



# Velkommen til IBM IT Service Management seminar 2006



# Agenda

- 9:00-9:15 Velkomst v/Mads Bjørklund, Senior sales Specialist
- 9:15-10:00 Introduktion til IBM's IT Service Management strategi v/Jørgen Krog, NE IOT Manager
- 10:00-10:30 Konkrete eksempler på problemstillinger og udfordringer i forbindelse med indførelse af Change & Configuration Management v/Michael Imhoff Nielsen, Service Management Pricipal
- Pause
- 10:45-11:45 Hvordan kommer man igang og optimerer Change- og Configuration Management processen ved hjælp af Application Dependency Discovery Demo v/Mogens Theill
- 11:45-12:00 Afrunding
- 12:00 Frokost



IBM Software Group

# IT Service Management

## Efficiently and Effectively Aligning IT Performance to Business Goals



**Name:**

**Jørgen Krog**

**Title:**

Sales Manager – Business Automation

**Organization:**

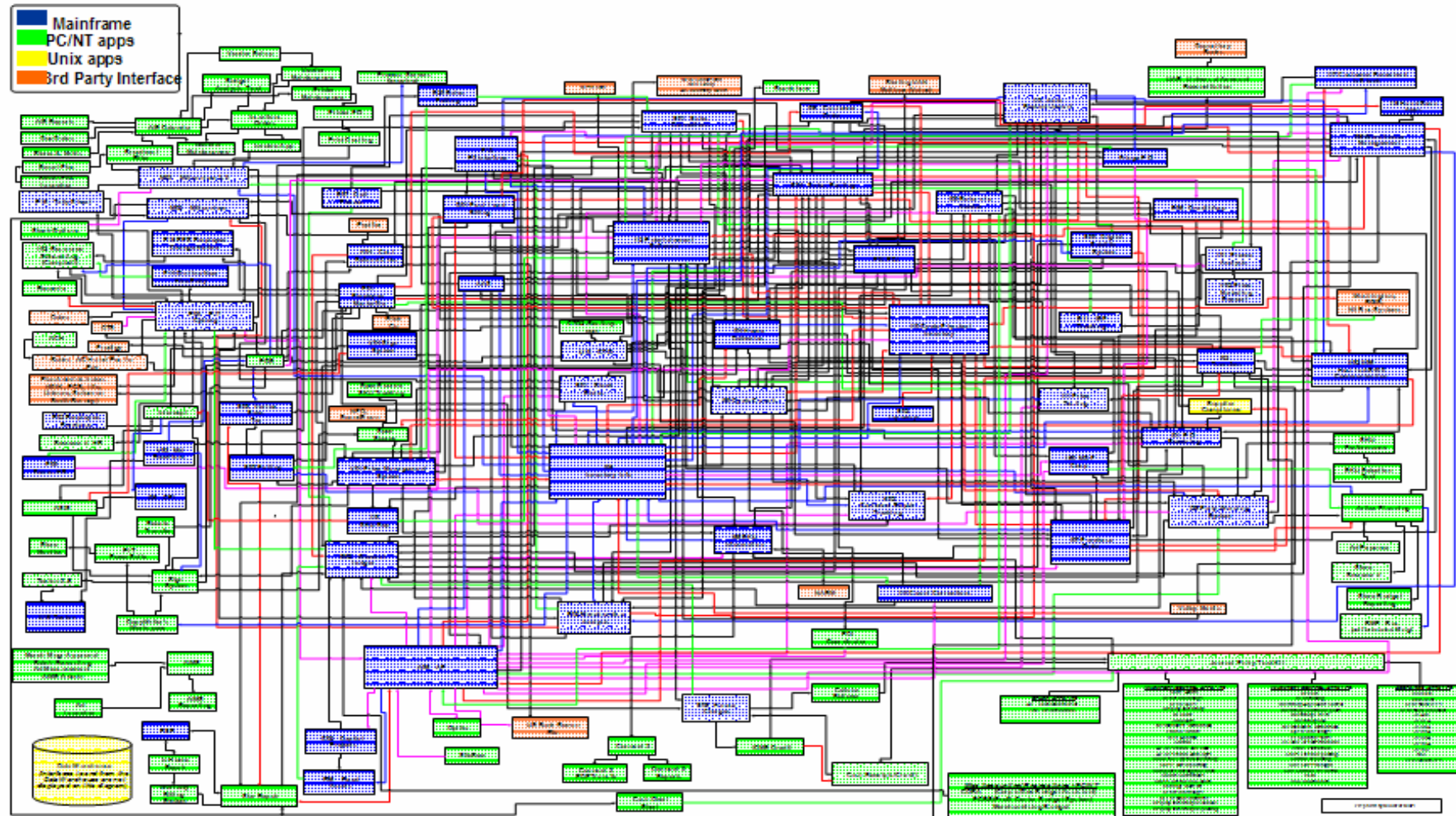
IBM Tivoli Europe

@business on demand software

## *Agenda*

- **Challenges – Value Proposition**
- **IBM IT Service Management Strategy**
- **Application Dependency Discovery**
- **Change Management Database**
- **Process Managers**
- **Where to start**

# Architectural Complexity Reduces IT Efficiency & Effectiveness

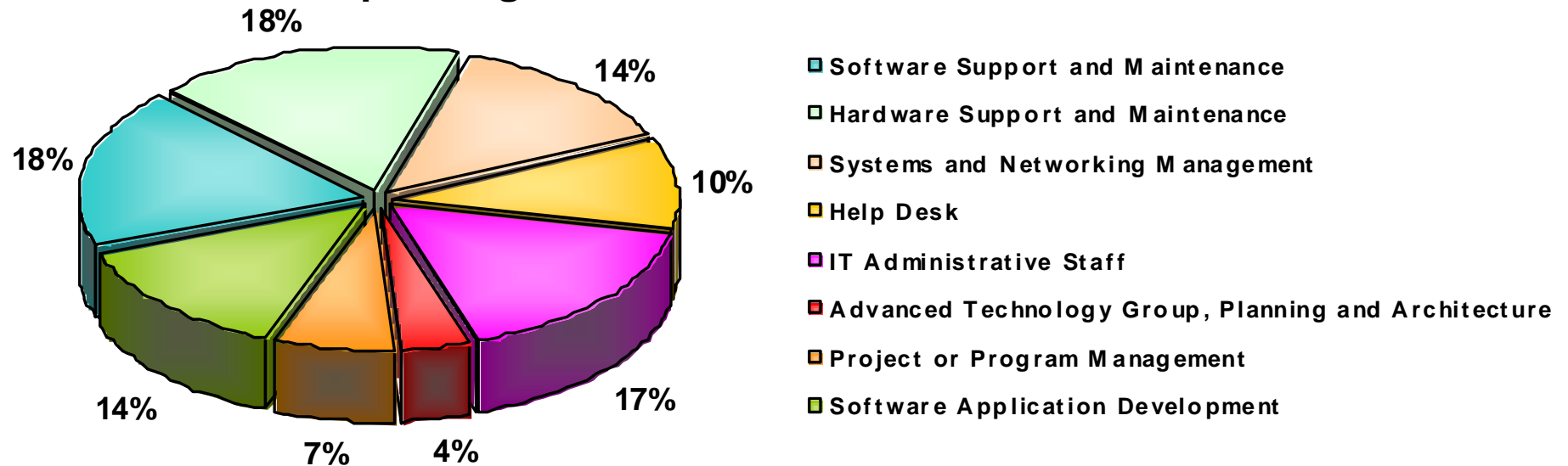


*Actual Application Architecture for Consumer Electronics Company*

# IBM IT Service Management – Challenges

Despite the focus on IT Operations’ “Effectiveness and Efficiency”, only little change in IT spending percentages can be seen over the past 5 years.

2005 Total IT Spending on IT Internal Staff<sup>1</sup>



77% of firms rated improving IT efficiency as the most important operational priority in 2006<sup>2</sup>

<sup>1</sup> Source: Gartner Research “U.S. IT Spending and Staffing Survey, 2005, Table 5” dated 2 November 2005

<sup>2</sup> Source: Forrester Research “North America’s 2006 Enterprise IT Spending Outlook” 3 February 2006

# IBM IT Service Management – Value Proposition



By shifting focus from IT systems or infrastructure management towards IT service management, customers can:

- Reduce costs
- Manage complexity
- Ensure compliance
- Respond to change

*“We’re trying to resolve a huge morass of IT complexity, while demand for our services keeps going up. We’re getting hit from both sides. So what are we doing about it? We’re delivering an adaptive IT organization that provides services on demand to support the needs of the business.”*

– George Surdu, Director, Global Information Technology Infrastructure, Ford Motor Company



# IBM IT Service Management – Value Proposition



Leading CIOs have a goal of driving down the ratio of IT spending for on-going IT operations and maintenance to accomplish four goals:

- **Demonstrate that they are effective managers of the IT function**
- **Make room for new IT initiatives that back business strategies and goals**
- **Fund technology R&D without seeking extra funds**
- **Cut overall IT costs, if required**

*“A company that spends less of its overall IT budget on ongoing IT operations and maintenance than the peer group average will have better business results.”*

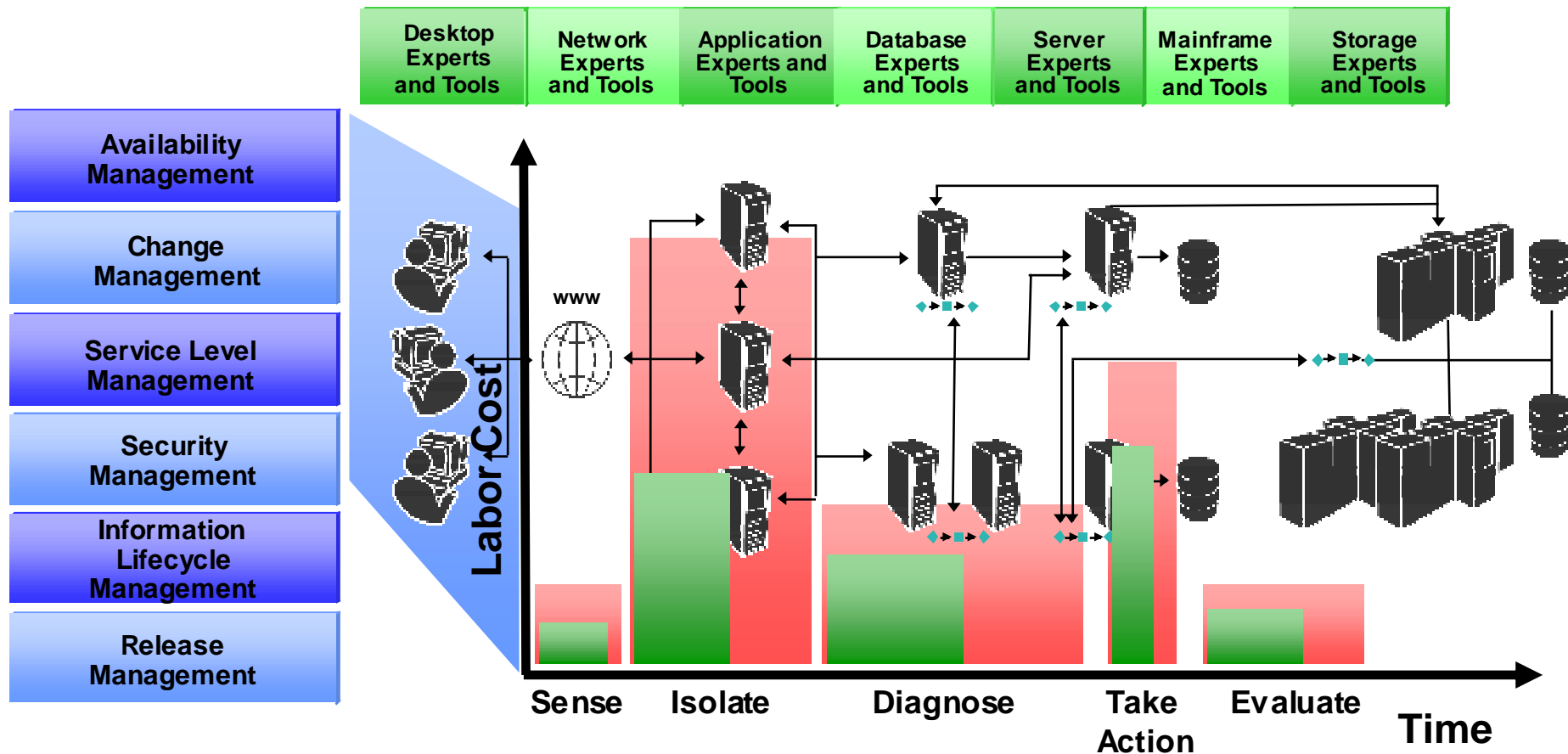
*– Forrester Research “US IT Spending Benchmarks For 2005” 24 May 2005*





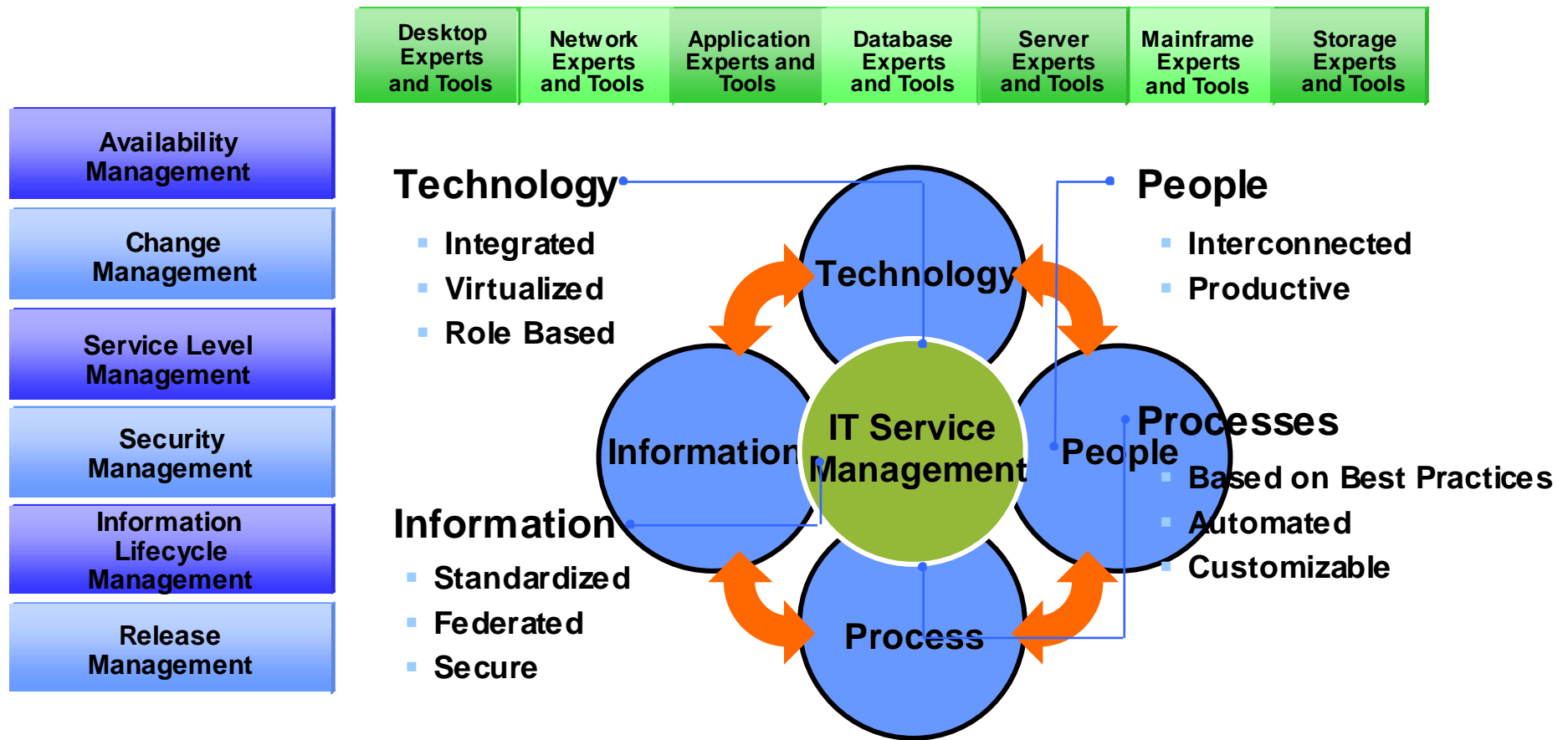
# IT Dilemma: Managing Cost and Responsiveness Across IT Silos

Many businesses struggle to manage composite applications.



# IT Service Management is the Optimal Intersection of People, Process, Information and Technology

Effective and efficient delivery of IT services in support of business goals.

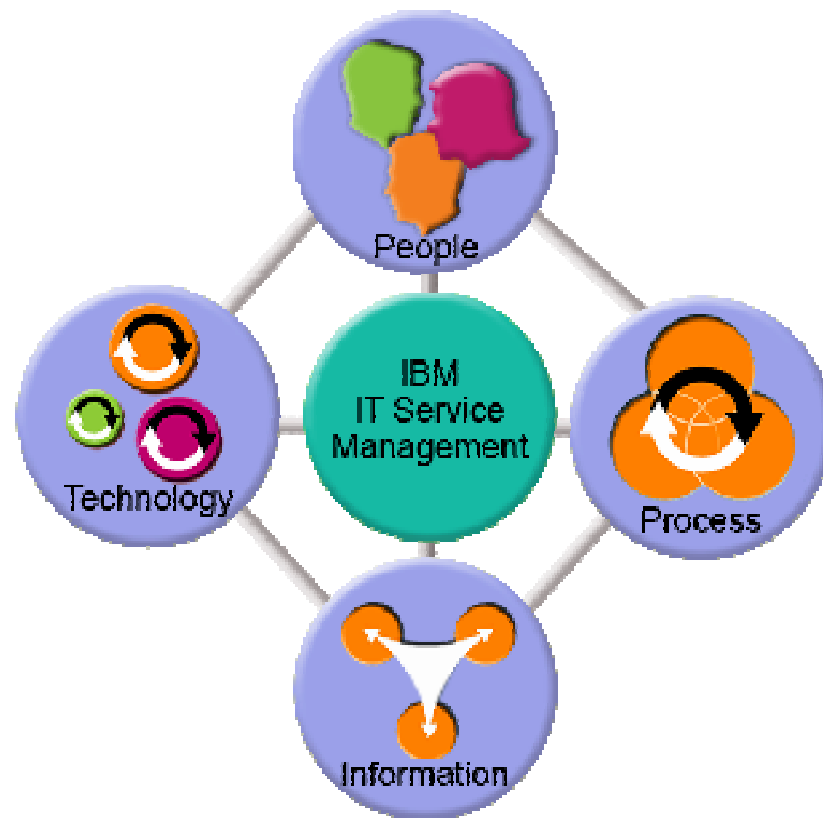


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- Where to start

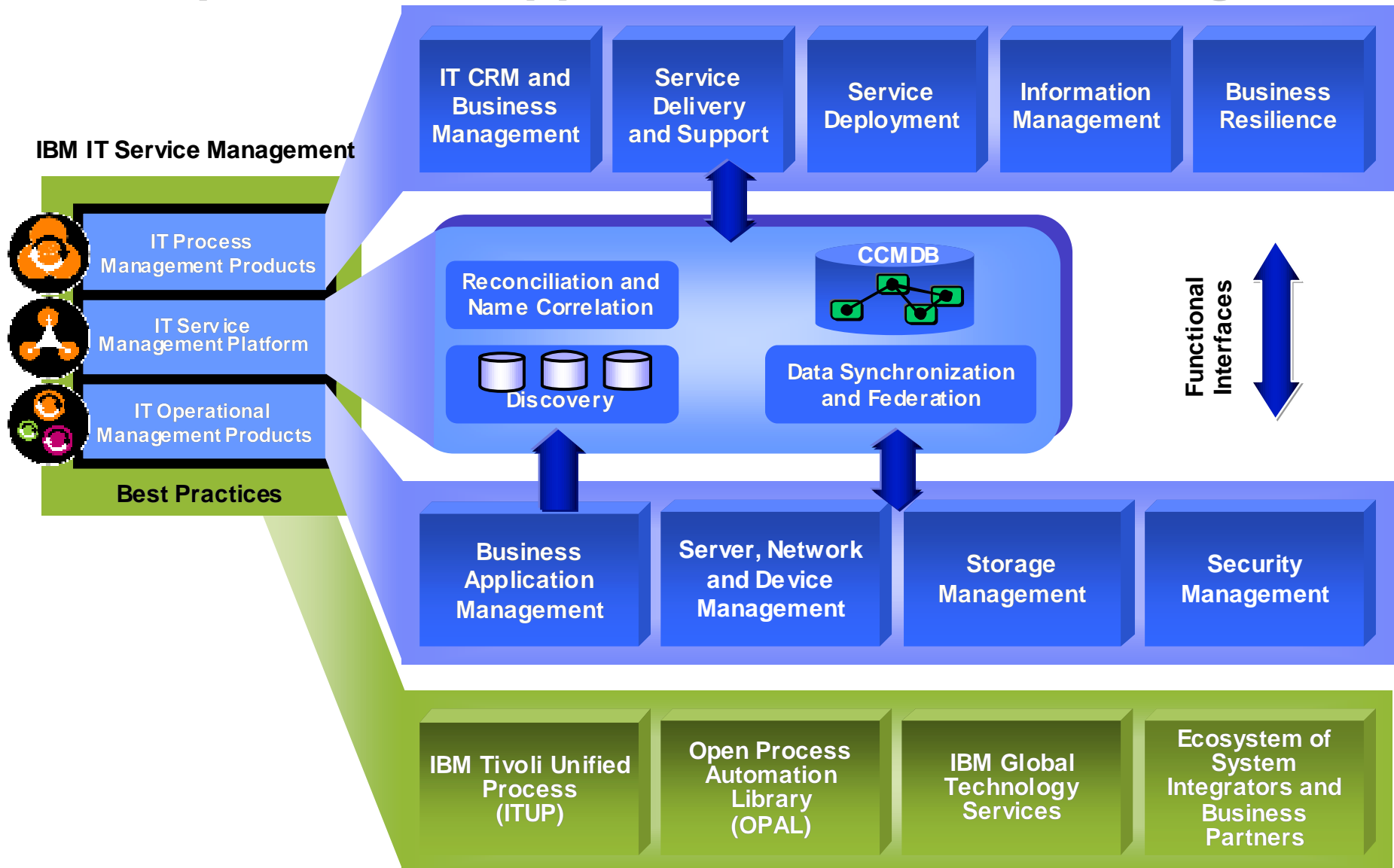
## *Innovation that Matters – IBM IT Service Management*

An innovative vision for the optimal intersection of people, process, information and technology.

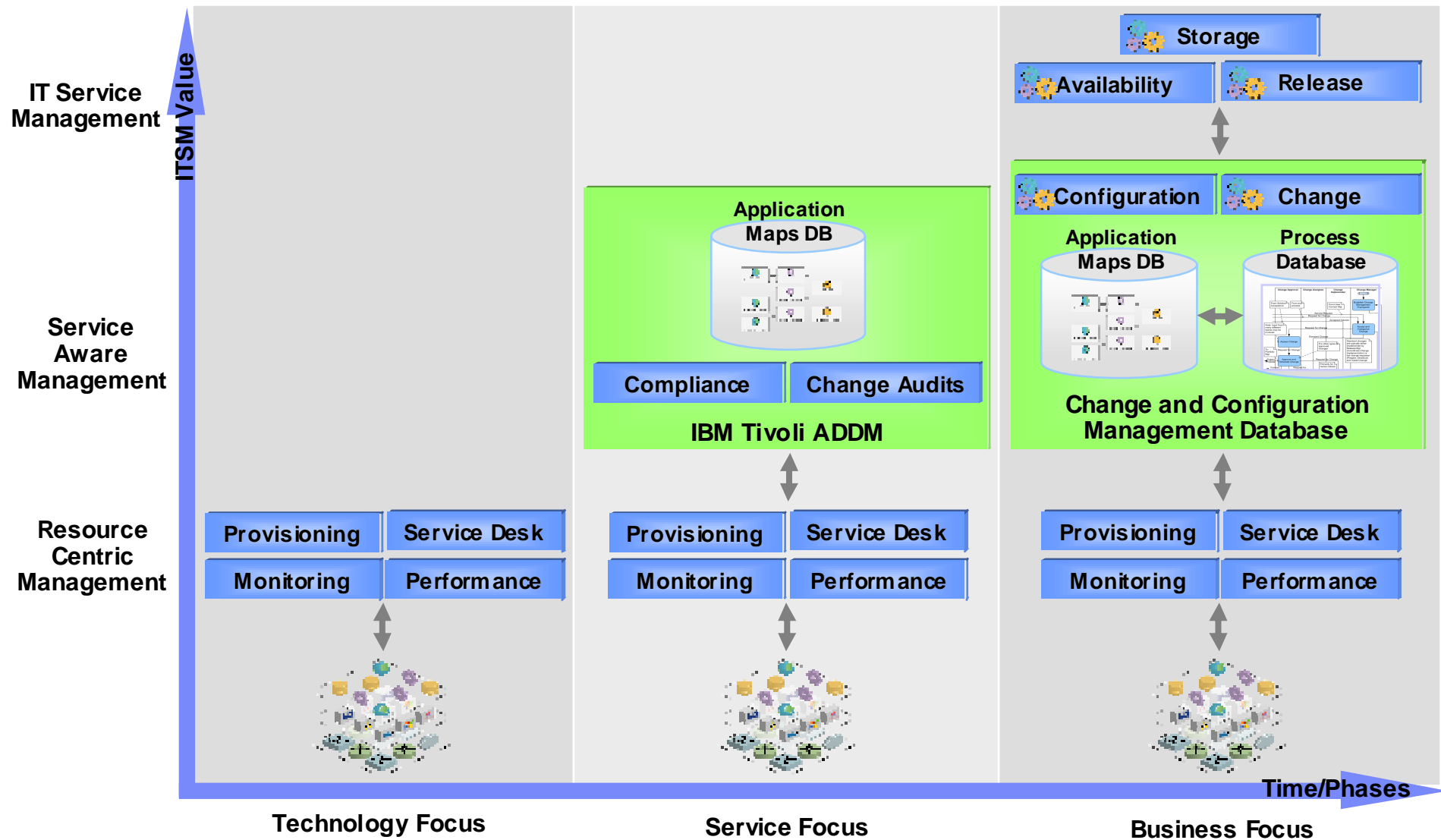


- Optimize the sharing of information across people, processes and technology
- Establish decision-making policies to collaborate across organizations
- Automate and integrate IT processes aligned to business
- Leverage IBM's modular approach to achieve objectives and business goals

# A Comprehensive Approach to IT Service Management



# Taking a Modular Approach to IT Service Management



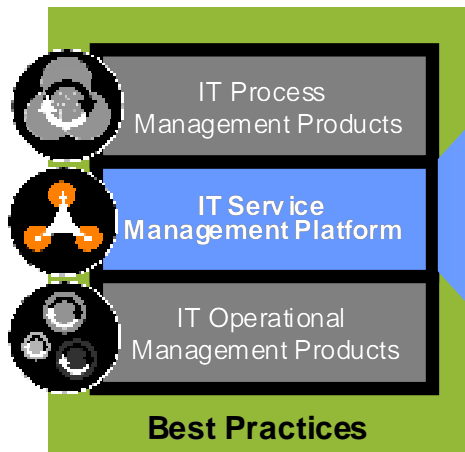
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## IBM Tivoli Application Dependency Discovery Manager

- 80% of business service related failures are due to IT *changes* that had unpredicted impacts.
- IT must manually identify *relationships and dependencies* between applications and the supporting infrastructure, which is typically undergoing numerous changes every day.

### IBM IT Service Management

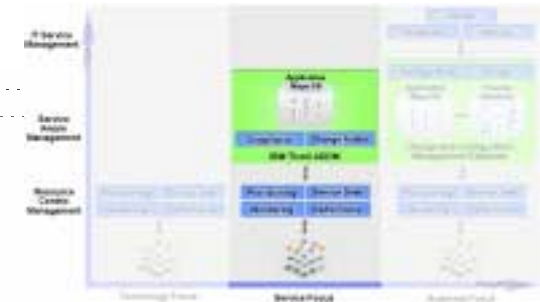


- **Automated Discovery** – Fully automated application mapping and device discovery for unified view of configuration items in a CMDB
- **Audit and Control** – Manage the change process and provide record of change as a checkpoint for compliance and audit requirements
- **Integration** – Provides an integration point for other IT Service Management processes and management data



# Today's Service Visibility Challenges

- **Exploding complexity**
- **Silo-based management**
- **Accelerated change**
- **Increasing service level demands**



**Critical relationships and change information are missing or hidden.**

**Visibility is the key success factor to:**

- **Know and control what you have**
- **Change it effectively**



# TADDM Application Mapping

## See the Big Picture

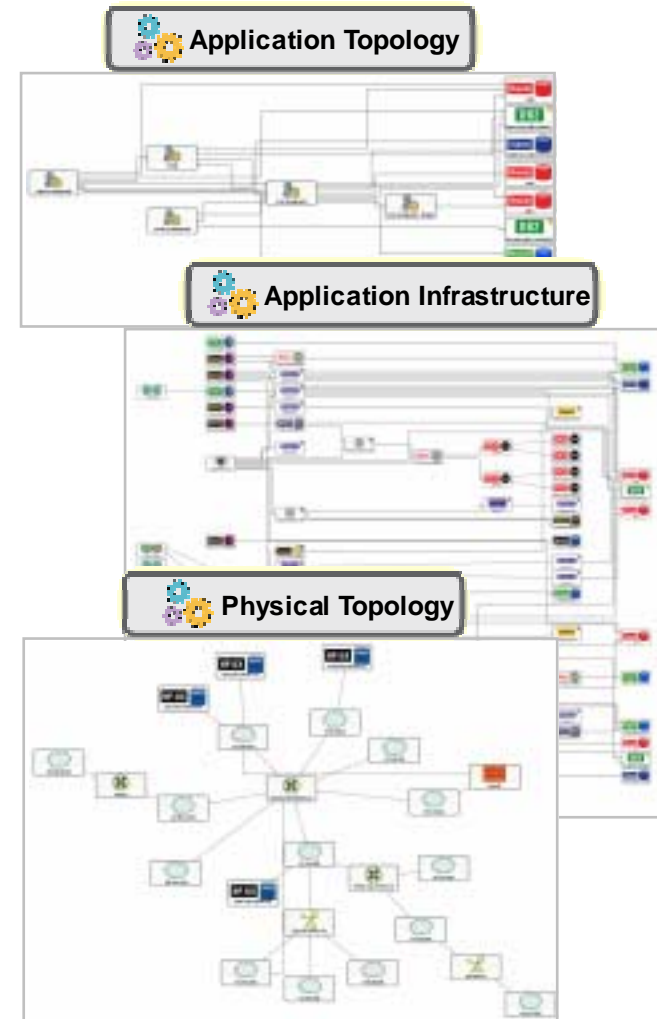
- Broadest and most extensible coverage
- Deepest cross-tier, run-time detail
- Only fully automated application discovery

## Leverage your investment

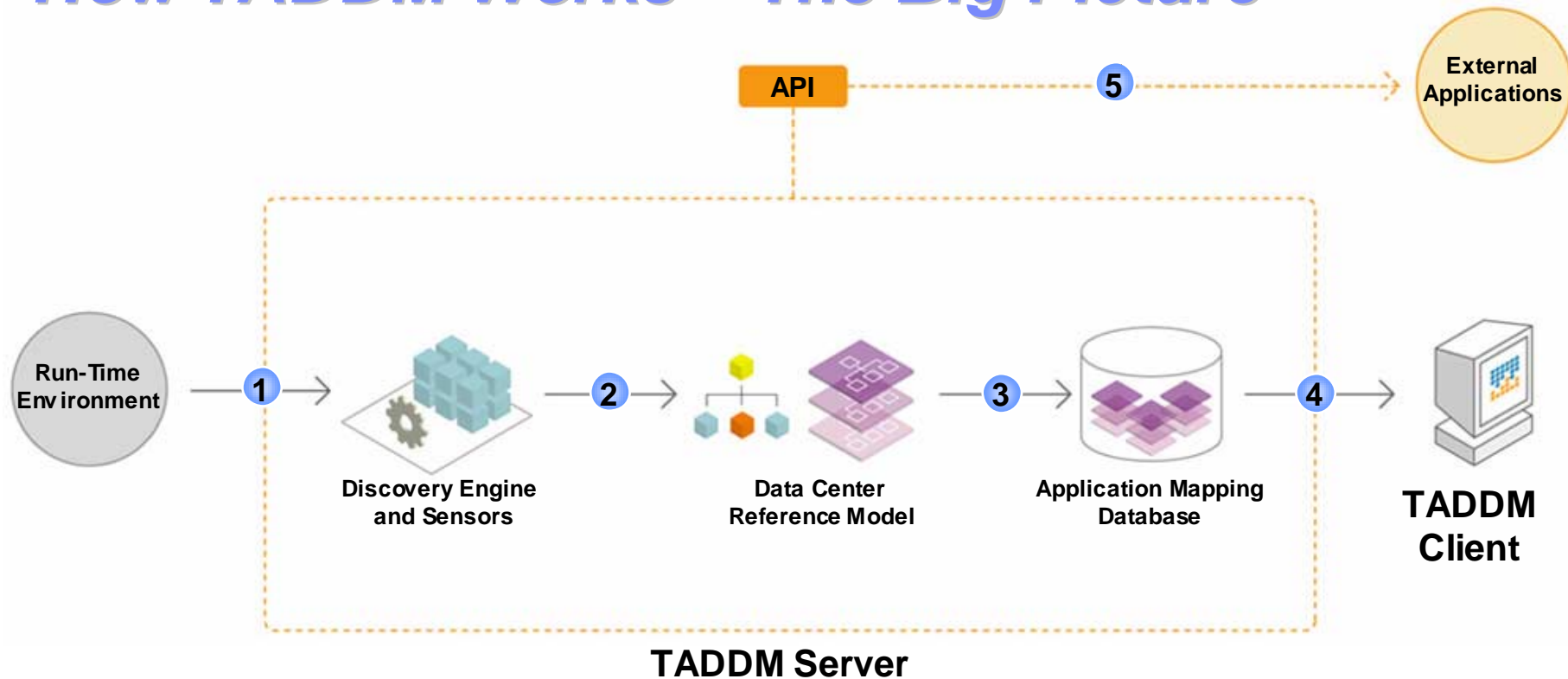
- Open and published Schema, API and SDK
- Field integrations completed in days
- Scales to global enterprise needs

## Rapid time to value

- Fast, low cost implementation
- Agent-free auto-discovery
- Pre-packaged analytics



# How TADDM Works – The Big Picture



- 1 The agent-free discovery engine coordinates the discovery sensors to collect the identity, attributes and configuration
- 2 The data is fed to the data center reference model creating the run-time cross-tier application topologies
- 3 The topologies, along with their configuration data, inter-dependencies and change histories are stored in the database
- 4 The TADDM client provides rich analytics and topological views of the discovered enterprise
- 5 Third-party applications (like service desks) integrate and access the TADDM server via APIs



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# A CMDB is More Than a Data Store

## Data integration

- Integrates and shares data across complex organizational silos
- Proactively manages data currency and accuracy
- Is the true, authoritative source of record

## Workflow integration

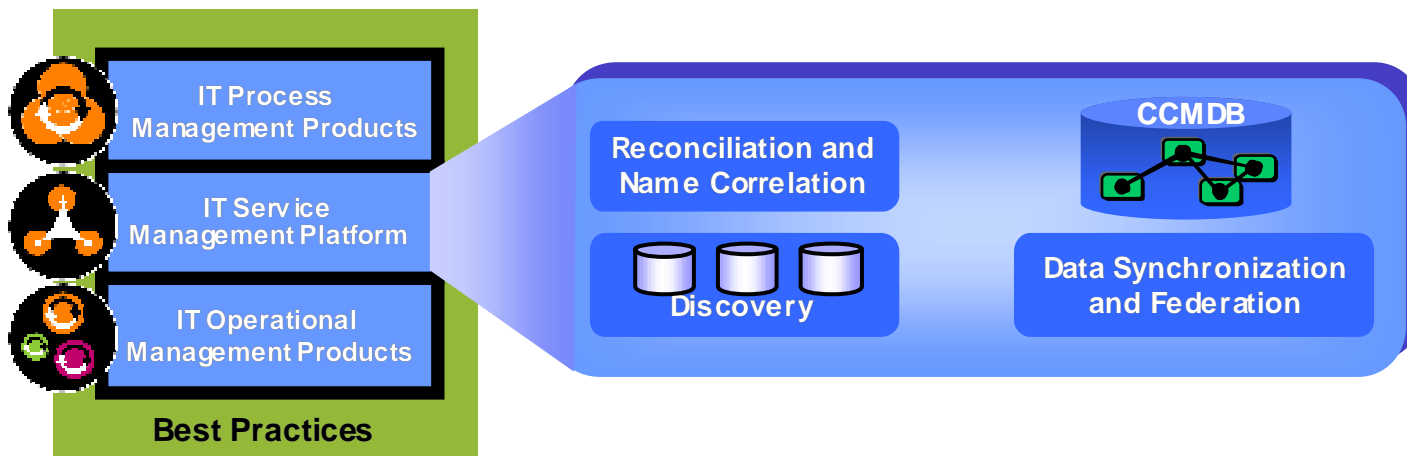
- Is coupled with an automated change management process to ensure integrity and consistency of configuration items
- Increases coordination and data sharing

## Policy integration

- Enforces policies to ensure compliance with internal and regulatory requirements

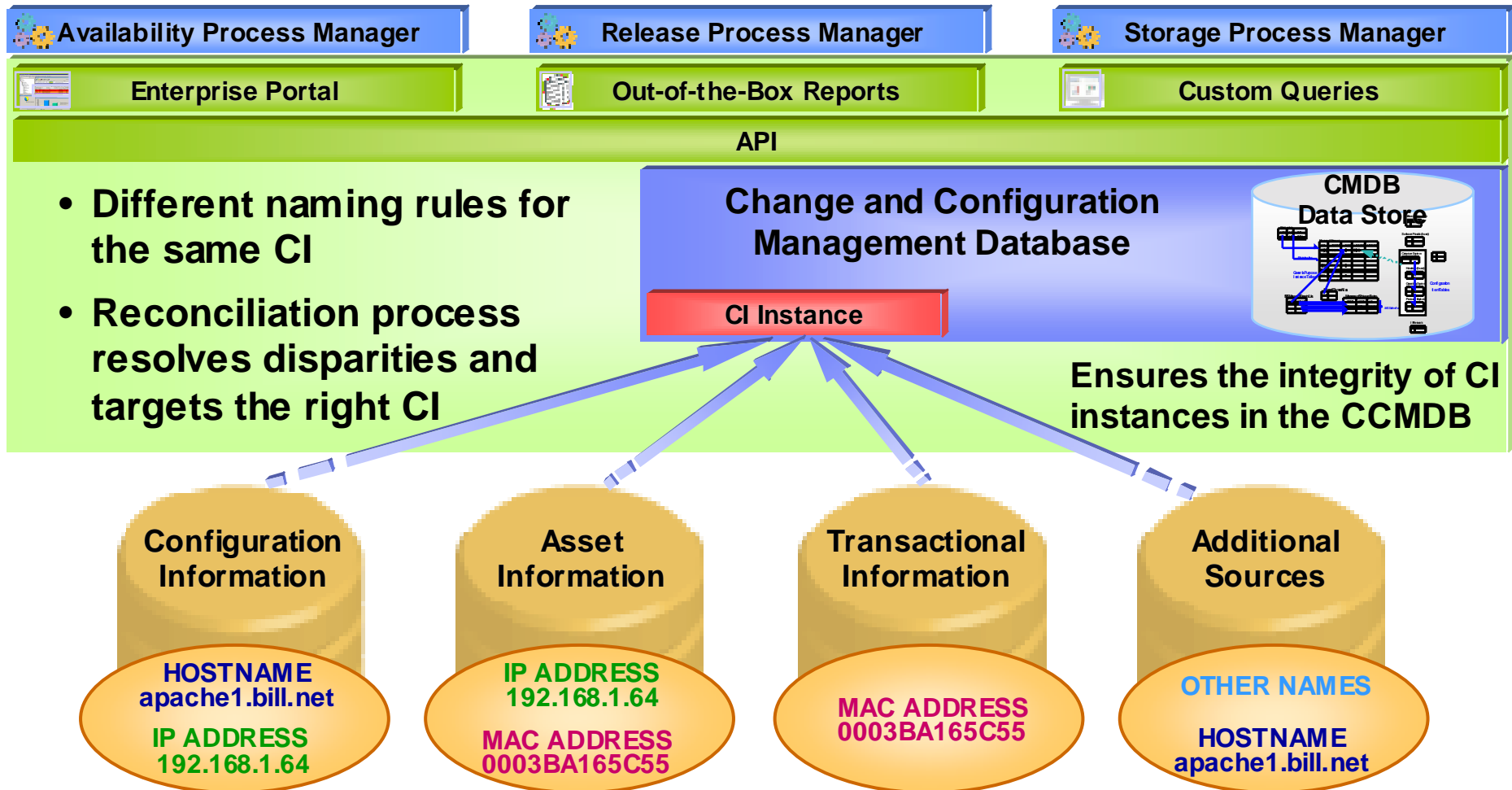


### IBM IT Service Management



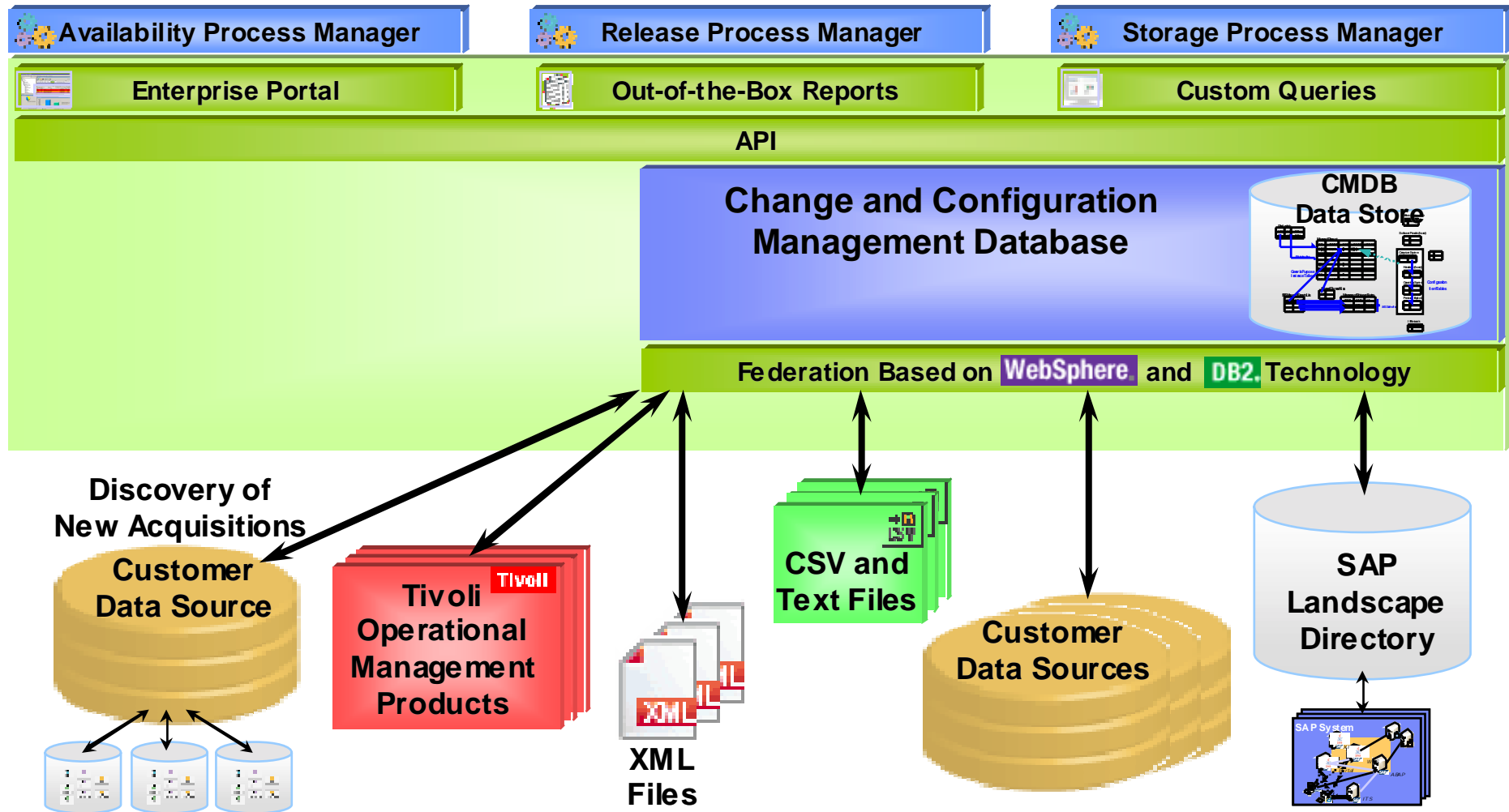
# Reconciliation

Reconciliation will ensure the data is coalesced – avoiding duplicates and enabling matching of configuration items from different sources



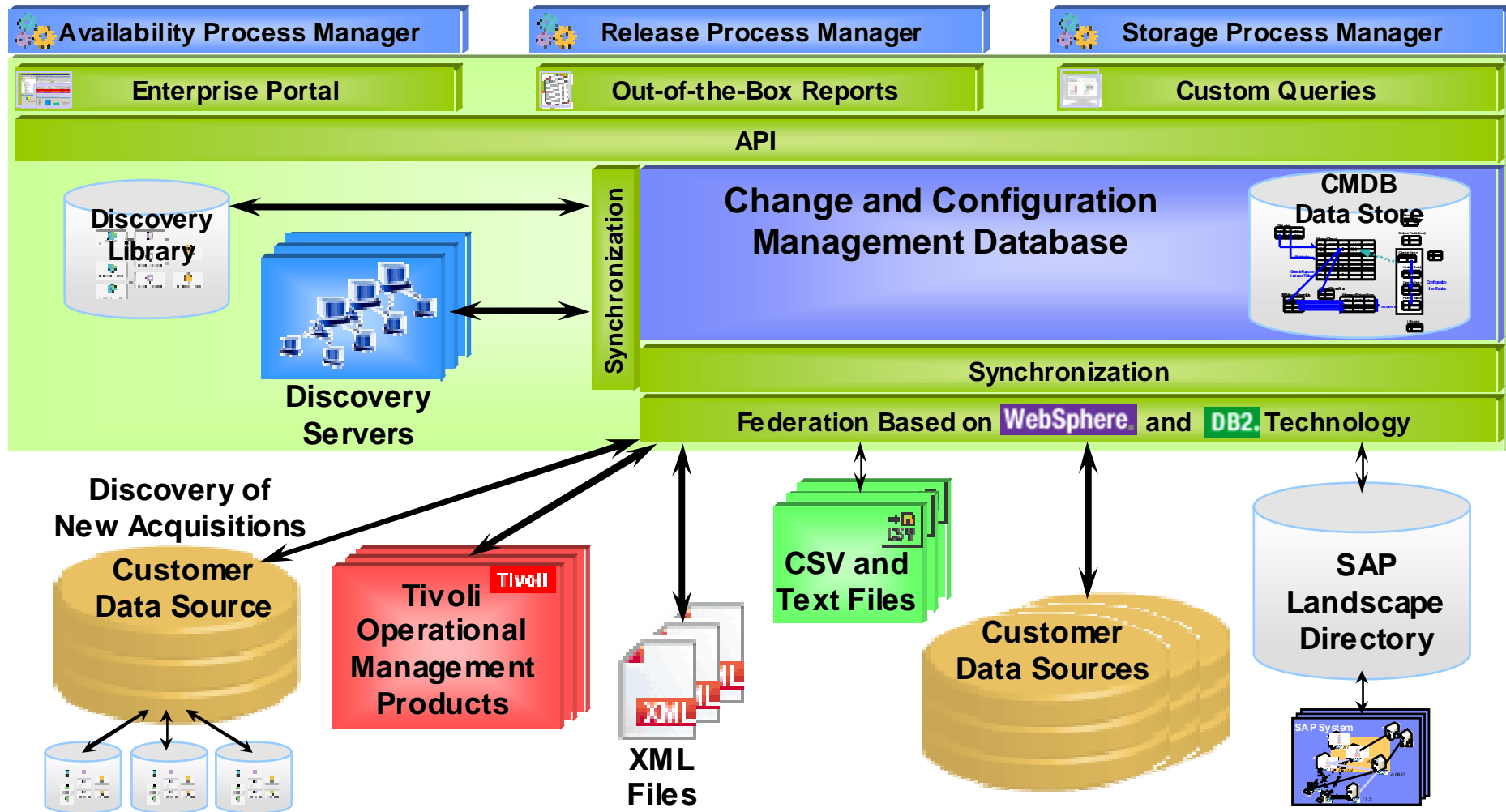
# Federation

Federation will bring in multiple data sources directly and by linking to sources



# Synchronization

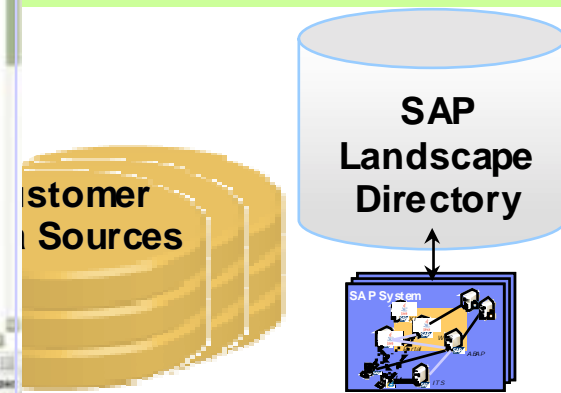
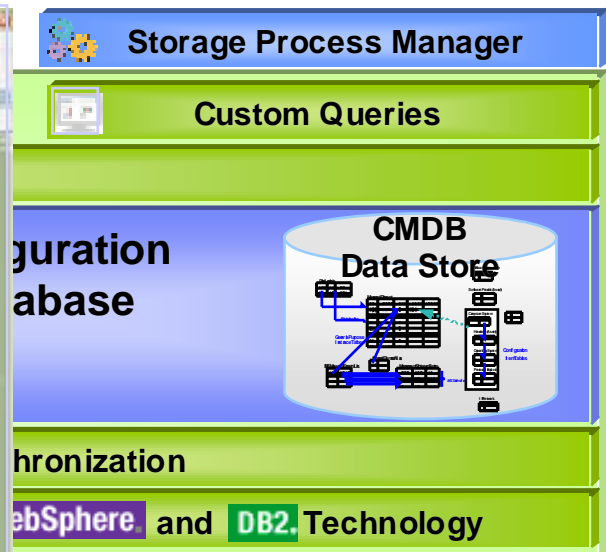
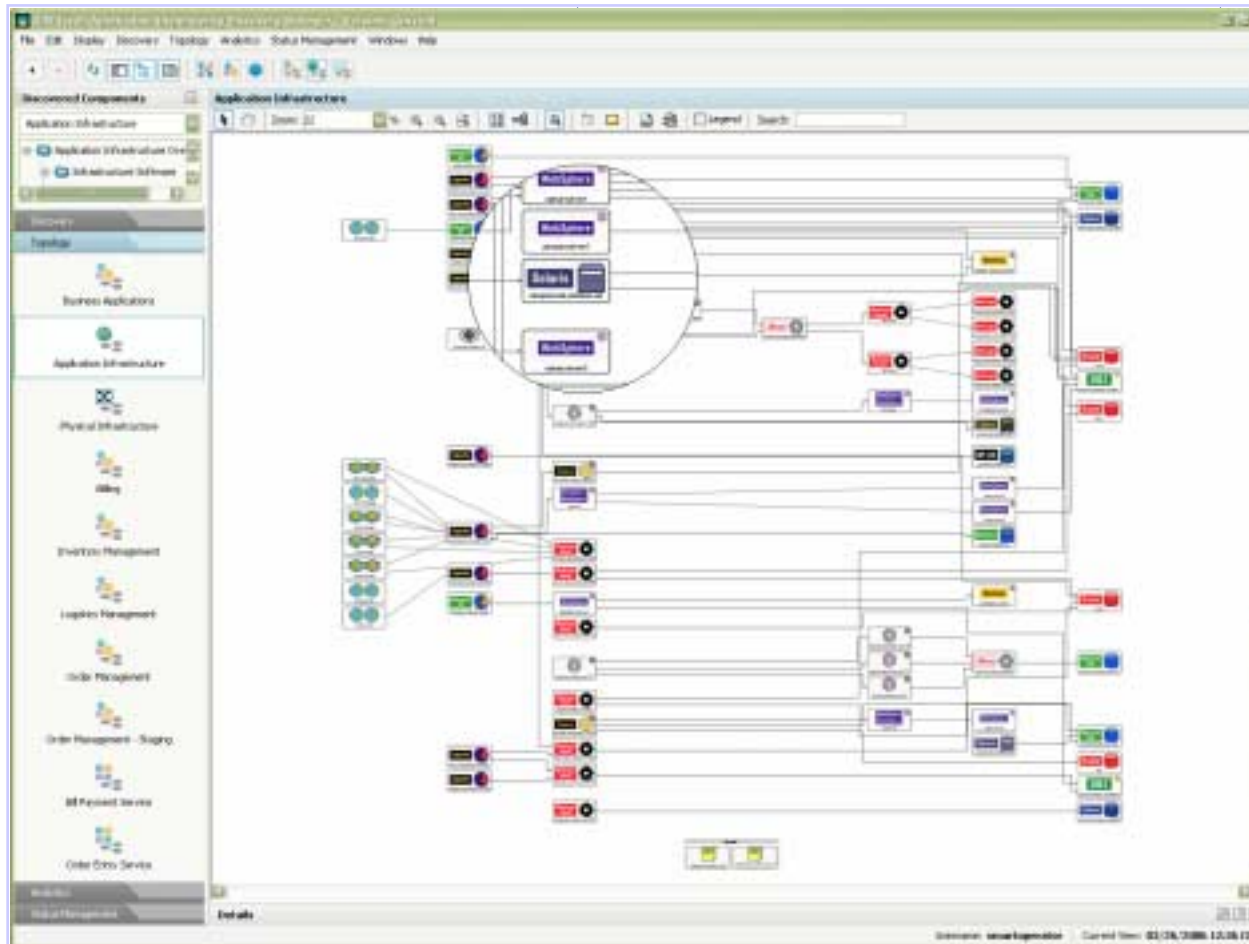
Synchronization will ensure the same version of the truth across integrated systems





# Mapping and Visualization

Mapping and visualization will enable a peer-to-peer and hierarchical view of the CIs



IT Infrastructure – Servers, Networks, Mainframes, Middleware, Applications, Business Services

# Comparing Capabilities – Service Desk vs. CMDB

Capability	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			✓

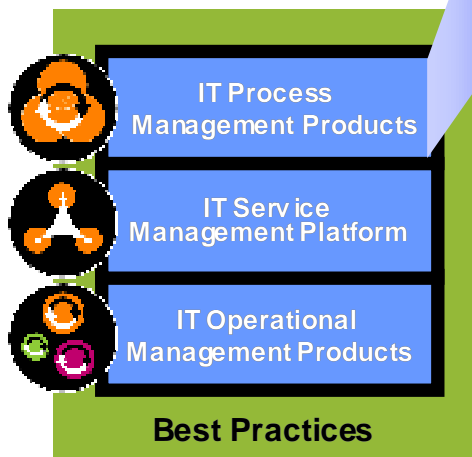


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# What are Process Managers?

## IBM IT Service Management



- Products that automate IT management processes for rapid responsiveness and greater flexibility
- Based on experience applying ITIL®, eTOM, CoBIT and CMMI in customer environments
- Integrate with Tivoli and non-Tivoli management products
- Customization tools allow customers to:
  - Customize the processes
  - Integrate additional products into the processes including in-house and third party applications



# Maintaining Application Service Levels

## Challenges

- When IT resources are unavailable or not performing as expected, a company's business is at risk
- Turning data into information and information into business value and higher quality of service
- The reality is<sup>1</sup>:
  - About 50% of outages are reported by customers via the help desk
  - IT operations uses help desk reporting to identify about 70% of the problems
  - IT change leads to more than 60% of availability and performance issues
  - When a problem occurs, 80% of IT operations time is spent isolating and diagnosing the problem

<sup>1</sup> Source: Based on IBM customer engagements

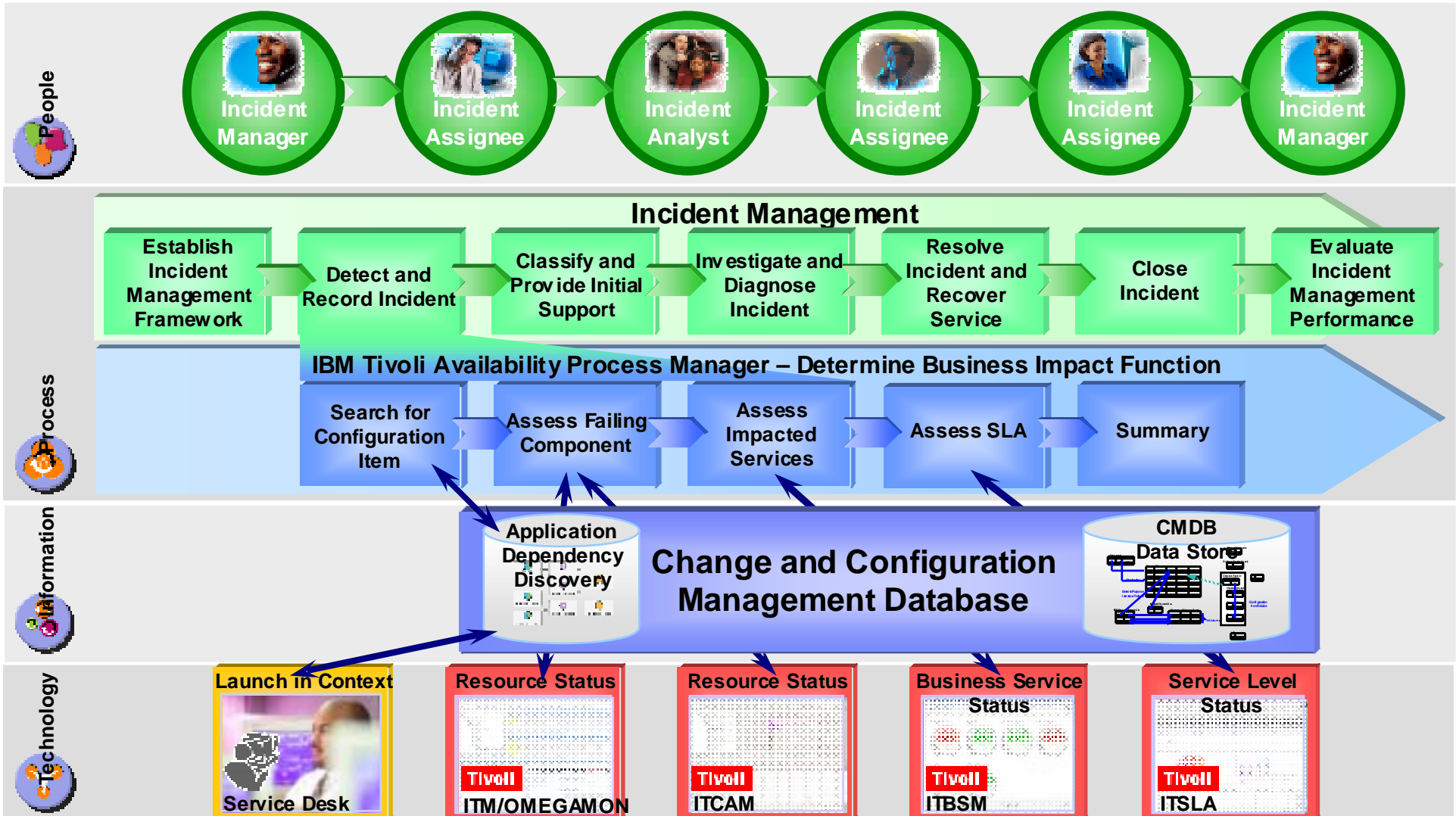
## Requirements

- Automatically sense poor performance in an application
- Identify what changes have been made
- Prioritize problems and incidents based on the impacted SLAs
- Determine resource relationships and identify failing components
- Dynamically launch needed diagnostic tools from a dashboard
- Base the corrective action on best practices and expert advice
- Verify that occurred problems have been resolved



# Maintaining Application Service Levels

IT Service Management in action – isolate, diagnose and resolve incidents



## *What's Unique in Availability Management*

- **Real-time application discovery and dependency mapping**
- **End-to-end application performance monitoring**
- **End-to-end transaction discovery and mapping**
- **Incident and problem classification and prioritization based on business service impact**
- **Holistic application management view – single portal view with integrated management information**



## Benefits of Maintaining Application Service Levels

- **Improved time to resolution**
  - Automates incident correlation for fast problem identification
  - Improve first call resolution rate
  - Controls problems proactively by analyzing historical management data and identifying trends
- **Improved performance against SLAs**
  - Reduced financial impacts
  - Higher business satisfaction with IT services
- **Increased availability of critical business services**
  - Accurate classification and prioritization of problems
  - Higher customer satisfaction
- **Improved IT cost efficiencies**
  - Improved staff productivity and efficiency
  - Reduced overall incident and problem volumes

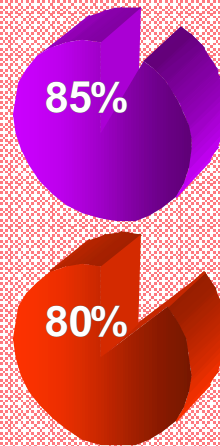




# Preventing Business Service Disruption

## Challenges

- 85% of problems are caused by IT changes<sup>1</sup>
- 80% of problems are reported by users or customers<sup>1</sup>
- 40% [of unplanned downtime] are caused by operations failures, typically people and process issues related to infrastructure changes, as well as configuration and problem management<sup>2</sup>



<sup>1</sup> Source: Tivoli Primary Research 2005

<sup>2</sup> Source: Gartner Report "Gartner Data Center Survey Shows Application Availability Levels Rising", 15 April 2005

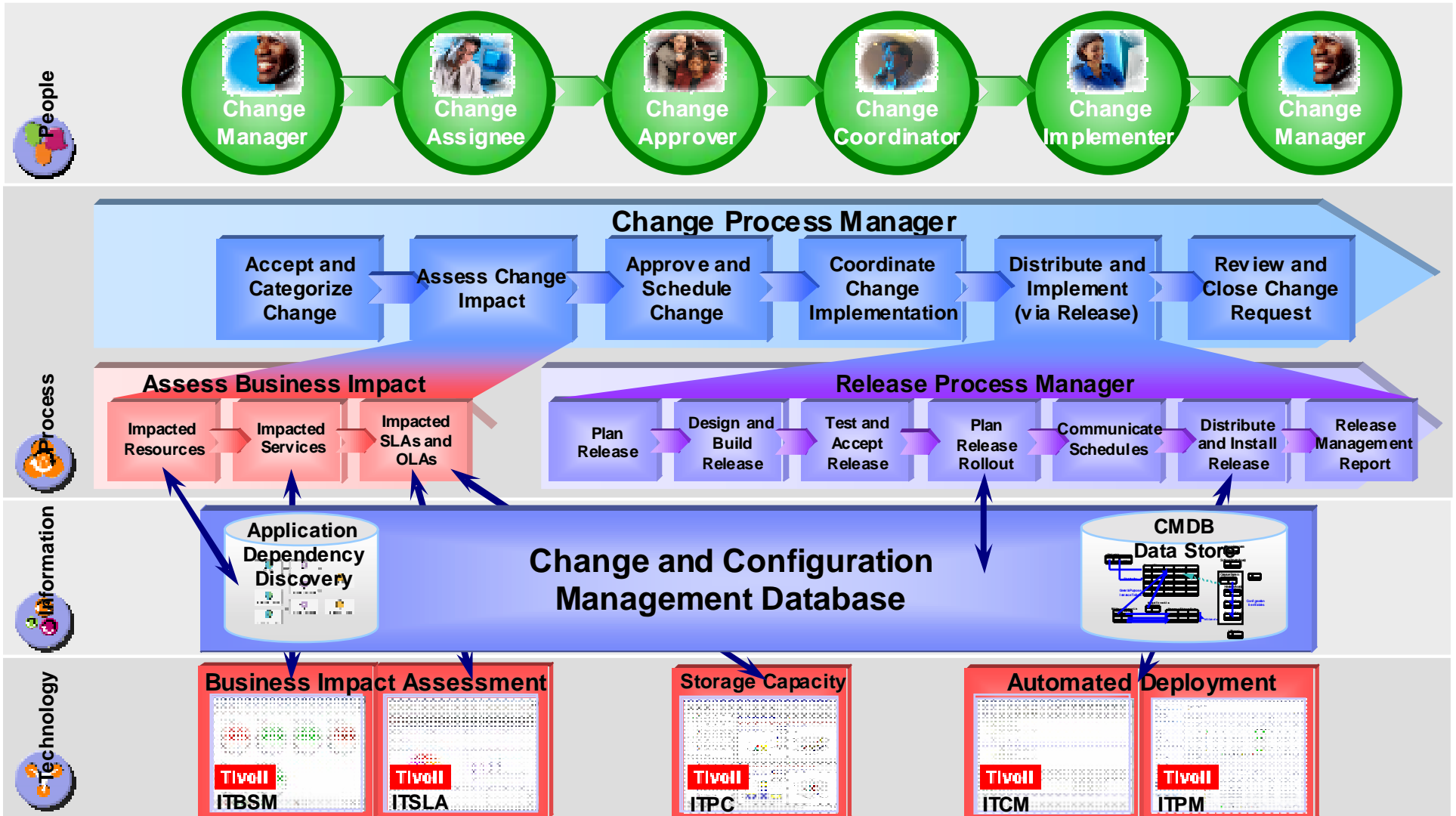
## Requirements

- Dynamically use the pre-defined, best practice workflow, based on the type of change
  - Urgent change
  - Major change
  - Minor change
- Fully understand the business impact prior to the implementation
- Automatically link the change management process with an automated release management process
- Assess the status of a change at any point in the process



# Preventing Business Service Disruption

IT Service Management in action – change management automation



## *What's Unique in Change Management*

- **Automated Change Management ensures consistency and accuracy in the execution of the process**
- **Integrating the Change Management process with the CMDB ensures the integrity and reliability of the configuration information in the CMDB**
- **Ability to automatically determine the appropriate Change Management process workflow based on the classification and prioritization of the request**



## Benefits of Dynamically Managing IT Change

- **Optimized process implementation based on type of RFC**
  - Automated, best-practice process to assess, implement and verify changes
- **More accurate impact analysis and assessment**
  - Business impact of change is fully understood prior to implementation
- **Increased efficiency – seamless integration with Release Management**
  - Ability to assess status of change at any point in the process
- **Improved collaboration across management silos**
  - Integration with CCMDB ensures other areas of IT have access to current change information
- **Reduces costs while improving application availability**
  - Fewer personnel involved
  - Workflow enforces consistent process execution resulting in fewer outages



# *Maintaining Production Application Rollout*

## **Challenges**

- 50% of applications put into production are later rolled back
- 68% of production application support is done by development teams – an average of 30% of their time
- 60% - 80% of average company's IT budget spent on maintaining existing applications
- Spending on administering and managing infrastructure is growing at two and one half times the compound annual growth rate of new server spend

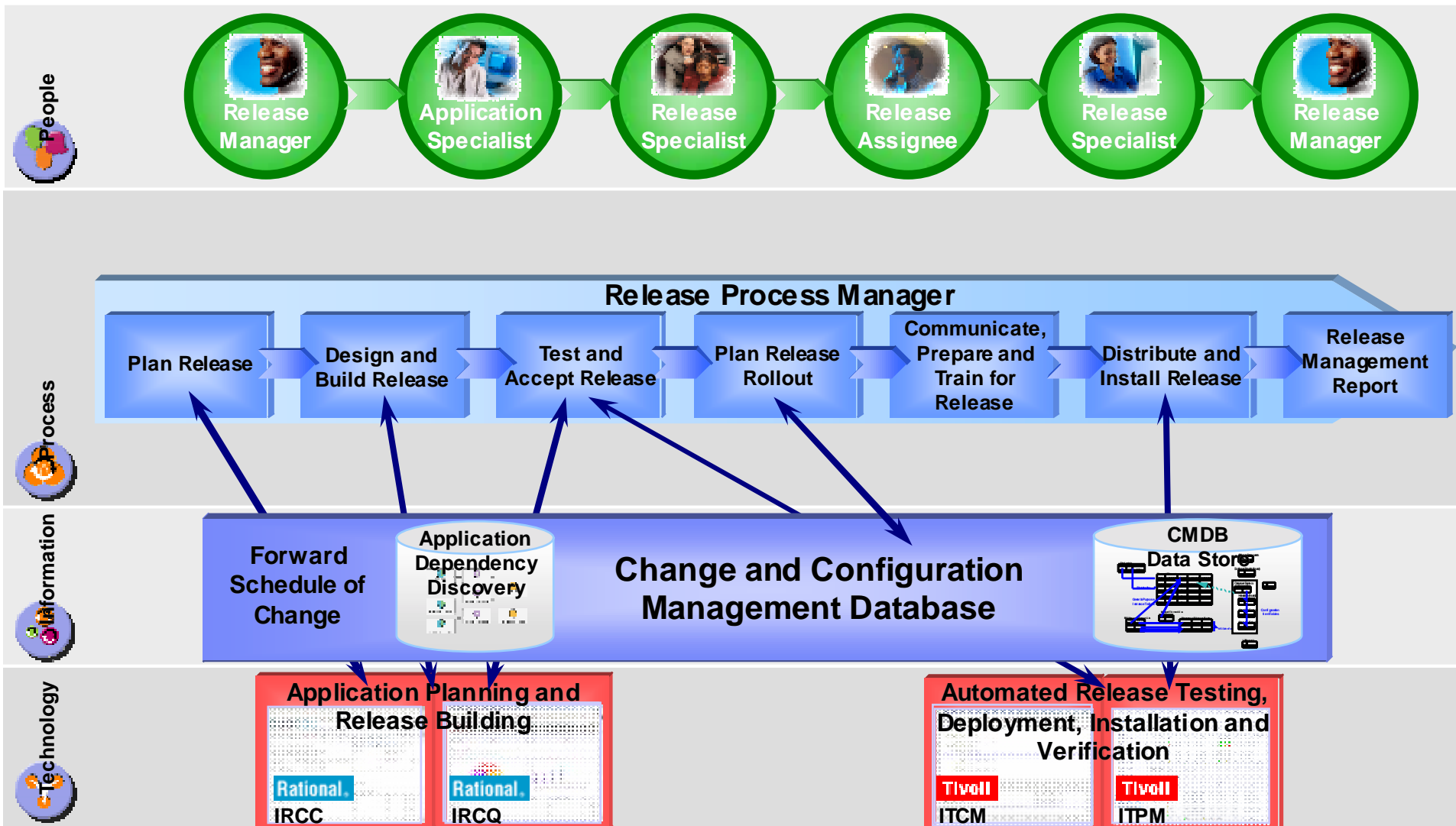
## **Requirements**

- View the critical path for coordinating multiple releases
- Automate the deployment process of release packages
- View a single consolidated report identifying success of the installation – even if multiple rollout tools were used
- Improve visibility into the status of all releases



# Maintaining Production Application Rollout

IT Service Management in action – release management automation



## *What's Unique in Release Management*

- **Multiple distribution products can be used for deployment**
- **Deployment success validated by the distribution products**
- **Release Management process is tightly integrated with the Change Management process**
- **Changes reflected in the CCMDB**
- **Automatic roll-back upon failure**
- **Exception report can be used to establish new deployment list**



## Benefits of Ensuring Quality Rollouts

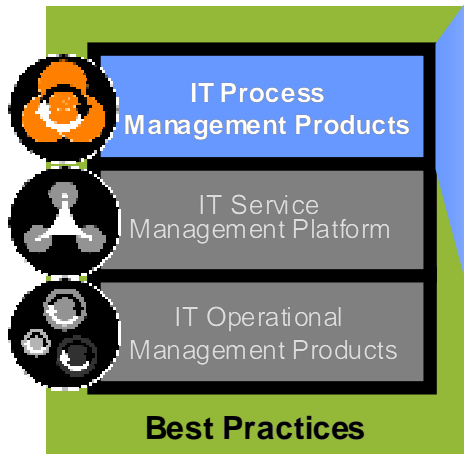
- **Increase success rate for software and hardware deployments**
  - Improved coordination among organizational barriers and management silos
  - Consistently track releases from plan-to-production using a single tool
  - Reduced release errors by tracking and automating repeatable actions
- **Improve ability to absorb high rates of changes to the IT infrastructure effectively**
  - Minimize disruption of business services through synchronization of releases to pre-defined maintenance windows
  - Complete audit trail of changes to the live environment is maintained – both for software distributions and for hardware changes
- **Reduce costs for managing and maintaining the IT infrastructure and applications**
  - Leverage existing investments for many automation activities
  - Centrally build and control the software used at remote sites





# IT Process Managers Bridge Organizational Silos

## IBM IT Service Management



IT CRM and Business Management	Service Delivery and Support	Service Deployment	Information Management	Business Resilience
	<ul style="list-style-type: none"> <li>• Change and Configuration Management</li> <li>• Availability Management</li> </ul>	<ul style="list-style-type: none"> <li>• Release Management</li> </ul>	<ul style="list-style-type: none"> <li>• Storage Management</li> </ul>	
	<ul style="list-style-type: none"> <li>• Capacity Management</li> </ul>			
<ul style="list-style-type: none"> <li>• Financial Assessment</li> <li>• Service Level Management</li> <li>• Asset Management</li> </ul>				<ul style="list-style-type: none"> <li>• Service Continuity Management</li> <li>• Security Management</li> <li>• Compliance Management</li> </ul>

- Available June 2006
- Available 2H 2006
- Future Directions

- Automates IT management processes for rapid responsiveness and greater flexibility
- Based on experience applying ITIL, eTOM, CoBIT and CMMI in customer environments
- Extends autonomic computing technology experience to people, processes and information

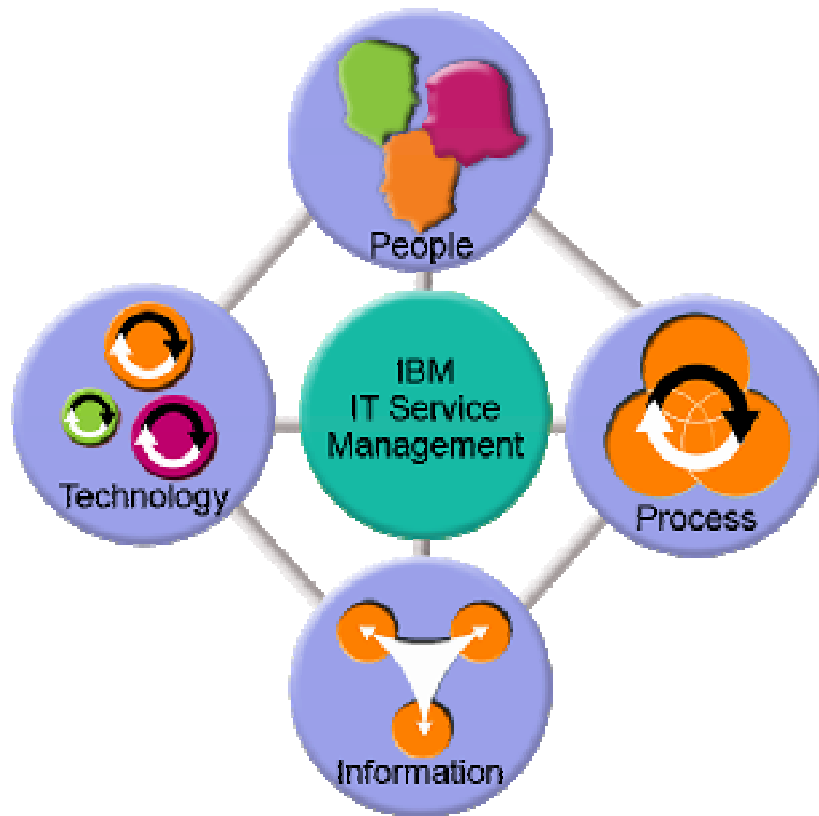


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## We'll Help You Achieve Greater IT Service Management Value ... Quickly



Modular SOA-based approach lets you implement at your own pace

Best practices – a key to success – based on extensive IBM experience helping customers implement solutions

Extensive product portfolio TODAY to automate tasks and integrate processes

Ecosystem of Business Partners provide expertise and services

# Step 1: Establish the Technology Foundation

Monitor end-to-end application performance

Establish accurate view of IT components

Create application and component map

Begin to analyze existing processes

Download IBM Tivoli Unified Process (free of charge)

<http://www.ibm.com/software/tivoli/features/it-serv-mgmt/itup/index.html>

Use to define best practices process flow, skills development and technology automation plan

Enlist Business Value Analysis Tool

Determine the Return on Investment for operational management products

Automation Assessment Tool

Assess current capabilities and determine a direction to deliver the best near-term value

Business  
Application  
Management

Server, Network  
and Device  
Management

Storage  
Management

Security  
Management

Technology  
Focus

## Step 2: Develop a Service Delivery Approach

Leverage IT Service Management offerings for operational improvements

IT Service Management Innovation workshops

Baseline your IT organization's current operations and establish tactical and strategic plans to improve skills, technology, process and information coordination

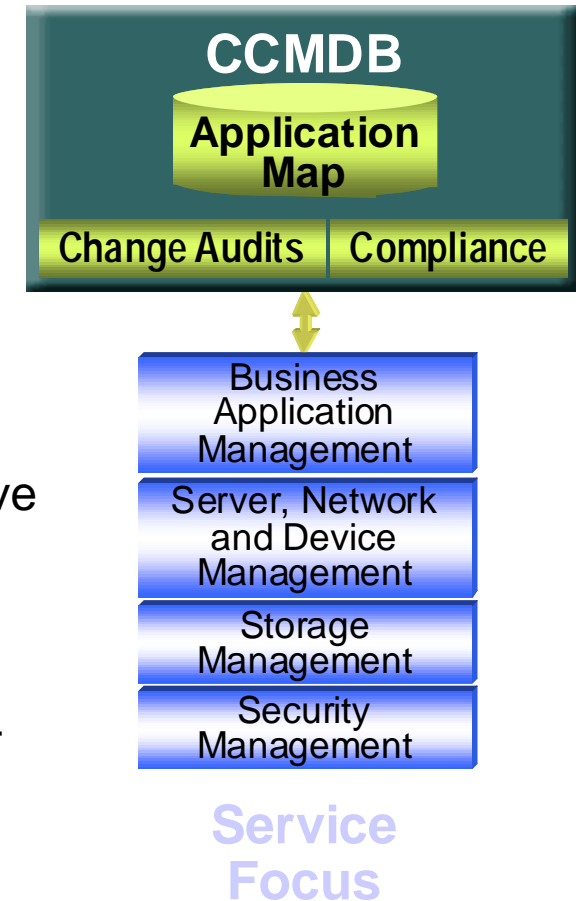
IT Service Management Readiness Assessment

Assess your organization's ability to execute an IT Service Management strategy and learn critical success factors

ITIL® Consultancy

Certify your IT staff on the ITIL® V2 framework

Establish an ITIL® roadmap strategy



## Step 3: Align IT Service Delivery with Business Operations

### Establish Configuration Management Data Base

Must be authoritative source of record (audit ready)

Federate and synchronize from other discovery & management products

Maintain current state configuration of all CIs

### Implement automated process managers

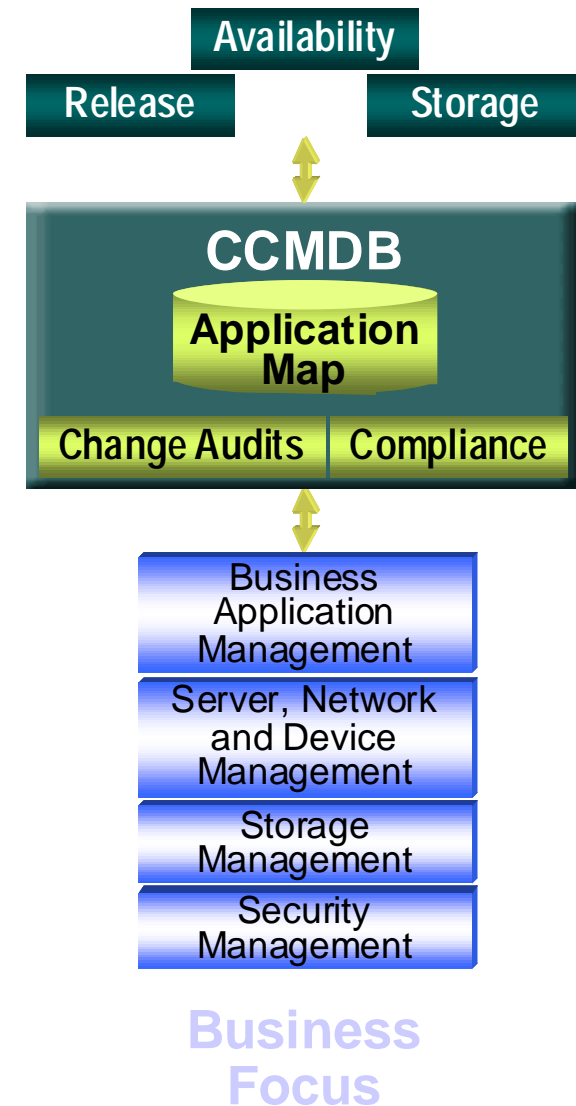
Change Management

Release Management

Availability Management

Storage Management

### Begin measuring process performance



## What are the Analyst's Saying

***"IBM's new product capabilities and new process-centric ITSM visions catapult IBM to the lead in terms of ITSM vision and ITSM value proposition".***



- Summit Strategies Dynamic Computing Industry Report Card: ITSM Software

***"Service management software will give IT administrators the tools they need to get a handle on the costs, the value and the efficiencies of their operations."***



- Summit Strategies, "The 2005 Summit Seven Dynamic Computing Gets Down to Business Executive Briefing

***"IT services deliver the business services that drive competitive advantage and success. In an on demand computing environment, IT service management must be well-planned, intelligent, automated, and integrated to provide the information and control needed by operations and line of business executives. IBM clearly understands and is delivering solutions to address these needs."***



- Richard Ptak, Ptak, Noel & Associates

***"Tivoli is adding new portal configuration tools providing the ease of use long taken for granted in the software development world. This is not your father's Tivoli."***



- Tony Baer, Principal Analyst, onStrategies

Thank  
You

