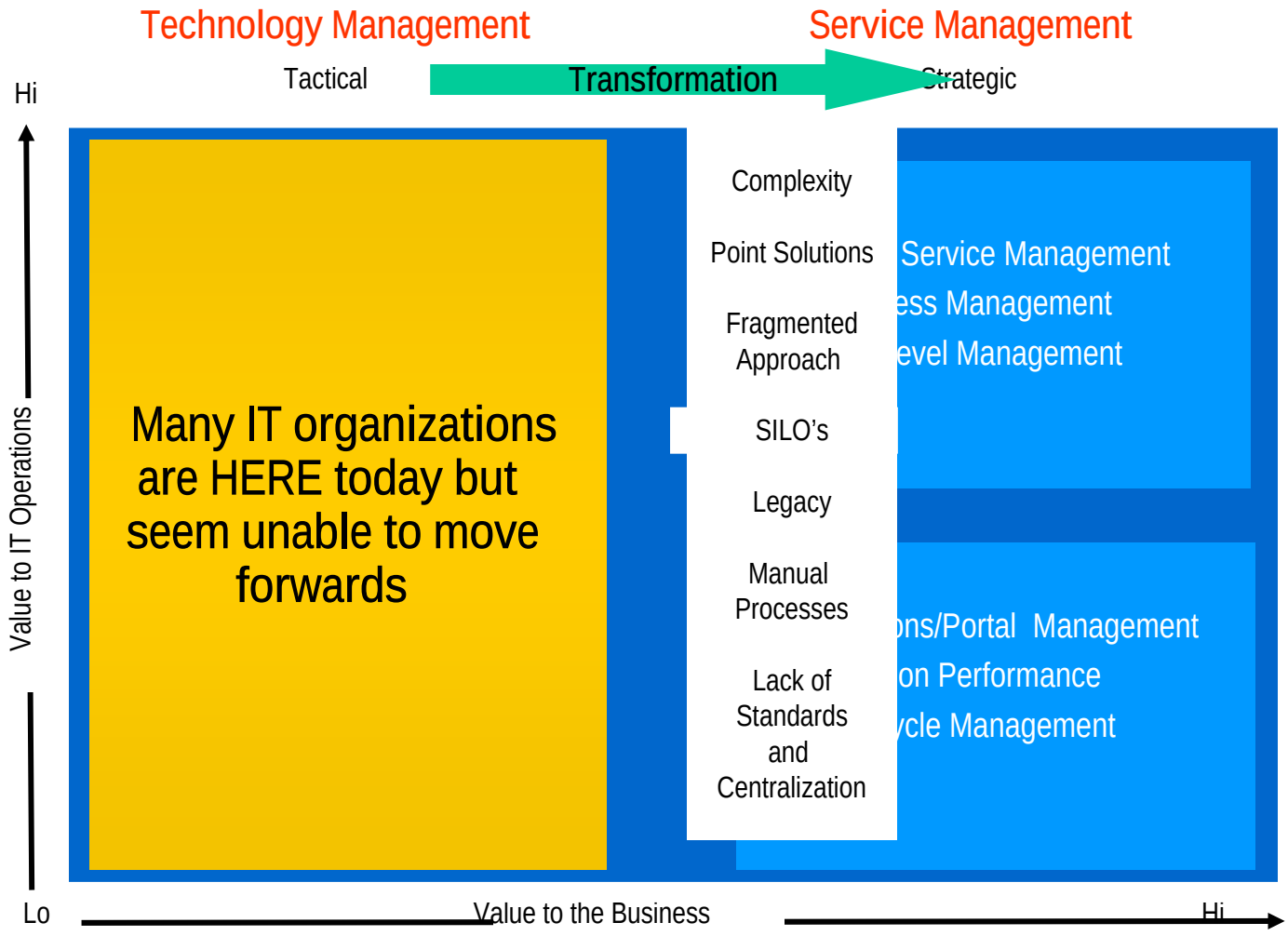

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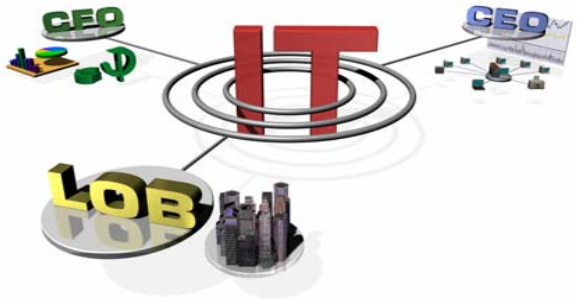
The drive towards value



IT	VALUE	BUSINESS
IT efficiency & productivity gains	IT aligned and responsive to business	Customer retention
Centralization	Focus on service	Customer acquisition
Standards	Manage and measure by service	Response to change in the market
Integration	Optimization through automation	Response to new opportunities
Service Management culture	High availability & performance	Time to Market
Best Practices	Compliance assurance	Routes to Market
Utilization improvement	Value for money	Competitive advantage
Process Automation	Service = Expectation	

Cost Efficiency	Partnership & Trust	Agility to prosper from change
Scalable model	Mutual value	Focus on growth not operation
Ability to fund innovation		Returns on Investment

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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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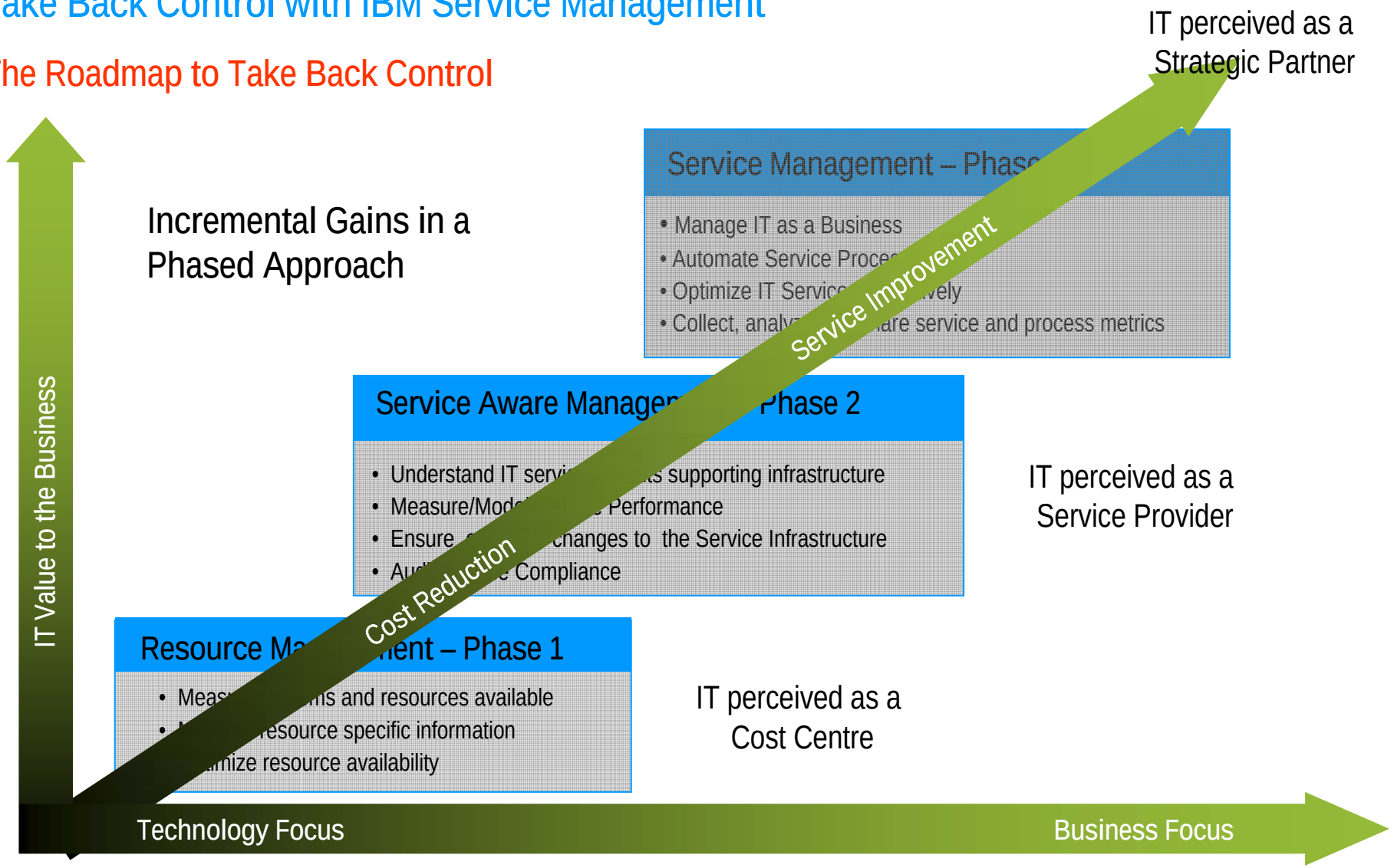
The Roadmap to Take Back Control



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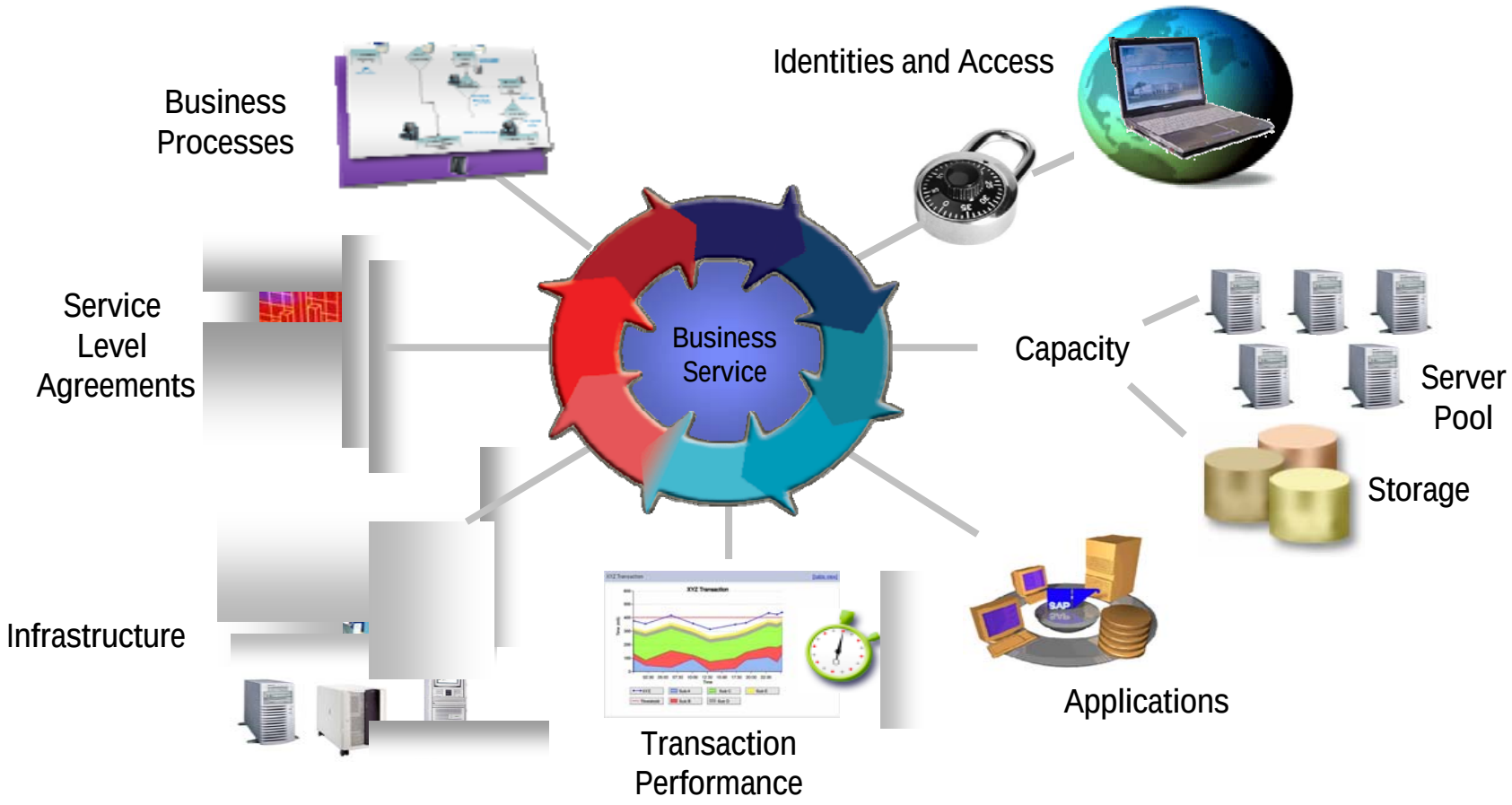
What lies beneath a Business Service



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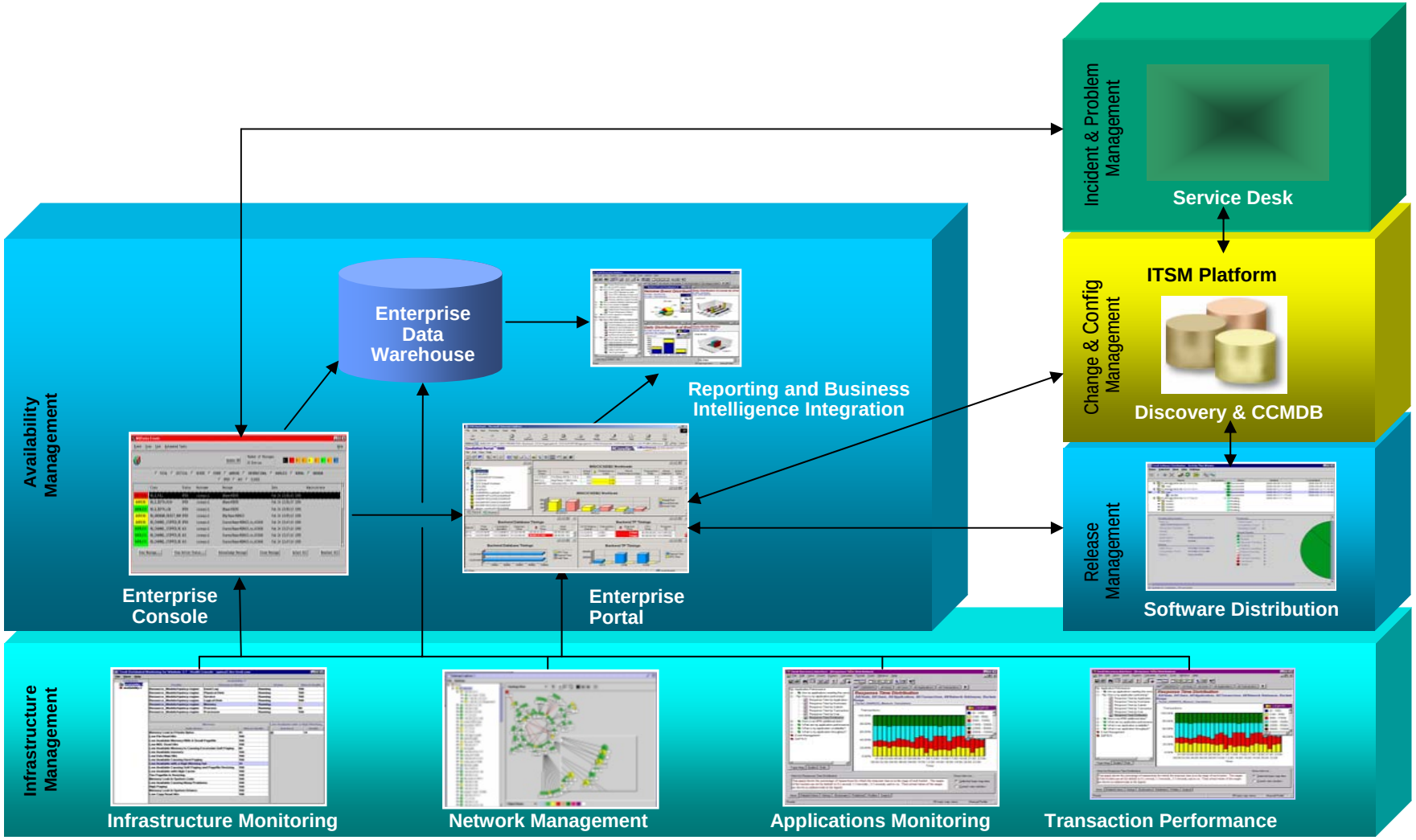
Phase 1: Resource Management - Build on your existing infrastructure management tools



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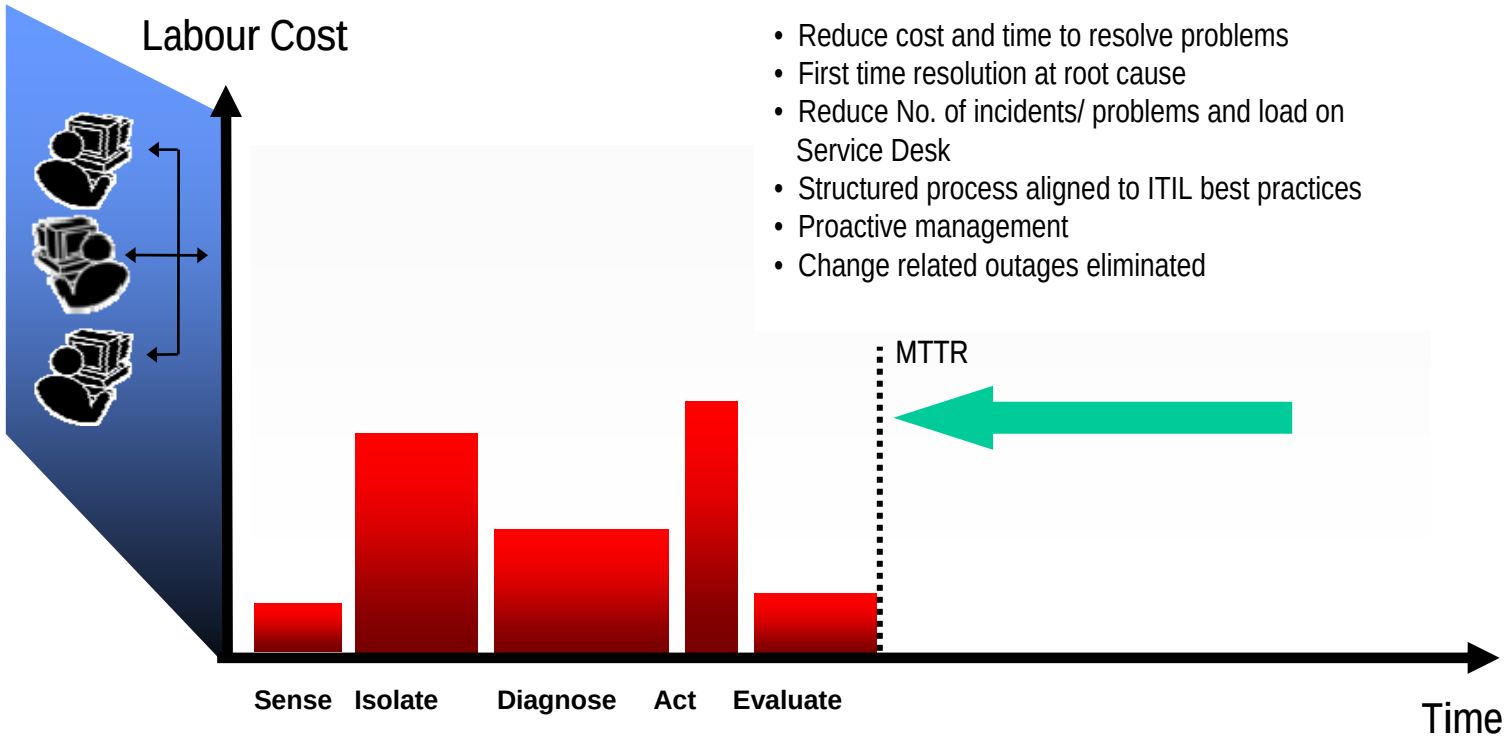
Managing Cost and Responsiveness across IT Silos

Process \ Skills	Desktop Experts and Tools	Network Experts and Tools	Application Experts and Tools	Database Experts and Tools	Server Experts and Tools	Mainframe Experts and Tools	Storage Experts and Tools
Availability Management							
Change Management							
Service Level Management							
Security Management							
Information Lifecycle Management							
Release Management							



Desired State:

- Reduce cost and time to resolve problems
- First time resolution at root cause
- Reduce No. of incidents/ problems and load on Service Desk
- Structured process aligned to ITIL best practices
- Proactive management
- Change related outages eliminated

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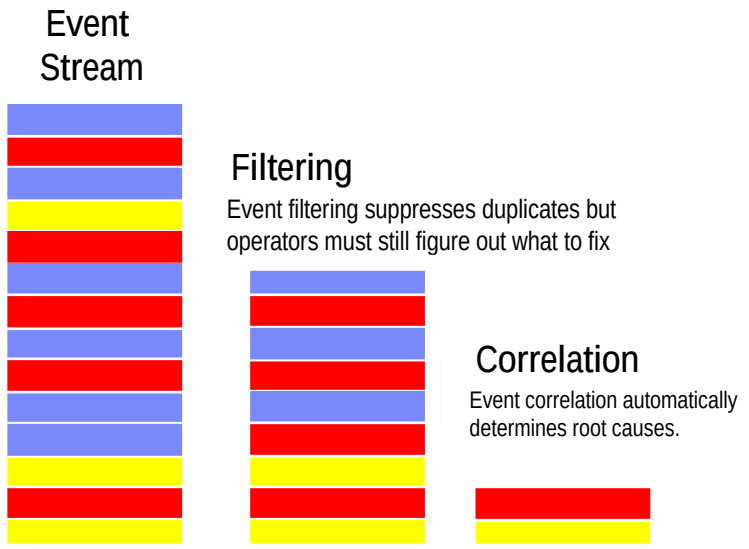
Tivoli Enterprise Console - Event Management

- 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



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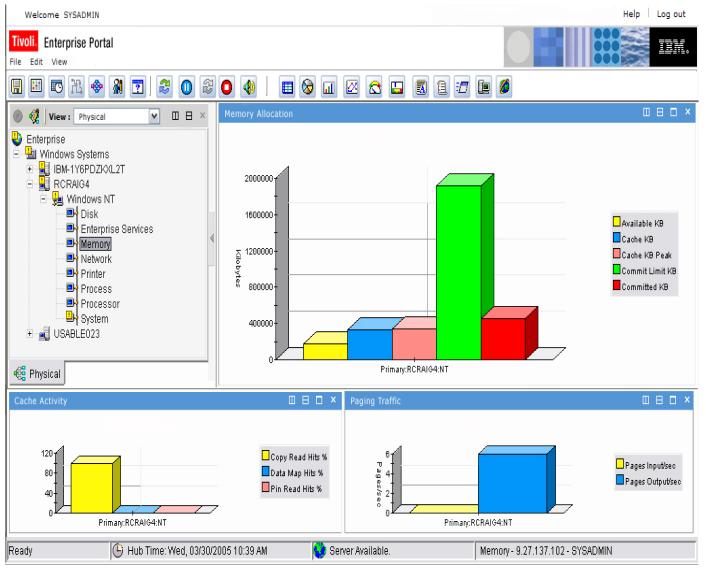
Tivoli Enterprise Portal – end to end management from a single, central point

- Integrates multiple Tivoli management products under a common GUI
- Adds personalization, event and status management, workflow automation, expert advise, 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 ..

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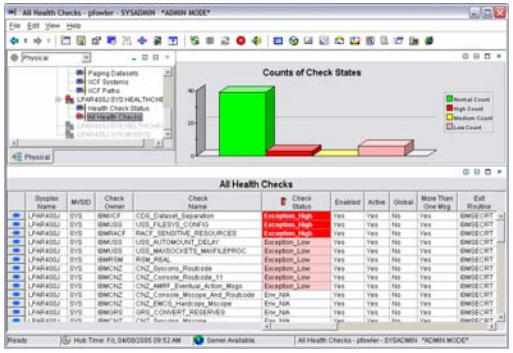
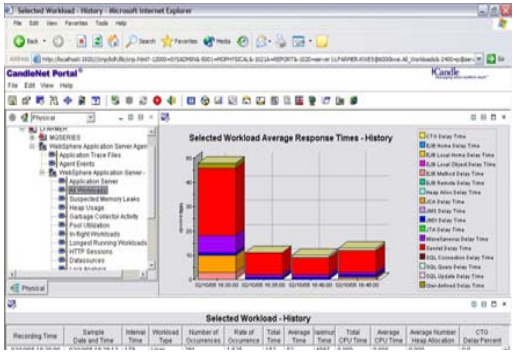
Create Multiple Customized Composite Application Workspaces

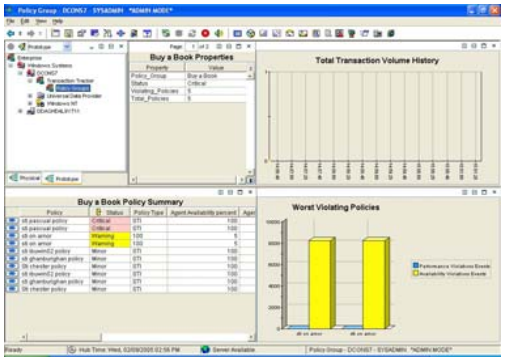
Operating Systems & MW



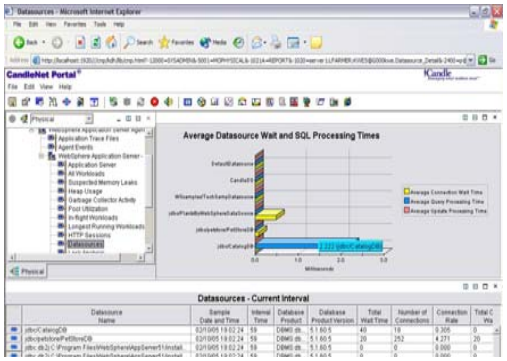
Native z/OS Health



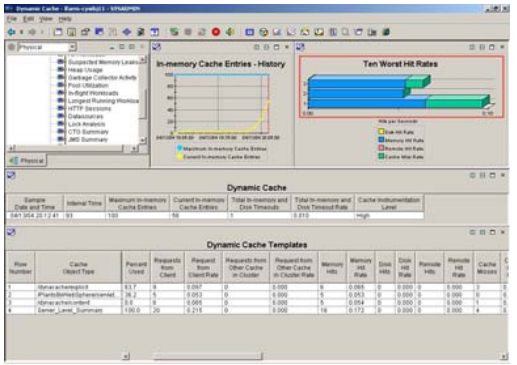
WS & J2EE Applications



End to End Transactions



WBI Infrastructure



Databases

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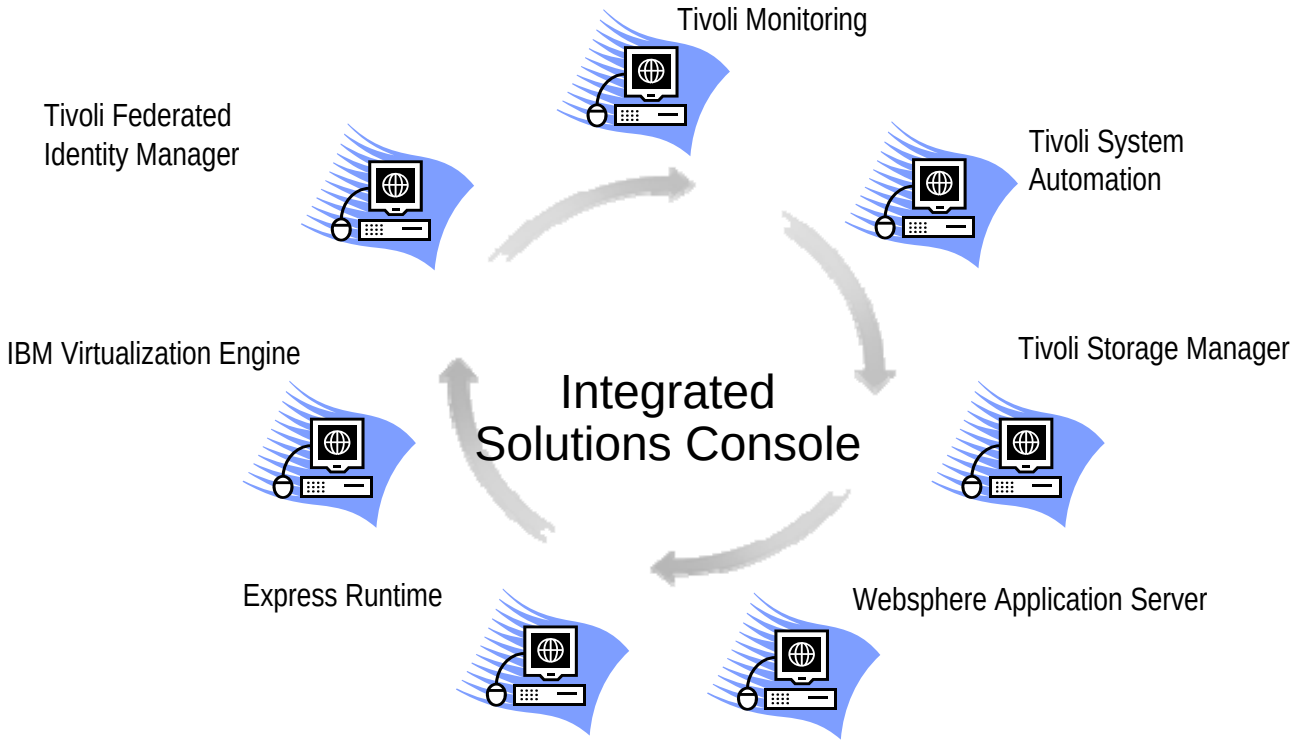
The Tivoli Enterprise Portal is a member of the ISC Family of Solutions – A Common Systems Administration initiative to evolve all product administration under a common, standards-based systems administration approach.



- 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

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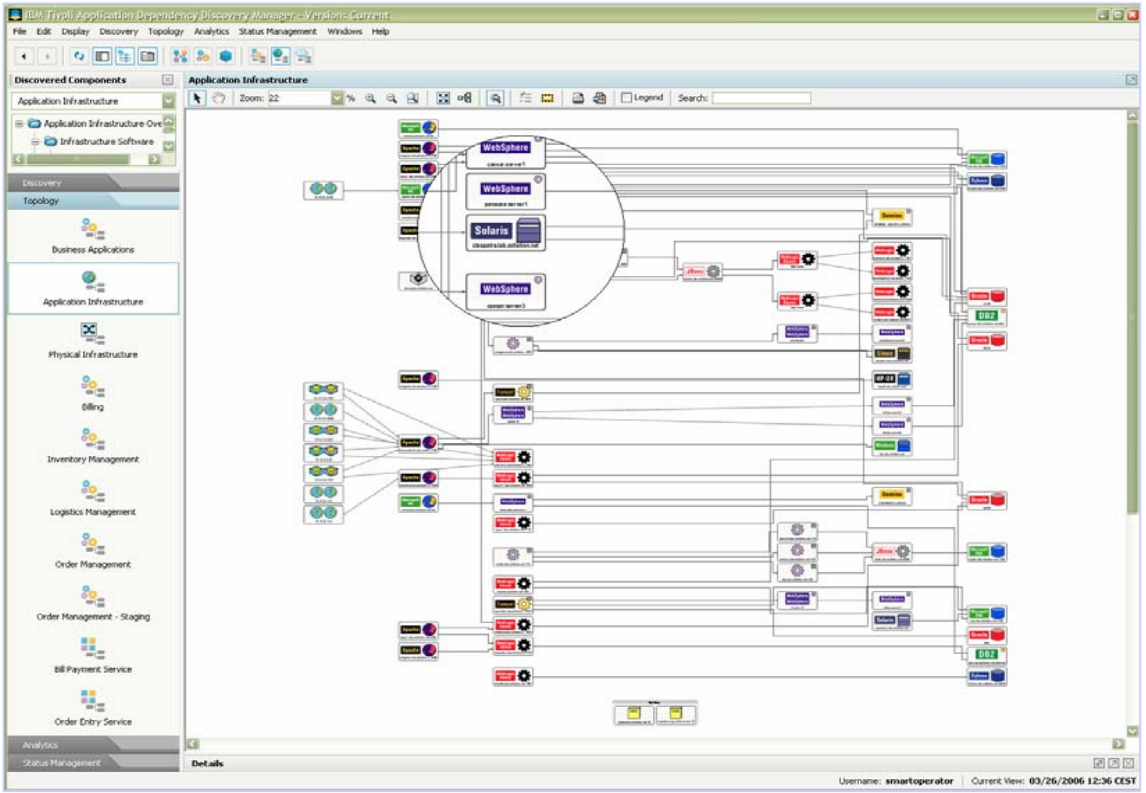
Take Back Control with IBM Service Management

Discovery of infrastructure components and applications

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

Tivoli Application Dependency Discovery Manager (TADDM)



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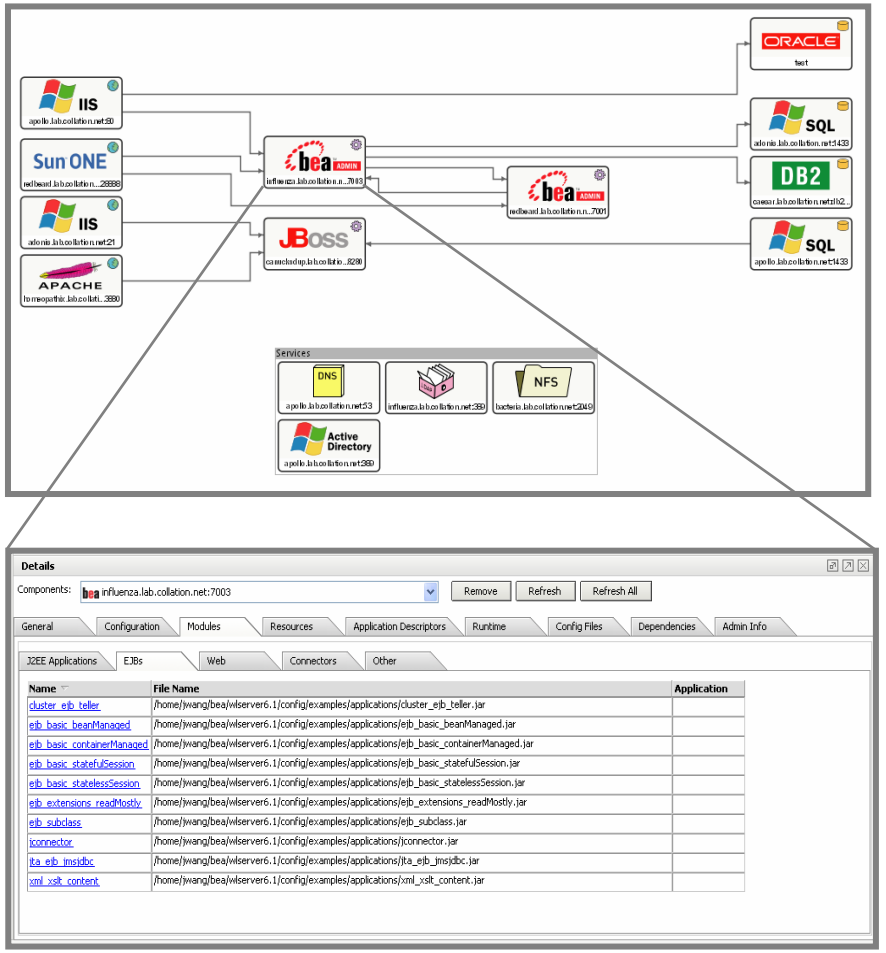
Discovery of infrastructure components and applications

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



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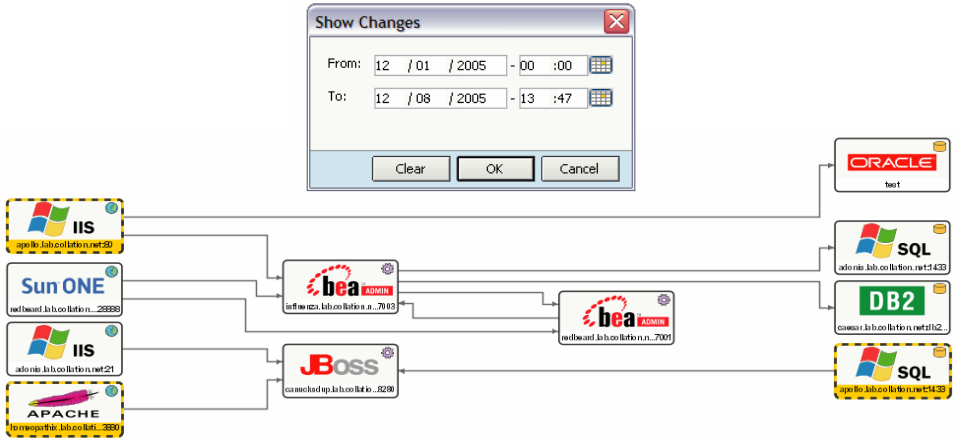
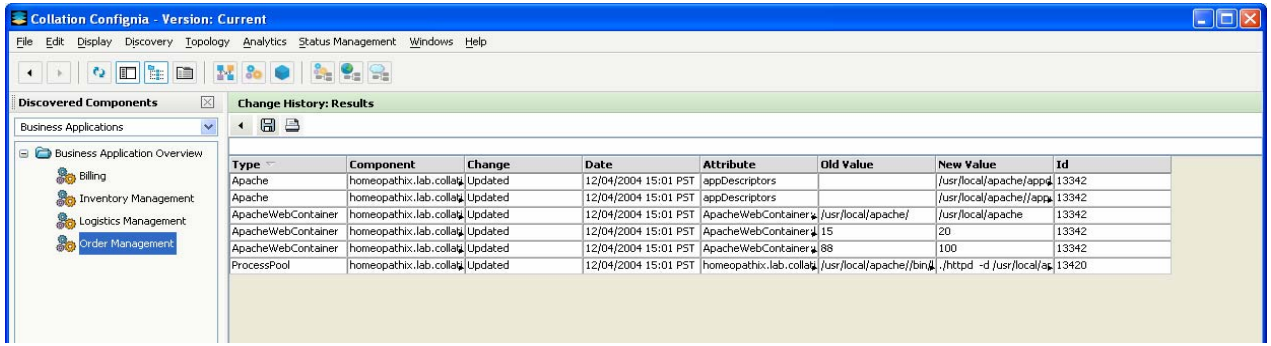
Discovery of infrastructure components and applications

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



80% of service outages are caused by CHANGE

Gartner



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Discovery of infrastructure components and applications

- Visibility of assets is crucial
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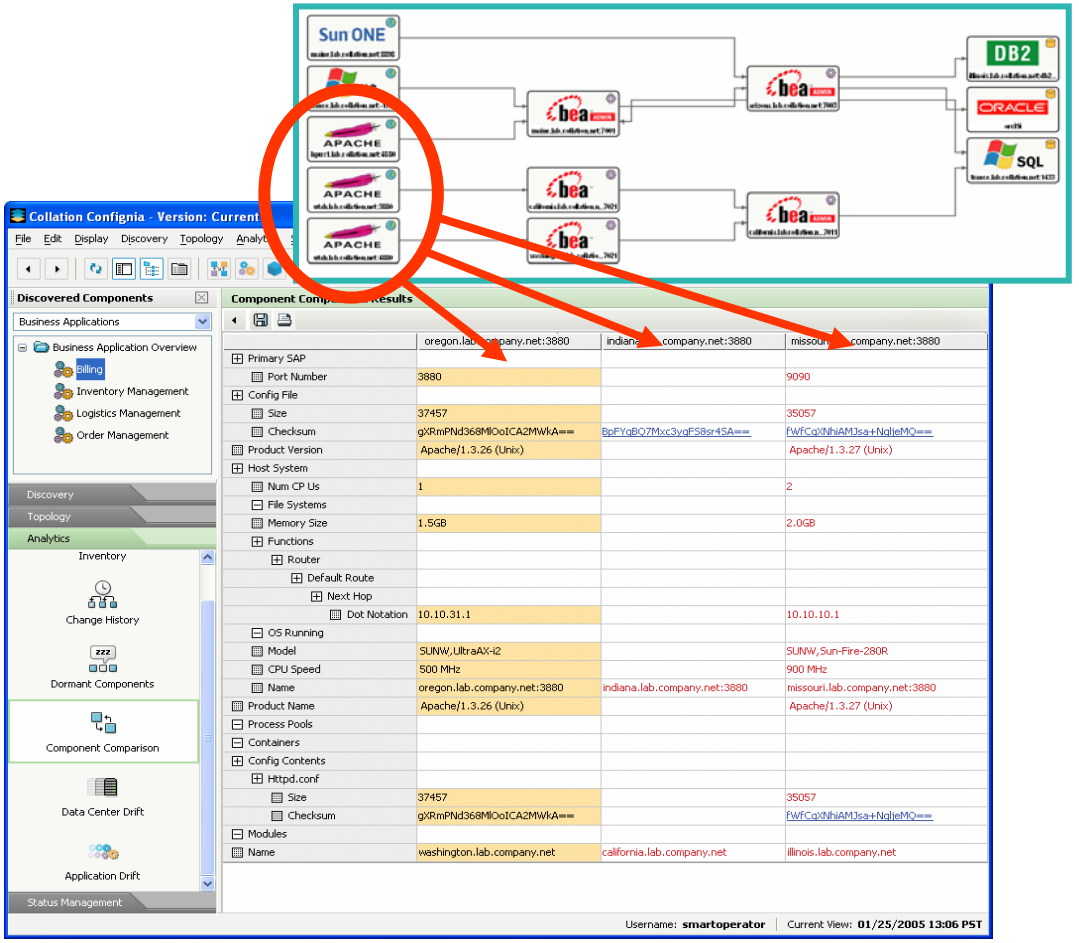
- Comparisons against standards



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Discovery of infrastructure components and applications

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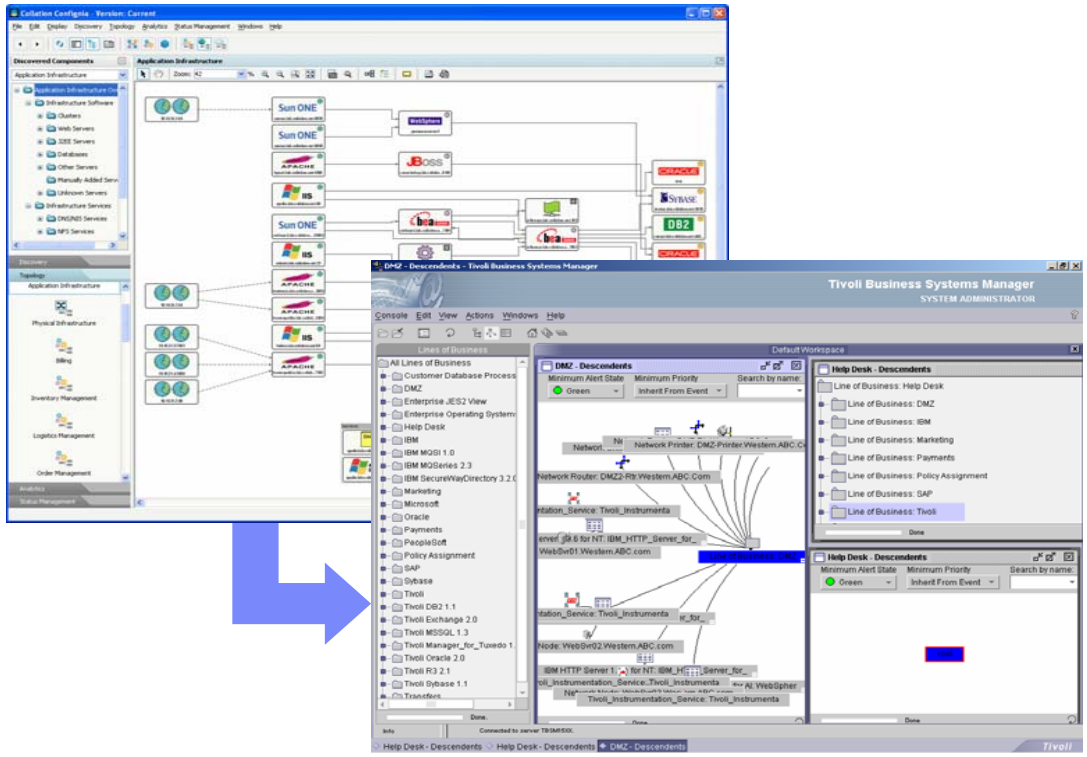
- Deep configuration details
- Change detection and reporting
- Comparisons against standards
- Populates CCMDB and Business Service Views



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Discovery of infrastructure components and applications

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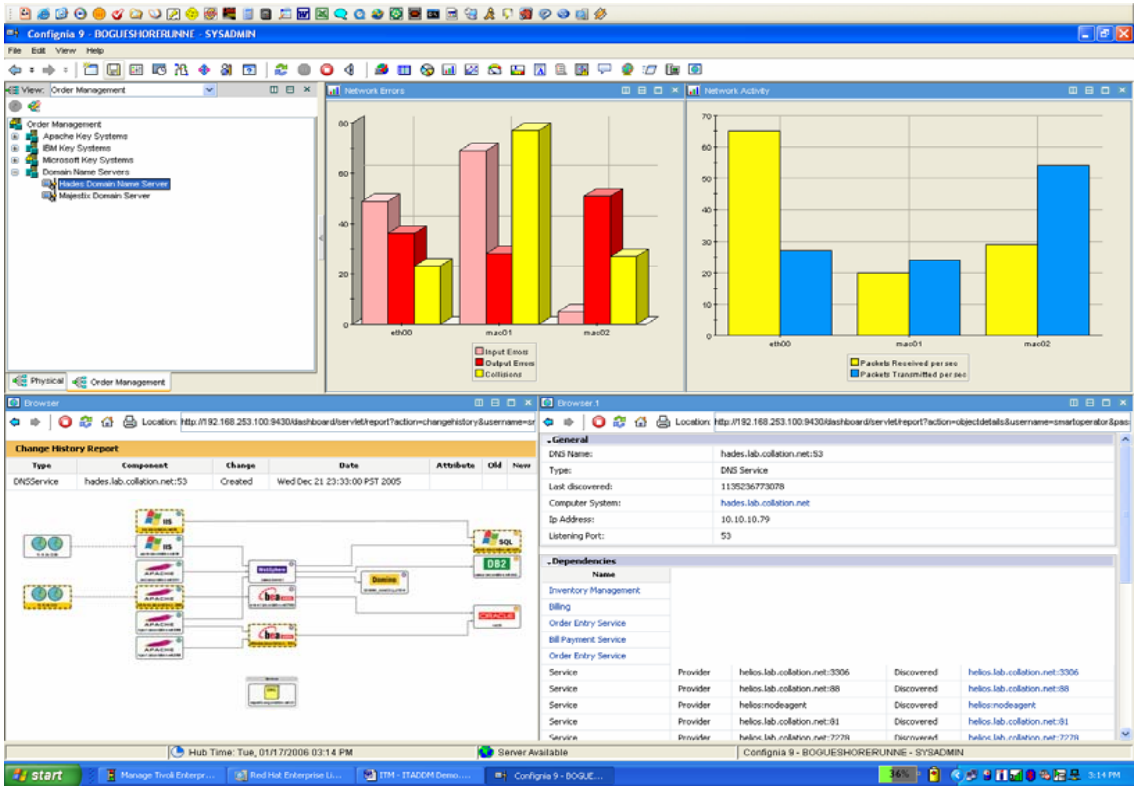
- Comparisons against standards
- Populates CCMDB and Business Service Views
- Use inside TEP and launch in context from CCMDB



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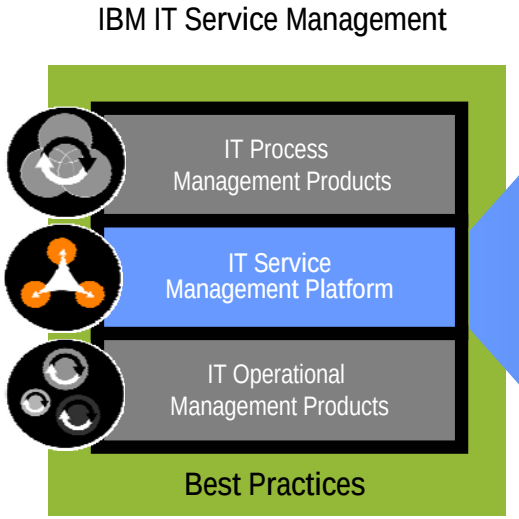
Take Back Control with IBM IT Service Management

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

collation. Tivoli WebSphere. DB2.



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

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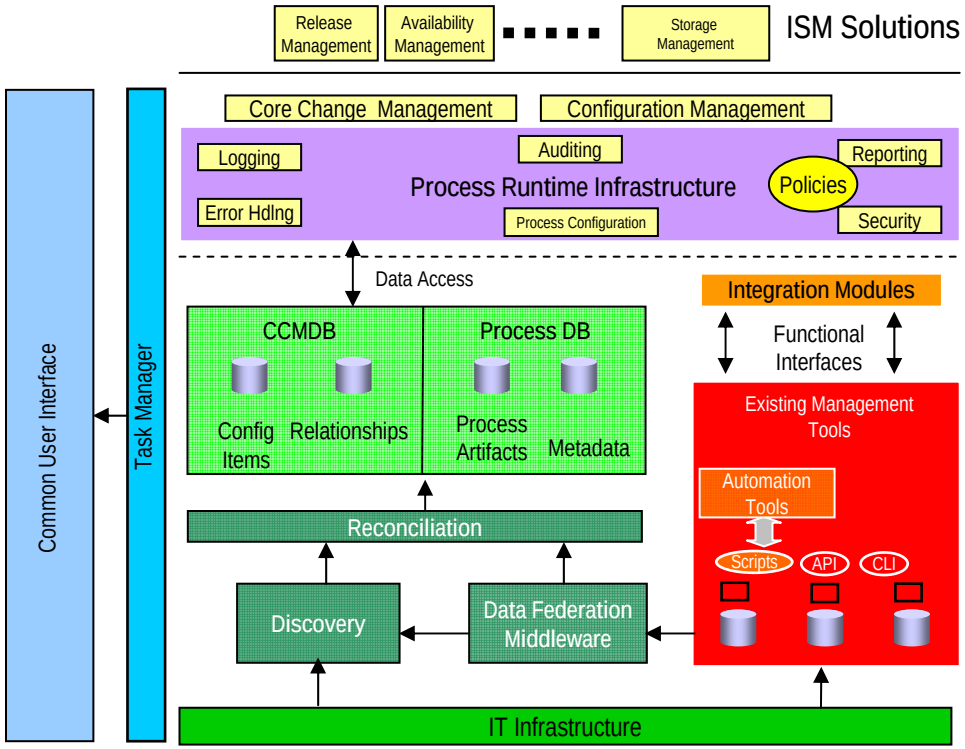
CMDB or Not?



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

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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			✓

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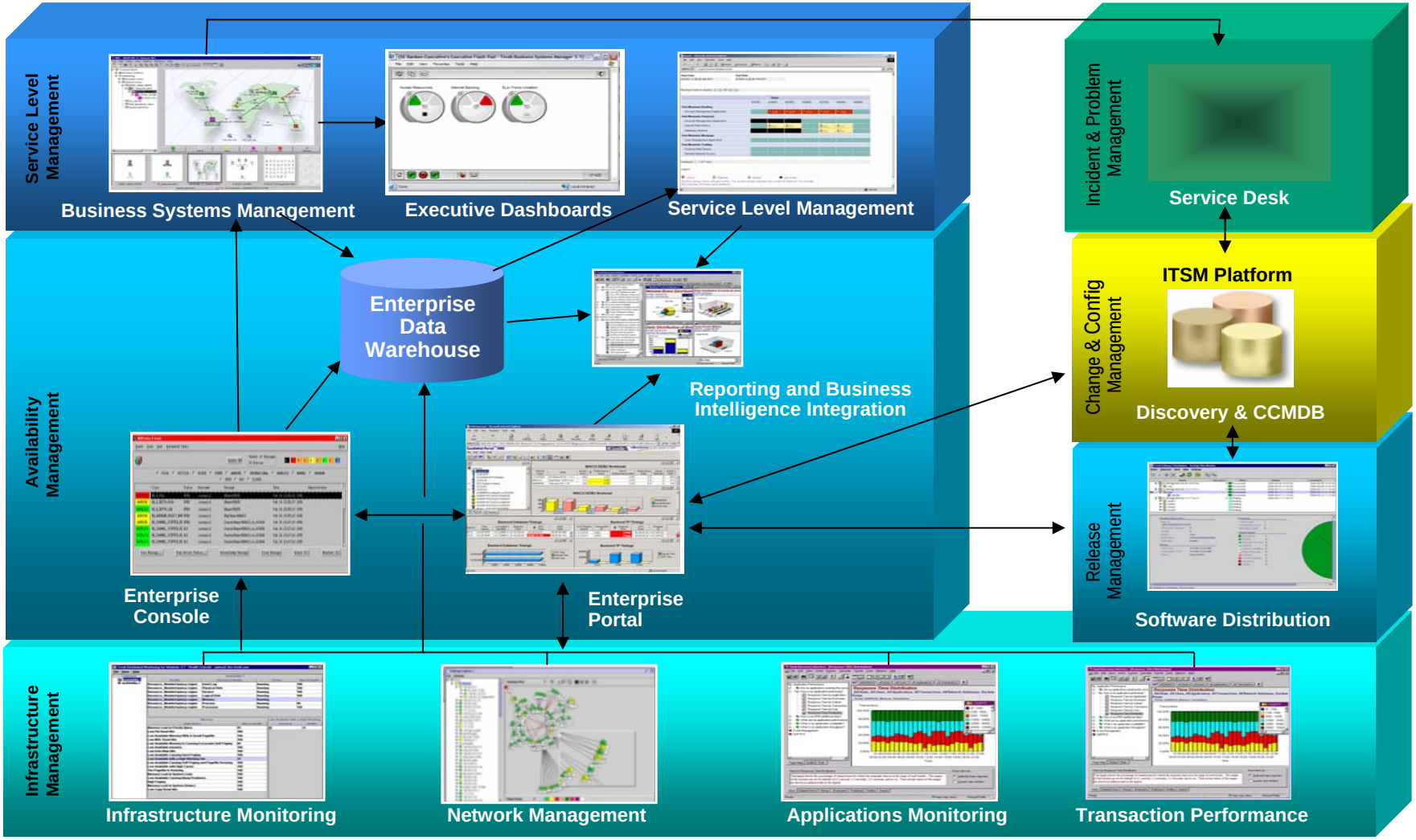
Phase 2: Service Aware Management – Operational Management Products



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Aligning IT to the Business – the vertical stack

Business Service 1

Business Service 2

Order Management

Business Service 4

Business Service 5

Application Layer

Middleware Layer

System Layer

Network & Device Layer

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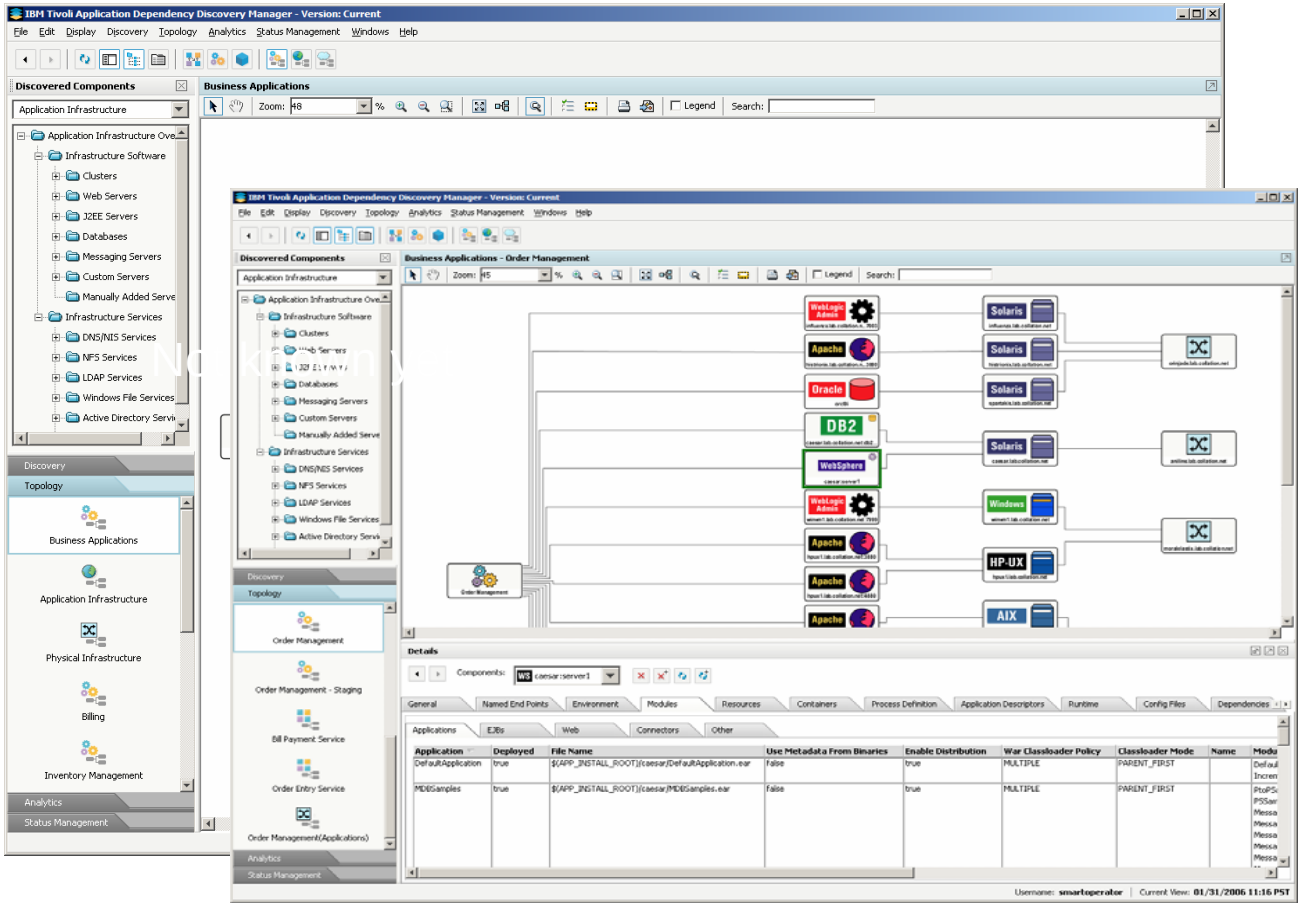
Discovery of infrastructure components *and* applications

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



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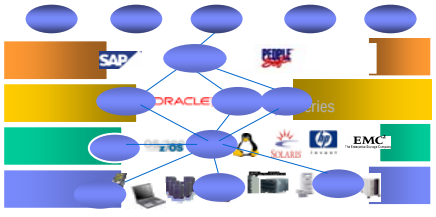
Aligning IT to the Business – Understand Business Impact

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



Business Perspective

"The business cannot sustain these outages"

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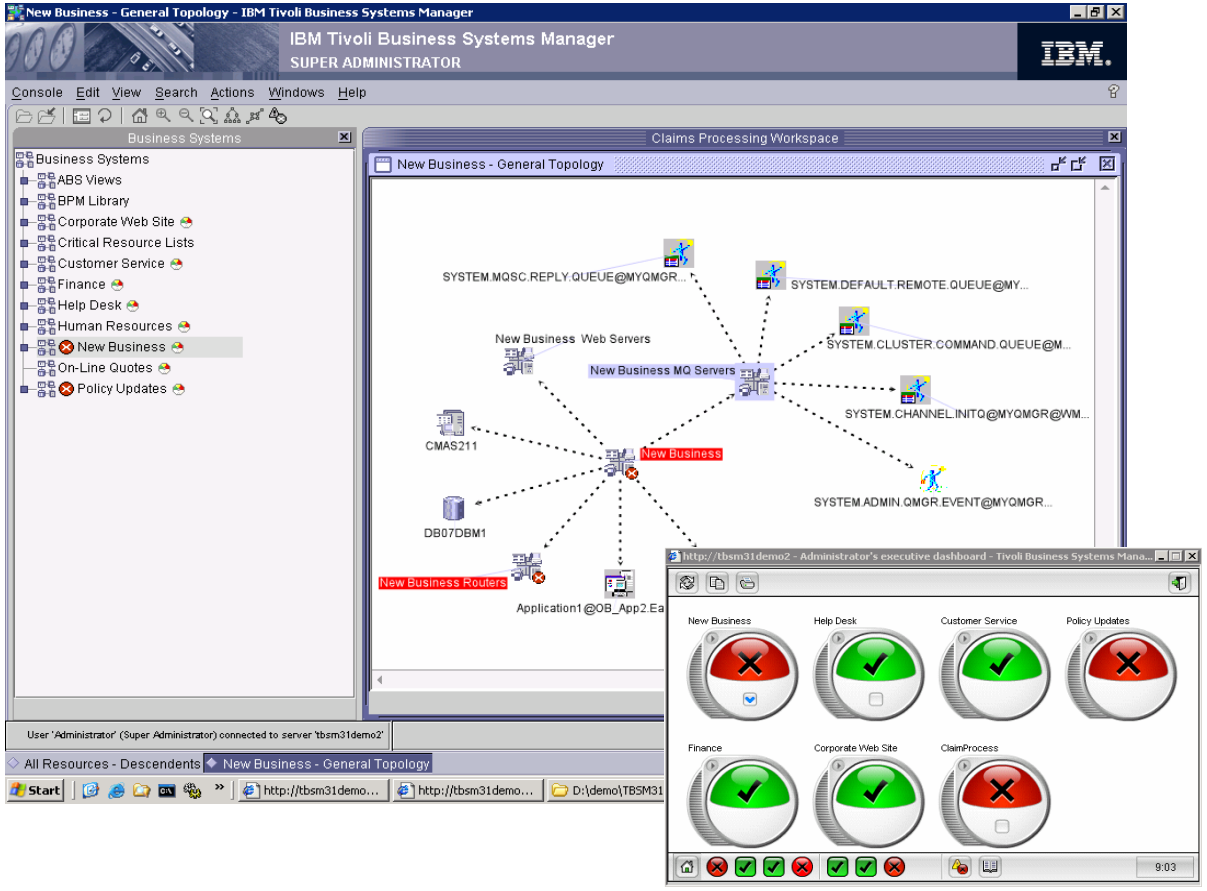
Aligning IT to the Business – Service Views

- 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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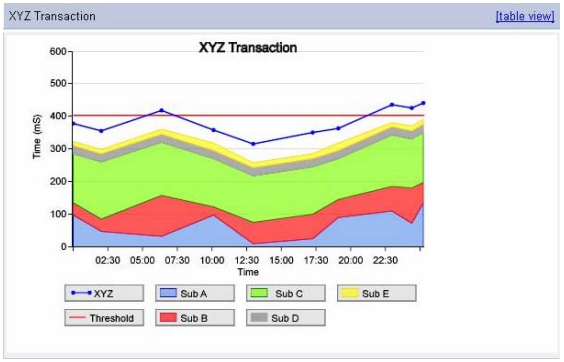
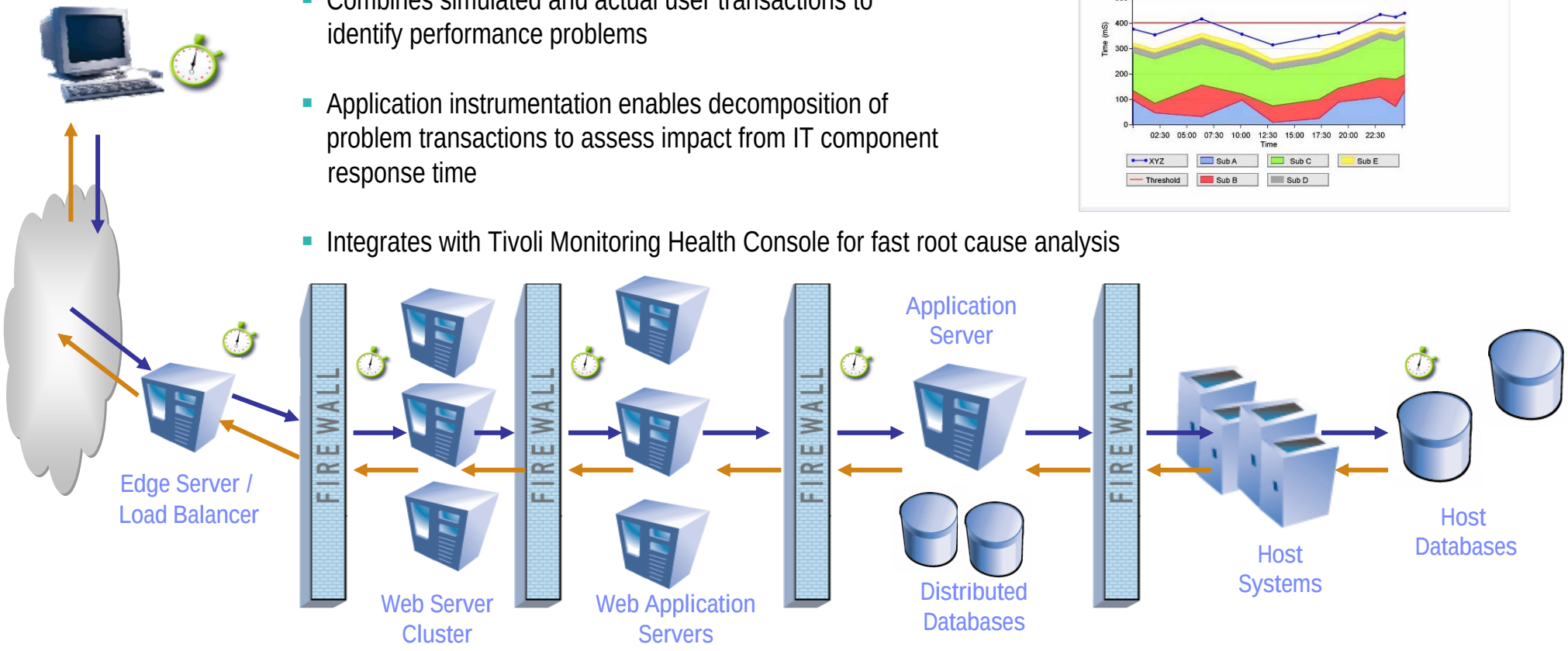
Understand and manage the customer experience

Tivoli CAM for Response Time Tracking



- 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



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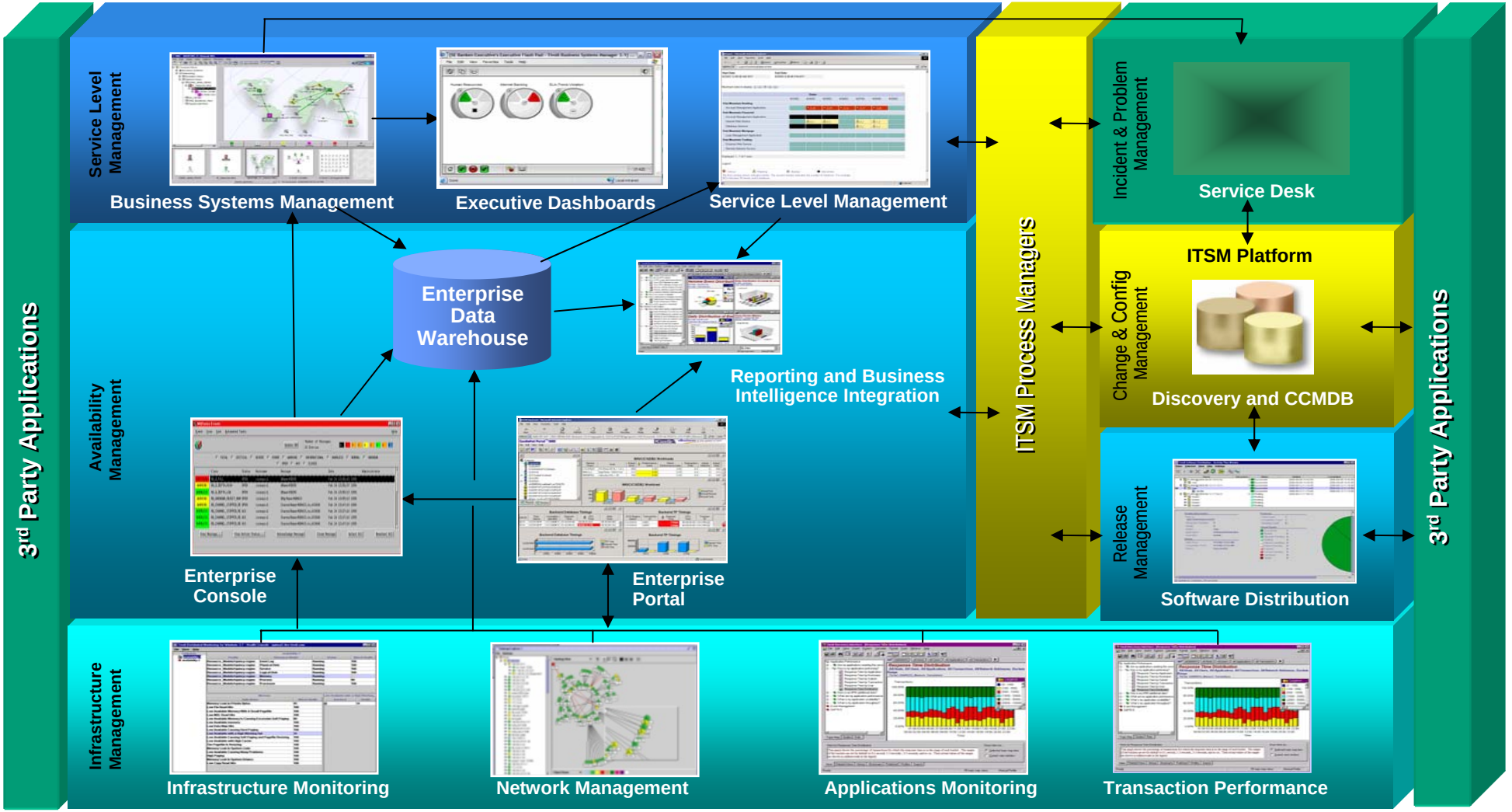
Phase 3: IBM Service Management – Process Automation



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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

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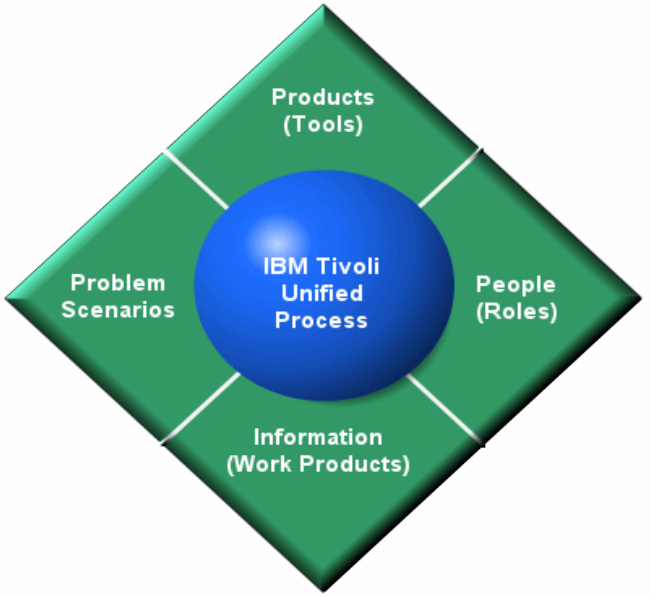
Service Management Process Automation –How to do it

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!

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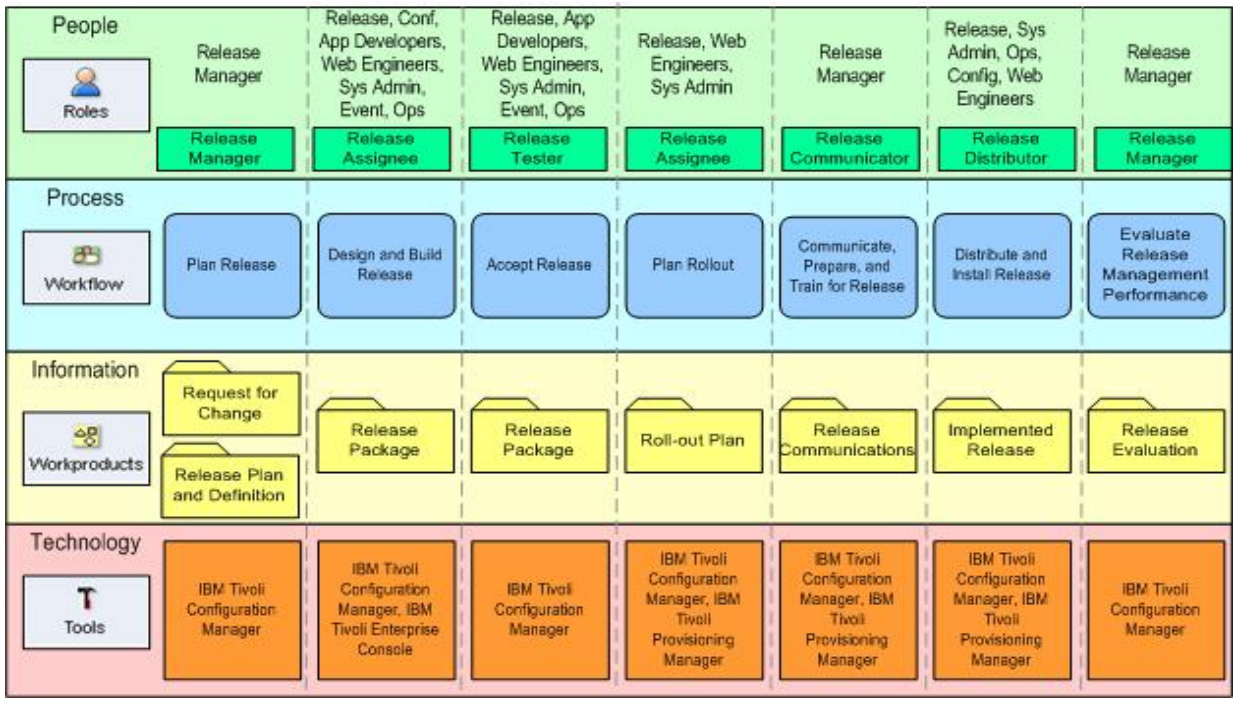
Service Management Process Automation – ITUP

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



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

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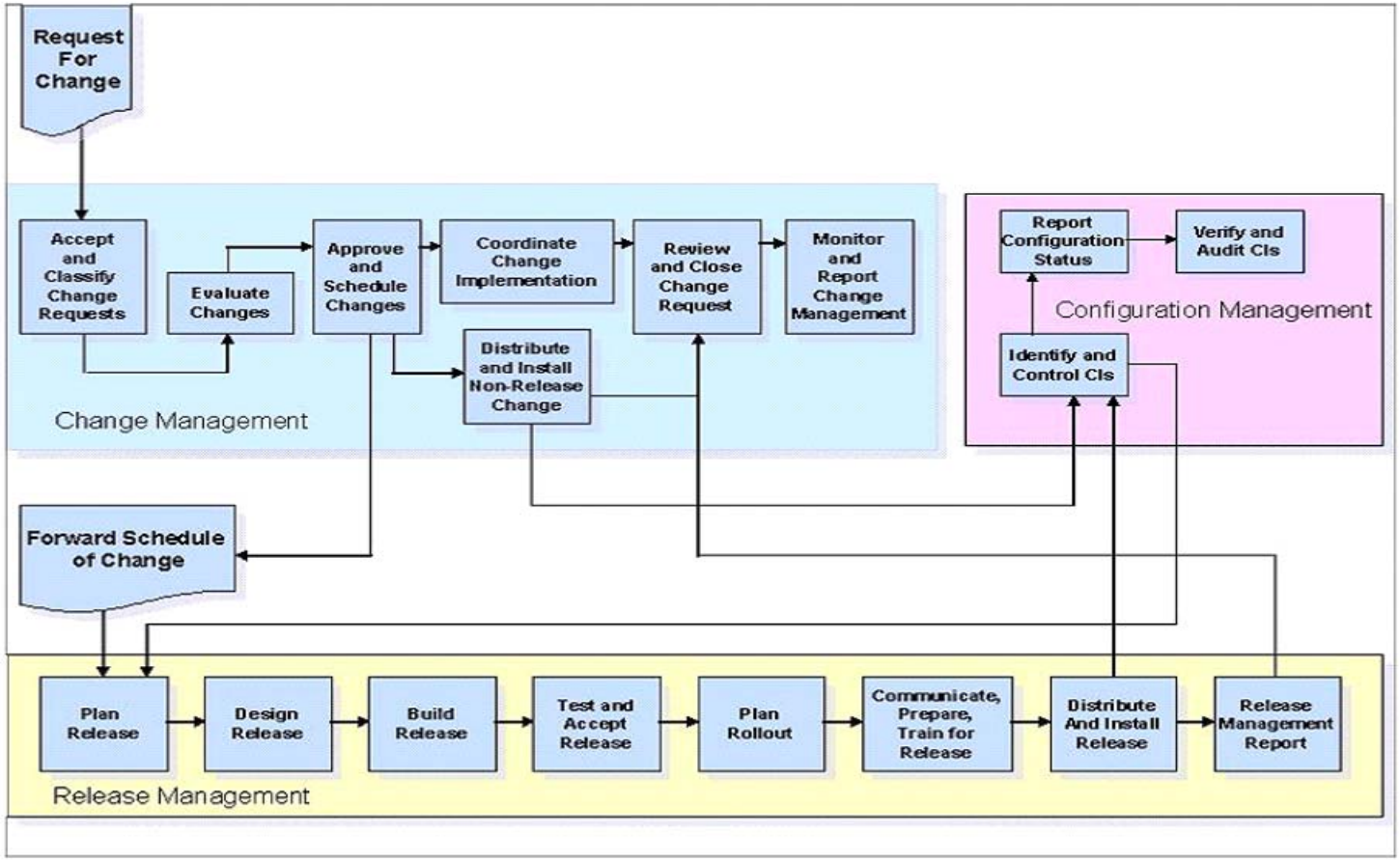
Phase 3: Service Management Process Automation



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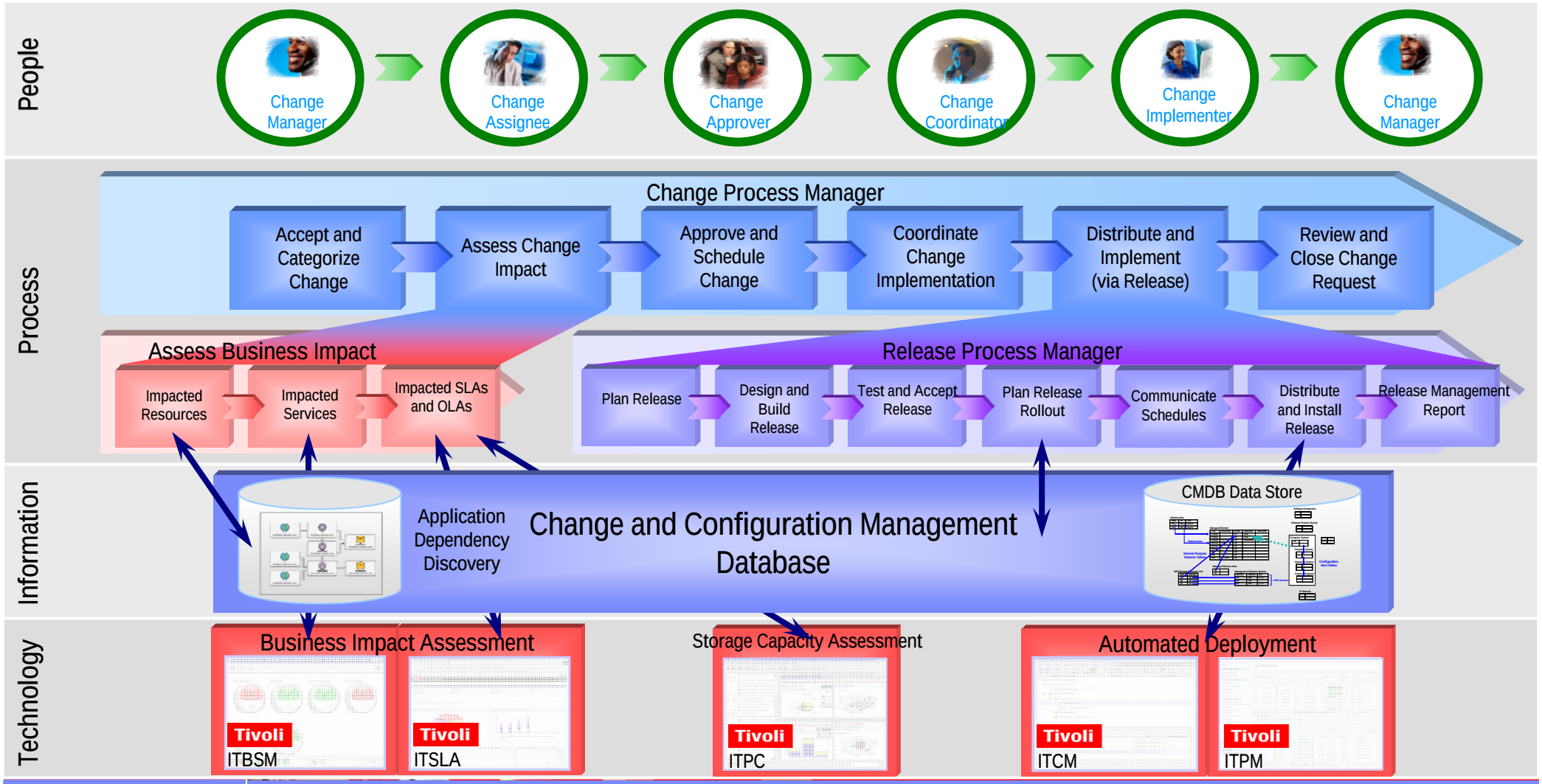
Phase 3: Service Management Process Automation



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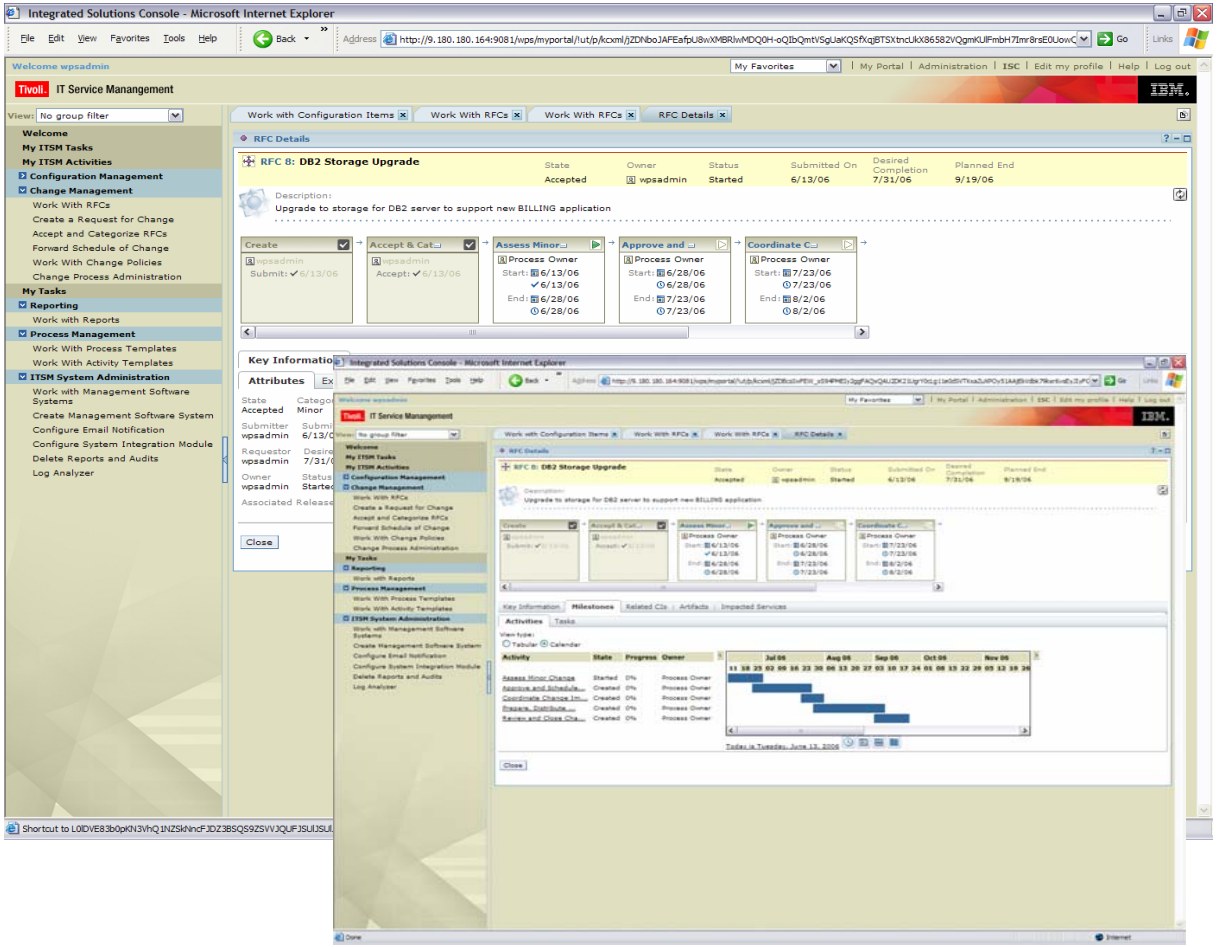
Phase 3: Service Management Process Automation

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



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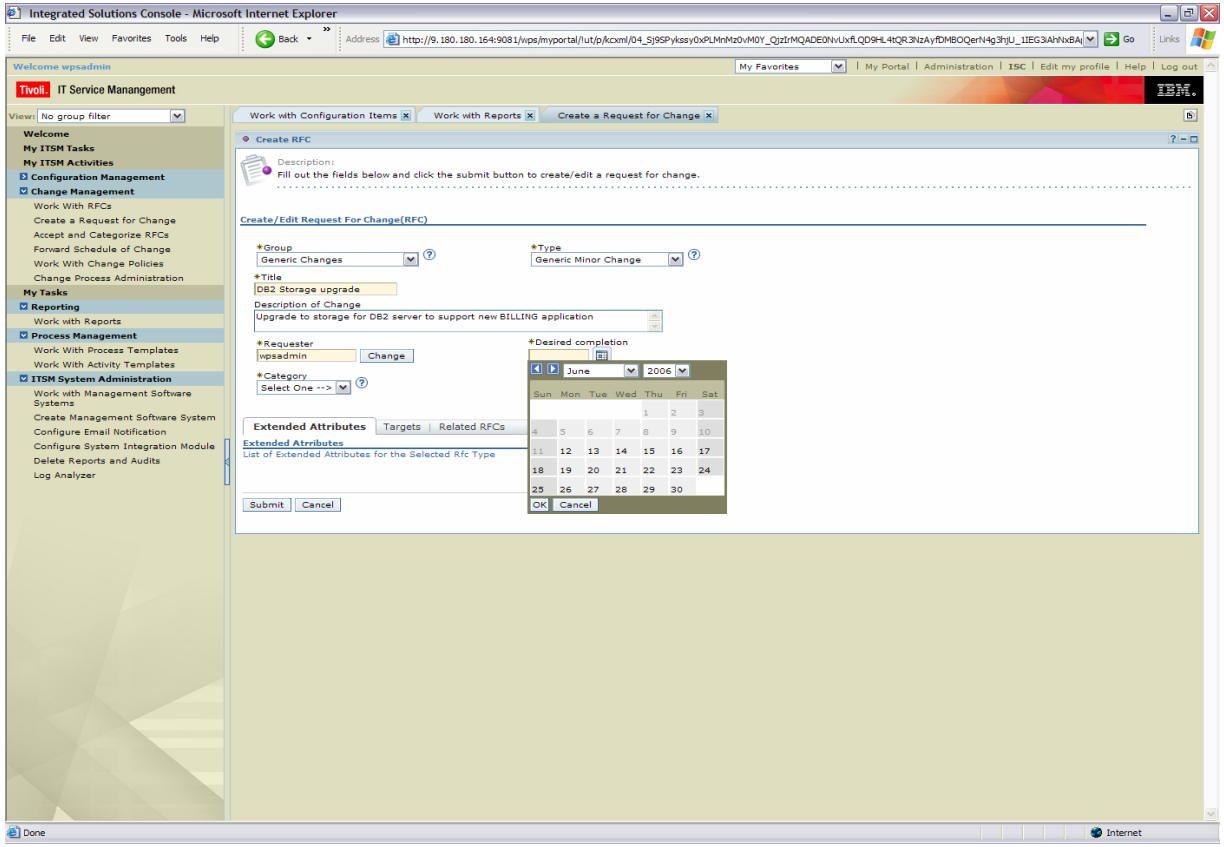
ISM Process Managers Build Business Value of IT

- 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



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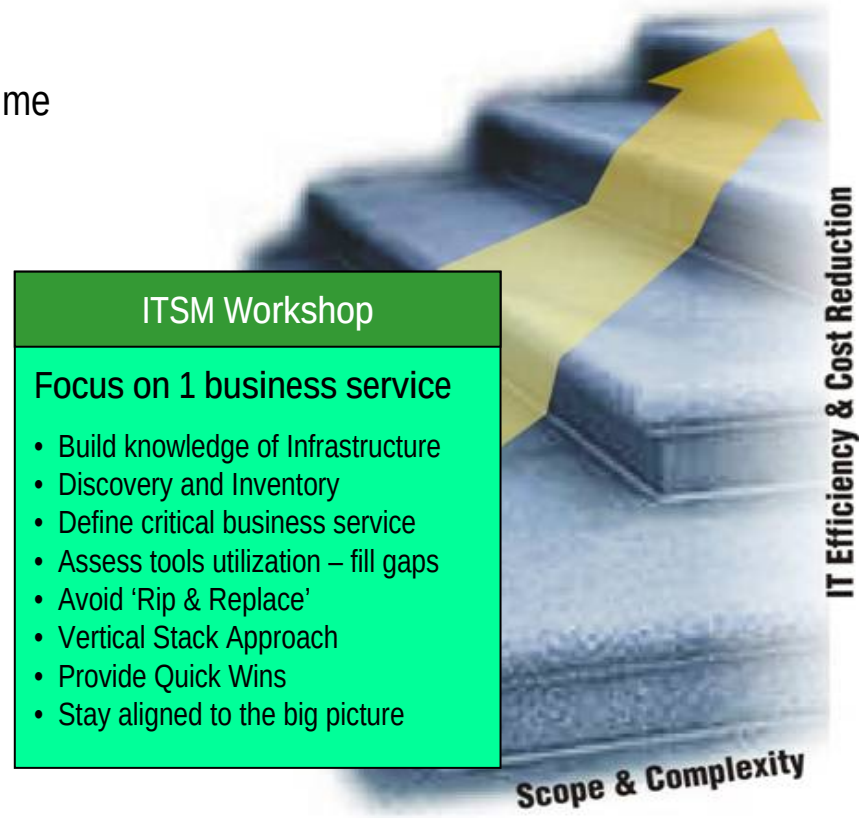
Focus on initiatives that deliver value *today* and contribute to the 'Big Picture'

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



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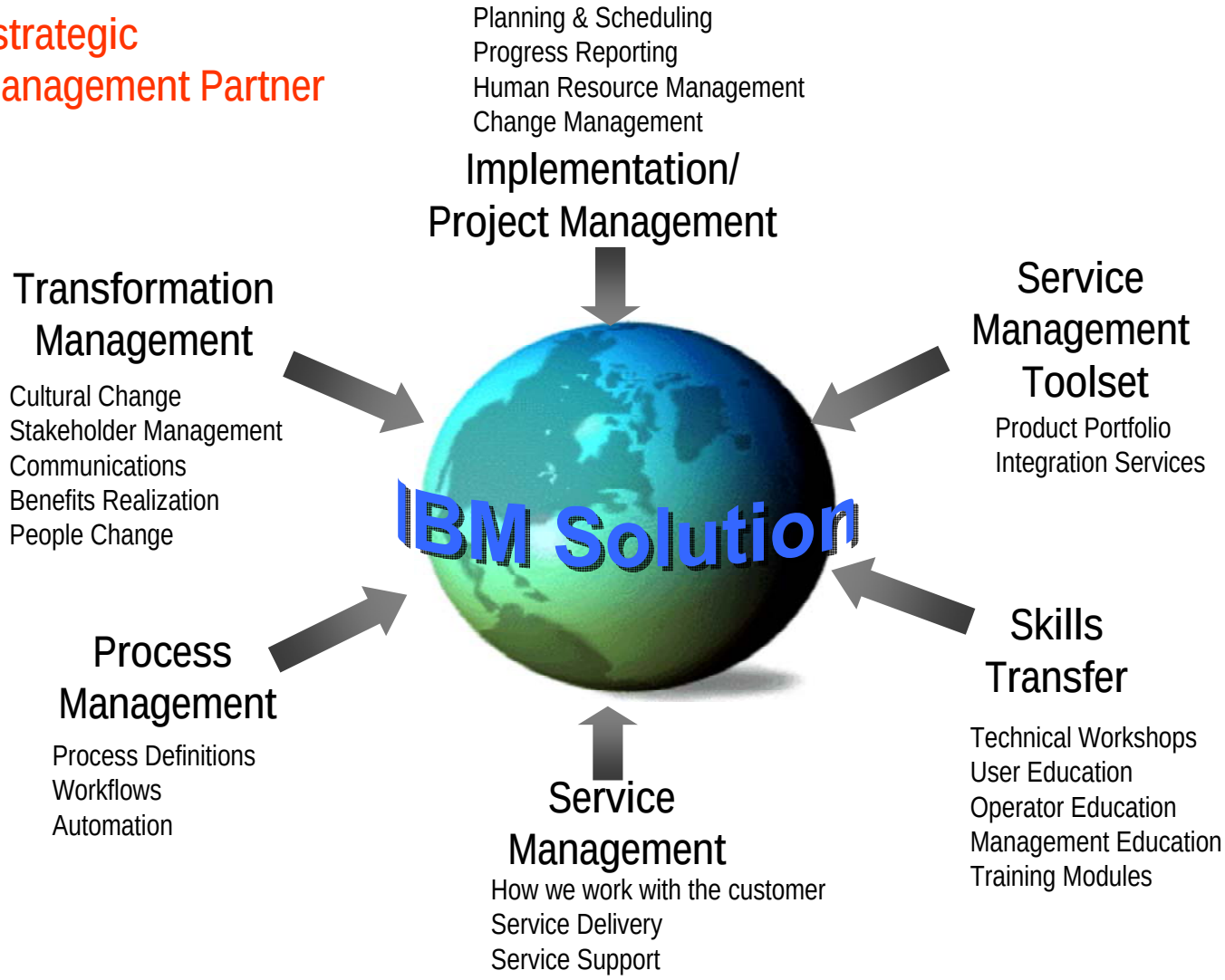
IBM as a strategic Service Management Partner



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“Take Back Control”

IBM Service Management

A better way to manage the business of IT

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