



IBM Service Management Strategy

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IBM Tivoli Software

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Agenda

- **Business and IT Objectives and Priorities**
 - Customer study findings – Realize value from existing IT and business assets
- **Service Management Essentials**
 - Overview of IBM Service Management and the underlying platform blueprint
- **IBM Service Management**
 - IBM Service Management solutions are designed to integrate and protect current investments
 - IBM Service Management Suite and the Core Products
 - IBM Service Management Business Value
- **Next Steps**

Top 10 Business Priorities for 2009

Organizations technology priorities concentrate on realizing value from existing assets through systems management solutions in order to raise enterprise visibility and transparency to align with business priorities

(Gartner EXP worldwide CIO survey – January 2009)

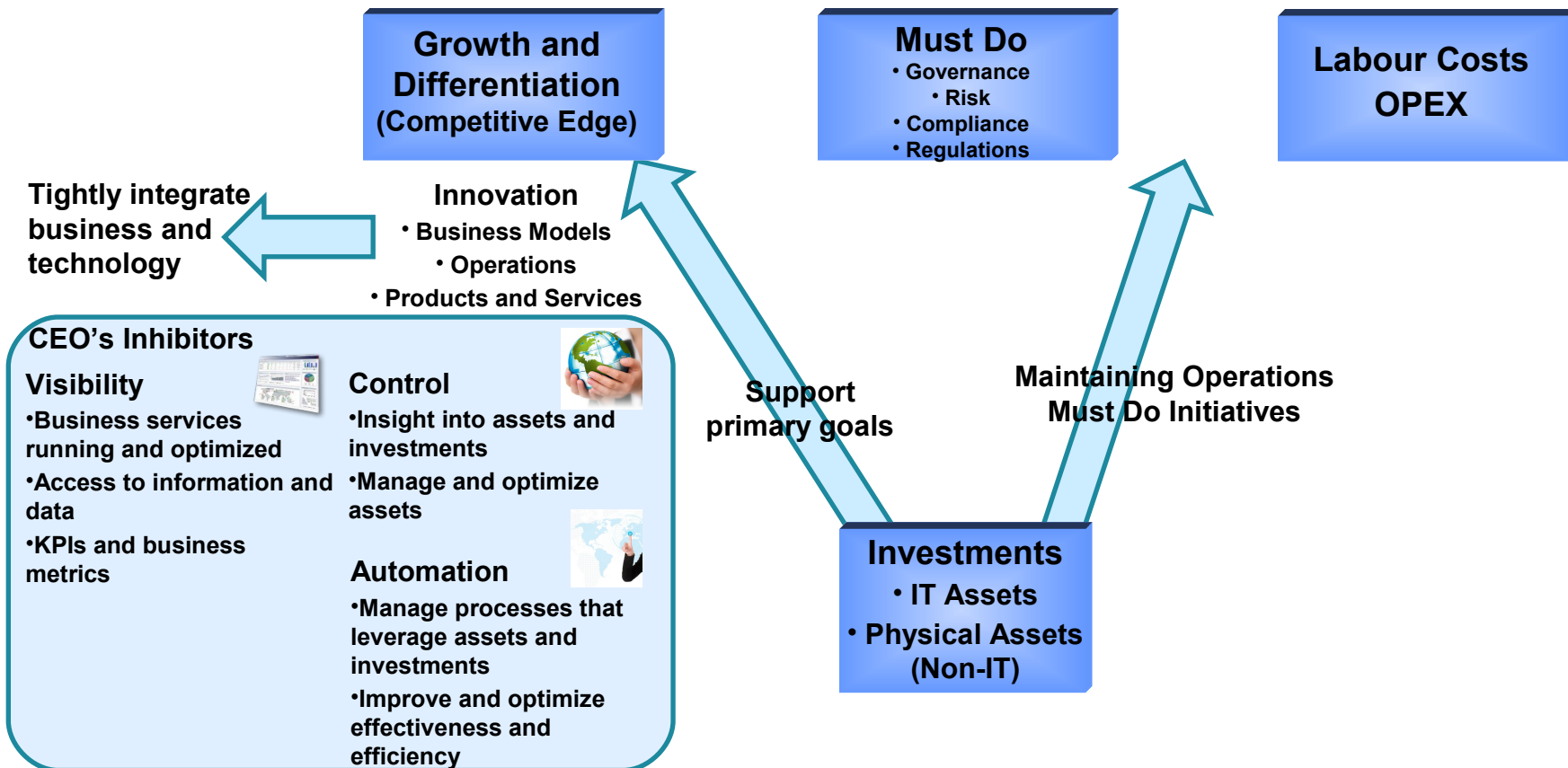
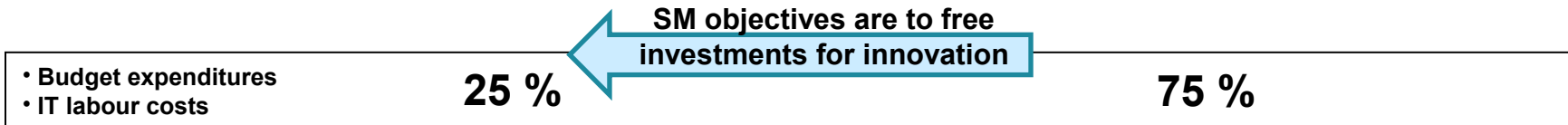
Ranking	Business Priority
1	Business process improvement
2	Reducing enterprise costs
3	Improving enterprise workforce effectiveness
4	Attracting and retaining new customers
5	Increasing the use of information/analytics
6	Creating new products or services (innovation)
7	Targeting customers and markets more effectively
8	Managing change initiatives
9	Expanding current customer relationships
10	Expanding into new markets and geographies

Source: Gartner EXP (January 2009)

Why to Invest in Service Management?

Quantifiably improve the leverage of customers investments

CEO's reason to invest in IT and Service Management



Enabling Innovation with Service Management



Visibility – *See your Business*

Respond faster and make better decisions



Control – *Govern your Business*

Improve quality and reduce risk

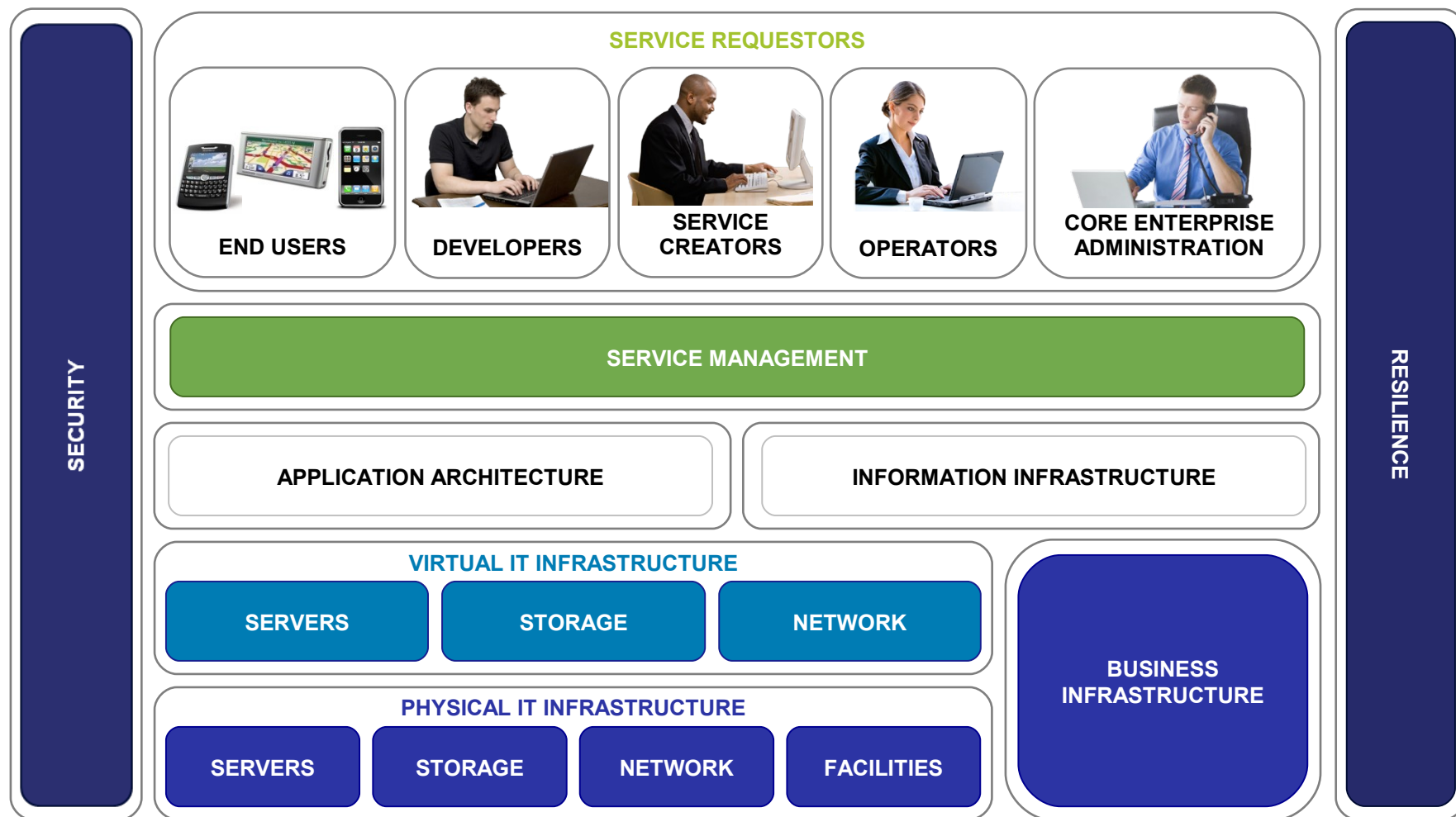


Automation – *Optimize your Business*

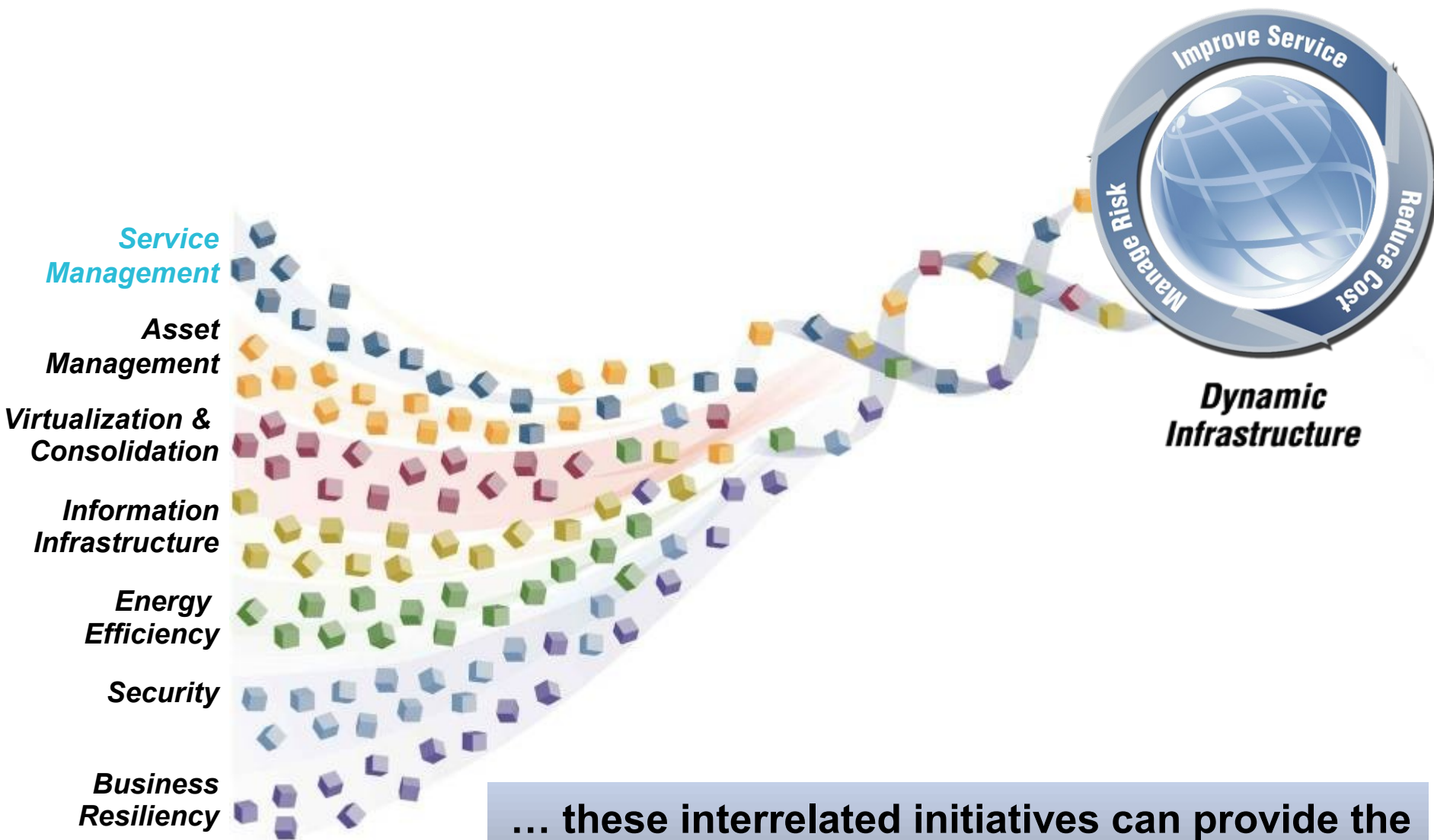
Lower costs and build agility

Architectural Model for Dynamic Infrastructure

Description of the Dynamic Infrastructure components at a high level



A Dynamic Infrastructure is a Journey ...



... these interrelated initiatives can provide the DNA needed for a Dynamic Infrastructure

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- **Process Framework Models**
 - ITIL v3 – Best practices for Service Management
 - IBM Tivoli Unified Process Tool
- **Market Analysts on Service Management Landscape**
 - Analysts research and predictions on the Service Management strategies and solutions
- **Where to get Started**
 - IBM Assessments help clients continue the journey towards a Dynamic Infrastructure
- **Next Steps**

Quality Service Delivery Requires Service Management

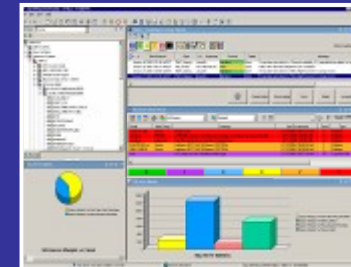
What do we mean by a *Service*?

- An offering, function or activity delivered to an internal or external customer that may contribute revenue and profit or fulfill a critical mission of an organization
- The output created through the use of an organization's human, intellectual, financial and physical assets



What do we mean by *Service Management*?

- Service management encompasses the management processes, tactics and best practices needed to deliver business services
- Applies to IT, operations, and line-of-business services – all require service management



What is IBM Service Management

ISM solutions deliver the visibility, control and automation needed to increase quality of service, manage risk and compliance, maximize return on investments, and accelerate business growth.

Address the top five tactical challenges to minimize time to value and to achieve practical business results and benefits.

Discover

- What you have – the infrastructure
- What if it breaks – the business risk of outages

Monitor

- Smart devices in both IT and business
- Manage performance and energy consumption

Protect

- Information from unwanted access
- Business from outages

Industrialize

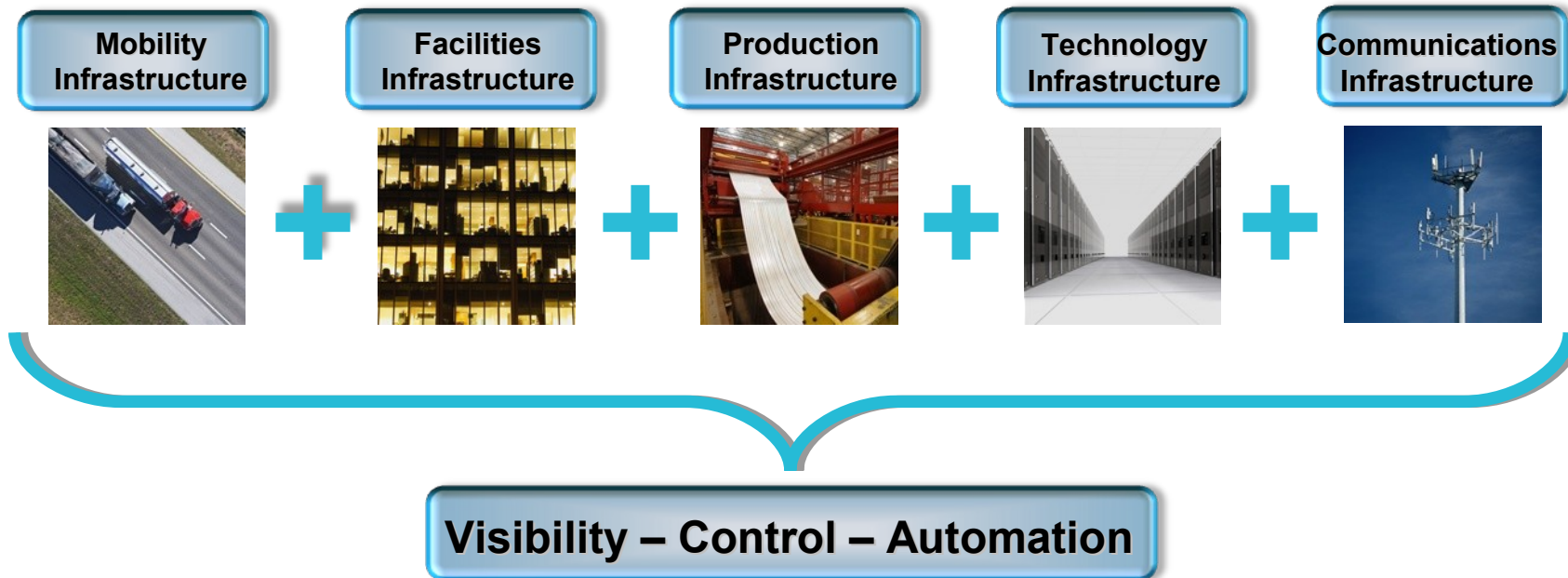
- Automate the process of IT
- Assure quality service to users and consumers

Integrate

- Application development and IT operations
- Quality service across IT and business infrastructure

Service Management – Think Different

Achieving service excellence extends IT's contribution to economic performance beyond managing expenditures



- Enabling visibility, control and automation across all business and IT assets supports converged management to deliver service excellence
- Innovation delivers new products, services, processes and business models to help accelerate growth and create competitive advantage

Enabling Innovation with Service Management

Innovation is the process of delivering new products, services, processes and business models to help accelerate growth and create competitive advantage – quantifiably improve the leverage of customers investments

Visibility

See your business services



- Implement dashboards for real-time operations and process management
- Create an integrated, actionable, and insightful view into business metrics

Control

Manage and secure your investments



- Implement an integrated asset control solution to discover and utilize those assets
- Integrate process workflows with operational tools to enforce control

Automation

Build agility into your operations



- Optimize and integrate operational processes that directly support the business
- Improve quality and reduce costs through automation by leveraging and integrating existing tools

IBM Service Management Solutions

IBM Service Management solutions support building an infrastructure needed to increase quality of service, manage risk and compliance, maximize return on investments and accelerate business growth

Discover

- What is out there – the infrastructure
- What if it breaks – the business risk of outages

Infrastructure Discovery and Mapping

Assessing Security controls Effectiveness

Business Resilience Planning

Monitor

- Smart devices in IT and business
- Manage performance and energy consumption

Event and Performance Management

SOA Applications Performance

Policy and Regulatory controls Monitoring

User Activity Monitoring and Log Management

User Access Rights and Lifecycle Management

Protect

- Information from unwanted access
- Business from outages

Vulnerability and Threat Management

Data Backup, Restore and Retention

Business Continuity and Disaster Recovery

Industrialize

- Automate the process of IT
- Assure quality service to users and consumers

Virtualization Management

Energy Management for Green Savings

Single Sign On

IT Asset Management

Usage Accounting

Integrate

- Application development and IT operations
- Quality service across IT and business infrastructure

Business Service Management

Service Deployment and Lifecycle Management

Integrated Service Management Planning

IBM Service Management Platform

IBM Service Management

Best Practices, Methodologies, and Services

Service Management Platform

Service
Delivery and
Process
Automation

Service
Availability
and
Performance
Management

Storage
Management

Security, Risk
and
Compliance

Datacenter
Transformation

Asset and
Financial
Management

Network
and
Service
Assurance

Visibility

Control

Automation

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Integrated Solutions for E2E Service Management

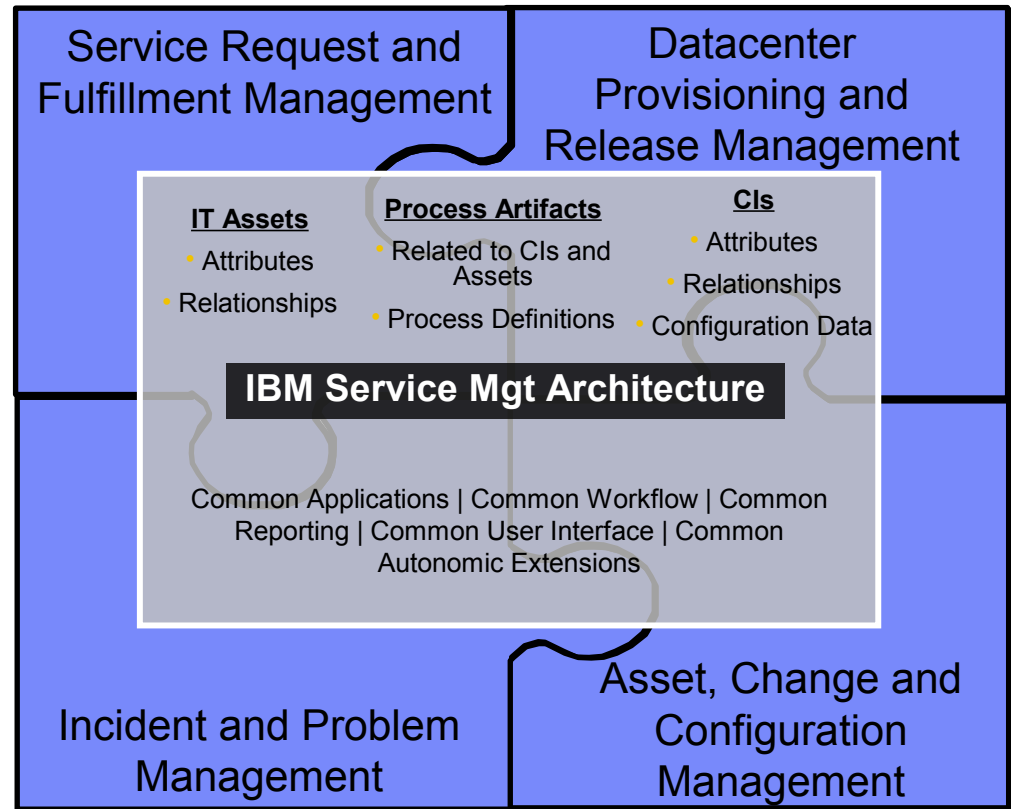
Integrated Solution
An Integrated set of solutions represent the full management of data, processes, tooling and people

Common Data Model
The core solutions share a common data subsystem for simple data sharing

Processes that Work Together
The core solutions share a process workflow automation engine

No Rip and Replace
Leverage existing investments in IBM and 3rd party IT management tools

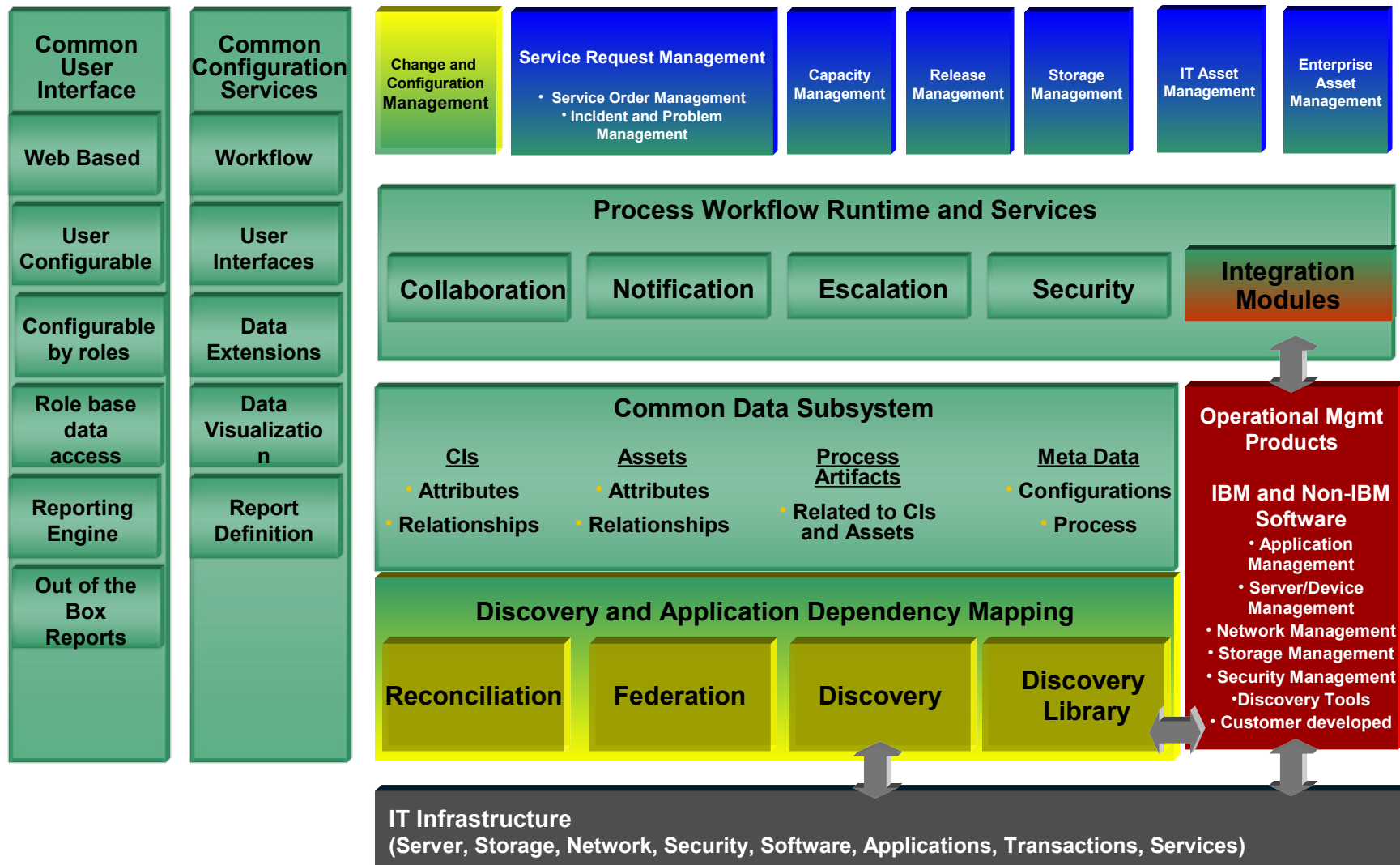
Lower Cost of Ownership
Lower infrastructure and training costs, simple upgrade model



IBM Service Delivery and Process Automation Offers a Unified Platform to seamlessly support Service Management Life-Cycle, simplifying the transition from ITIL V2 to V3

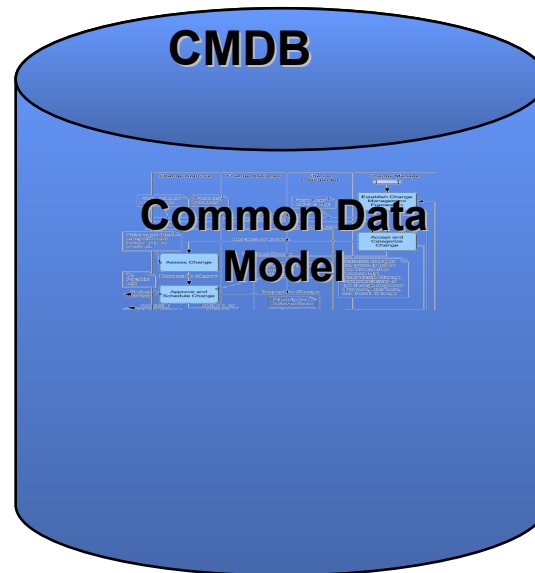
IBM Service Management Suite

Description of the IBM Service Management Platform and core components



CMDB – Foundation for Service Management

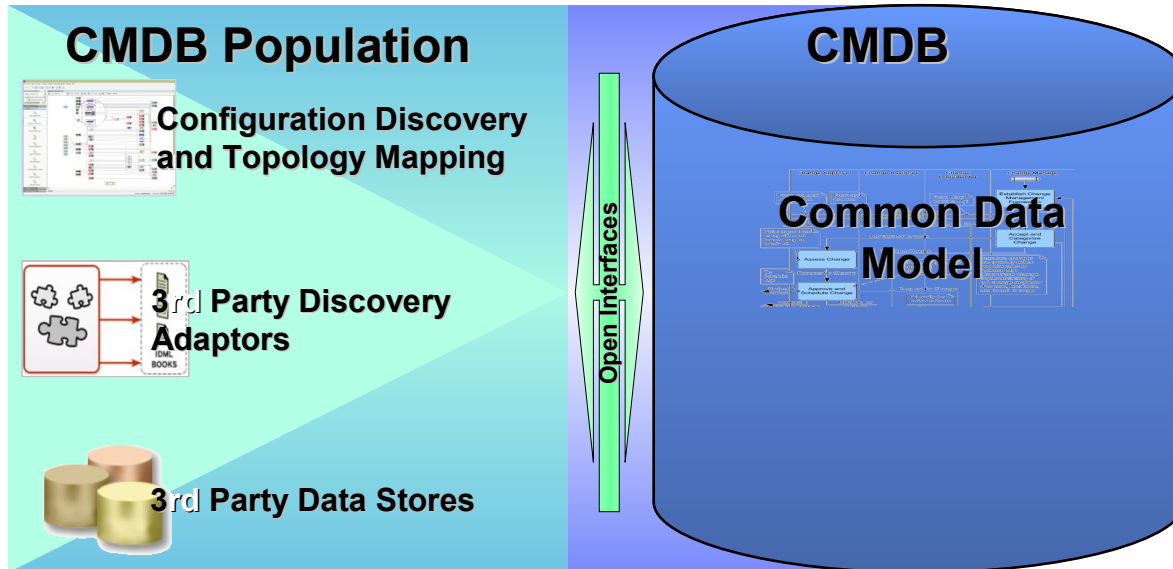
The CMDB provides the source about Configuration Item information and the relationship between them



- The CMDB provides the trusted source of information
- The Common Data Model is built on open standards and best practices (ITIL)
- The CMDB is a scalable platform for the implementation of Service Management initiatives
- The CMDB is accessible through an application programming interface (API) and GUI reporting

CMDB – Population through Discovery

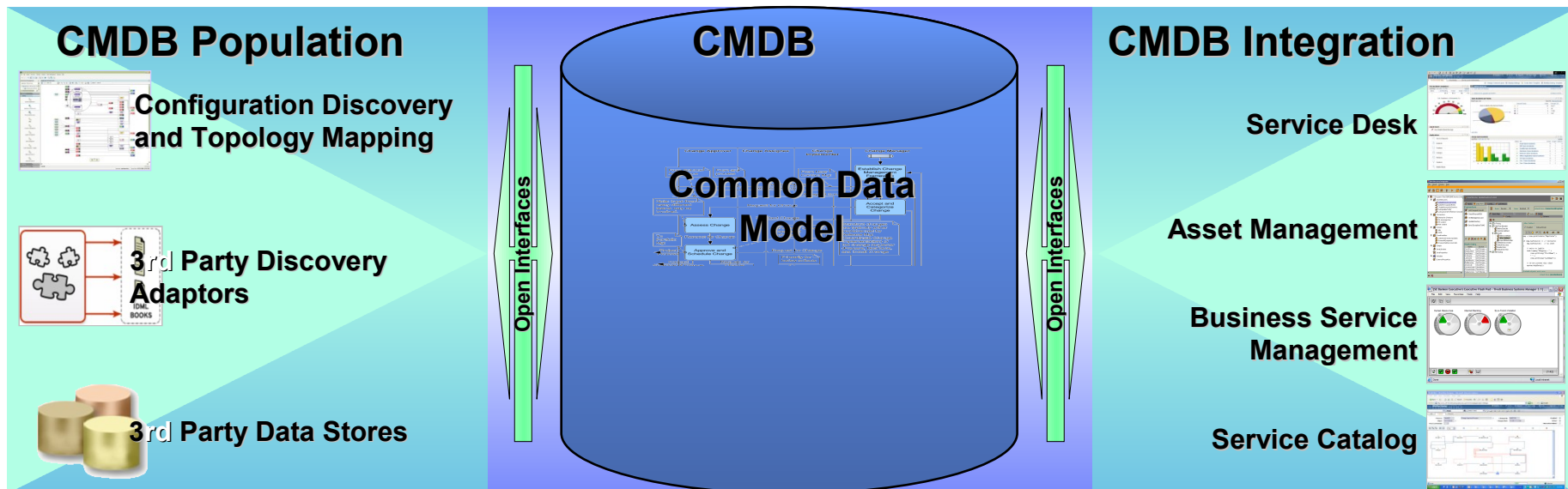
Automated discovery and mapping technology populates attribute information and interrelationships between Configuration Items



- **Methods to identify Configuration Items, their attributes and application dependencies:**
 - Automated agent-less discovery
 - Existing data repositories and tools
 - Manual entry
- **Topology mapping illustrates relationships between Configuration Items and supports the linkage to specific business services**

CMDB – Integration Point to Provide Services

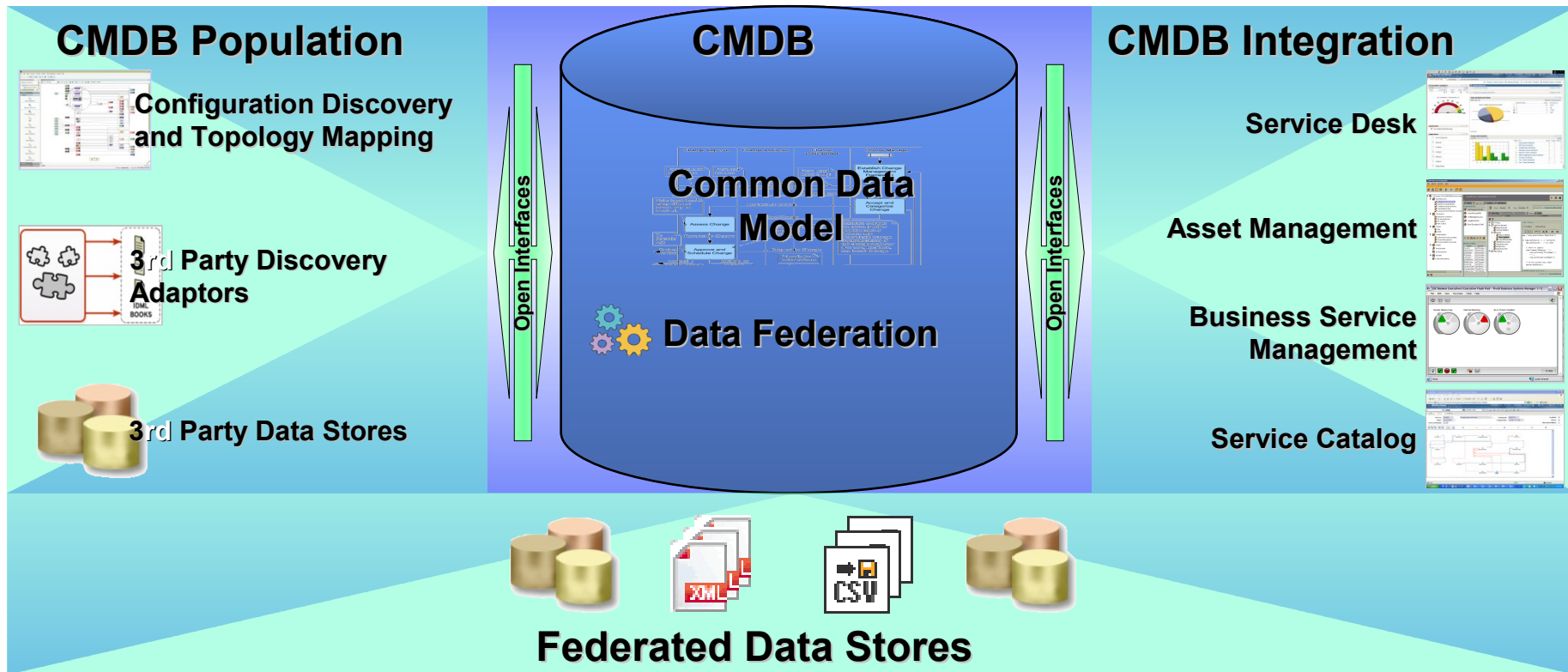
The CMDB is the integration point for the applications which use the information to provide Service Management processes



- The Service Desk delivers critical support by keeping key business systems and services available and reliable
- Asset management includes all the control and automation needed to seamlessly and efficiently track and manage asset configuration information
- Business Service Management provides management of applications as a service
- The Service Catalog is an essential element for defining services and communicating with the business

CMDB – Data Federation

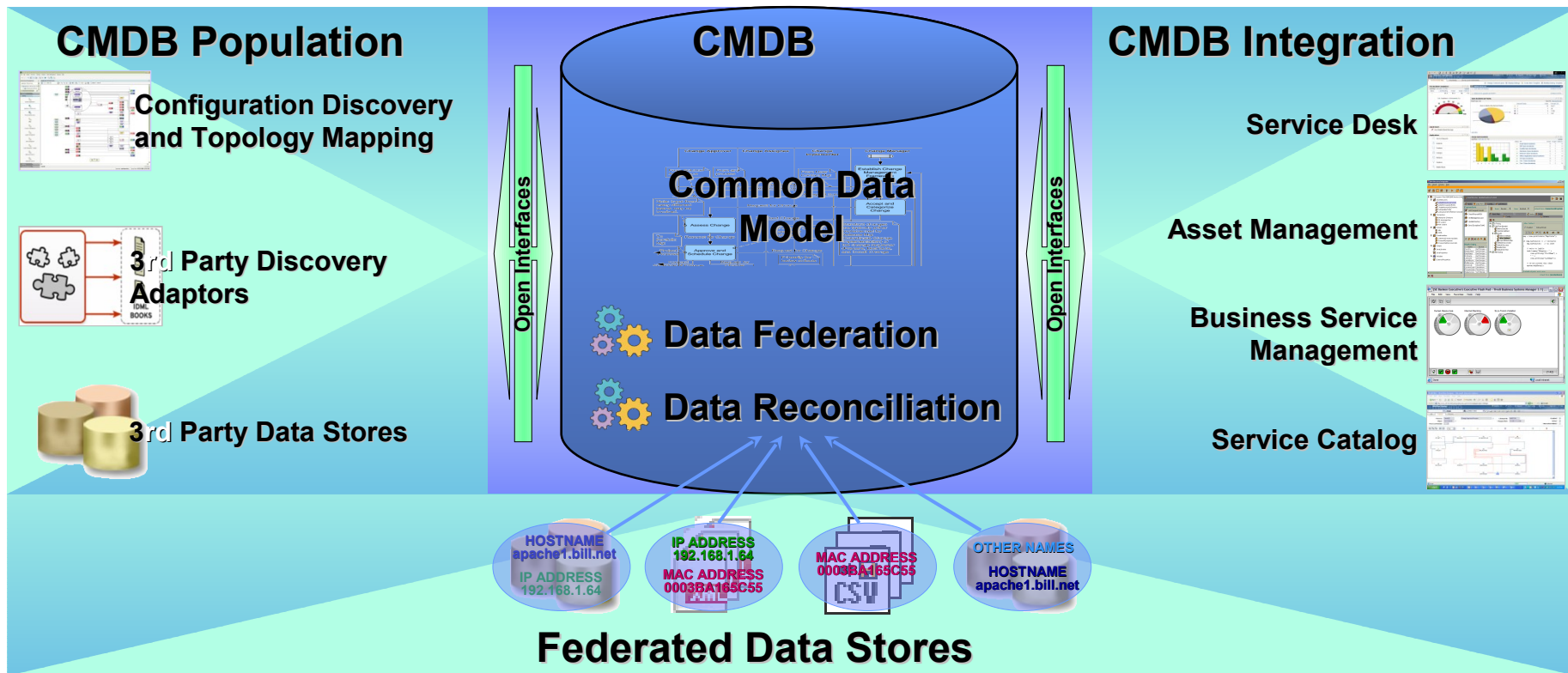
Federated data stores contain information which need to be tracked or referenced but which is not part of the core Configuration Item



- Access source of record for attributes which are not contained in the CMDB
- Federation brings multiple data sources into a coalesced view
- Report generation with information from CMDB and other data sources

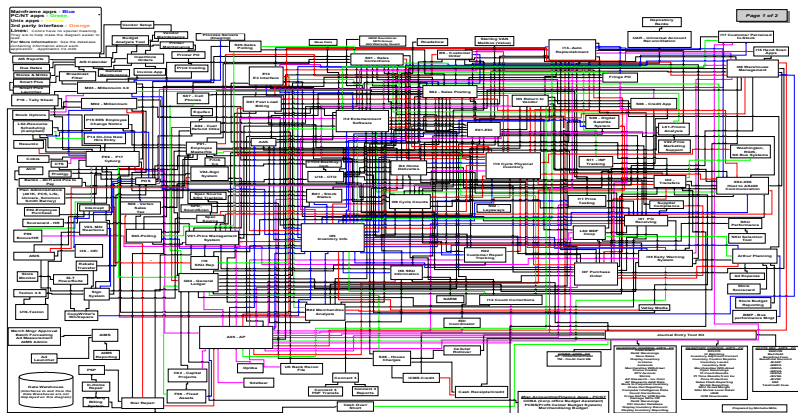
CMDB – Data Reconciliation

Data reconciliation is the ability to filter, prioritize and normalize identical Configuration Items from multiple sources



- Automatically ensures single records in the CMDB from duplicates found in multiple sources by comparing matching fields from each data store
- Maintains source integrity of each Configuration Item instance in the CMDB

Visibility through Discovery and Application Mapping

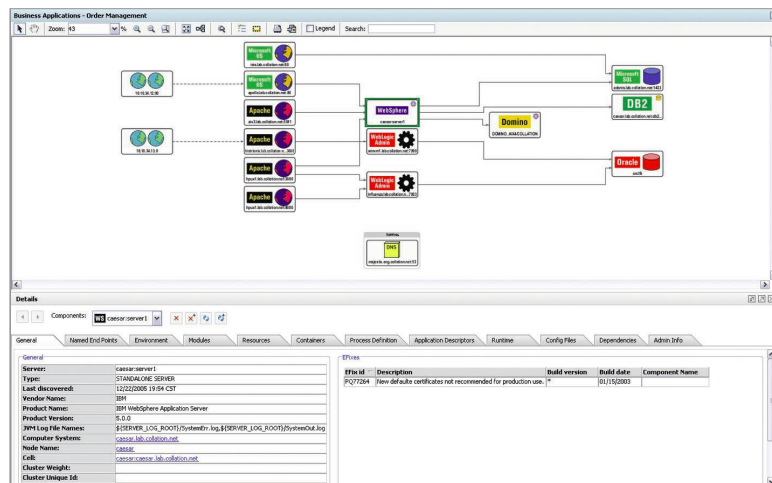


Traditional View of Infrastructure Topology

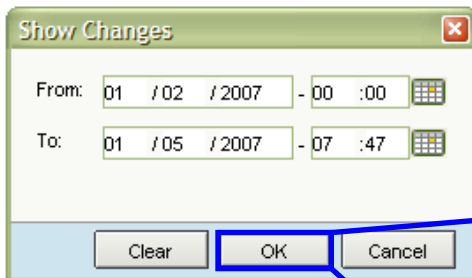
- What does the service configuration look like – does the topology reflect the current state?
- By changing this server, what other devices are impacted?
- What database might be involved and what other application could be affected?

Automated Discovery & Application Mapping

- Enables organizations to visualize dependencies between applications, and within the IT infrastructure
- Understand how any changes in the IT infrastructure can affect associated business processes
- Achieve regulatory compliance, ability to audit plus improved control of IT infrastructure

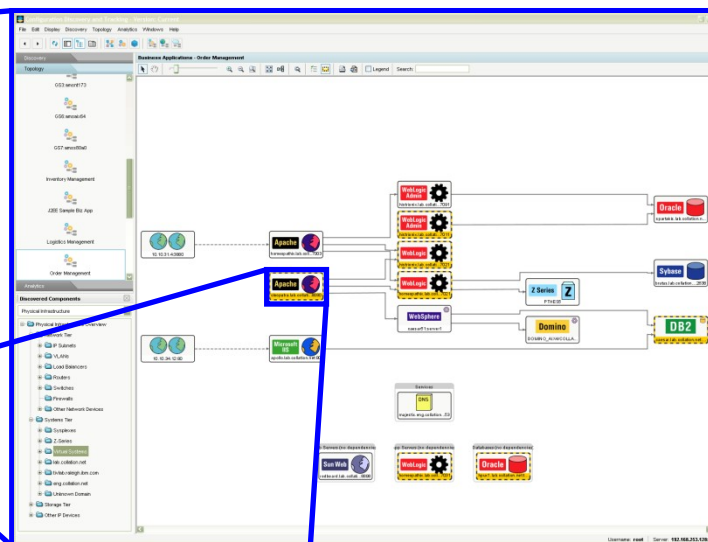


Identify Changes to Assist Problem Resolution



Step 1 – Select change history window to identify changed components

Step 2 – Changed Configuration Items are automatically identified

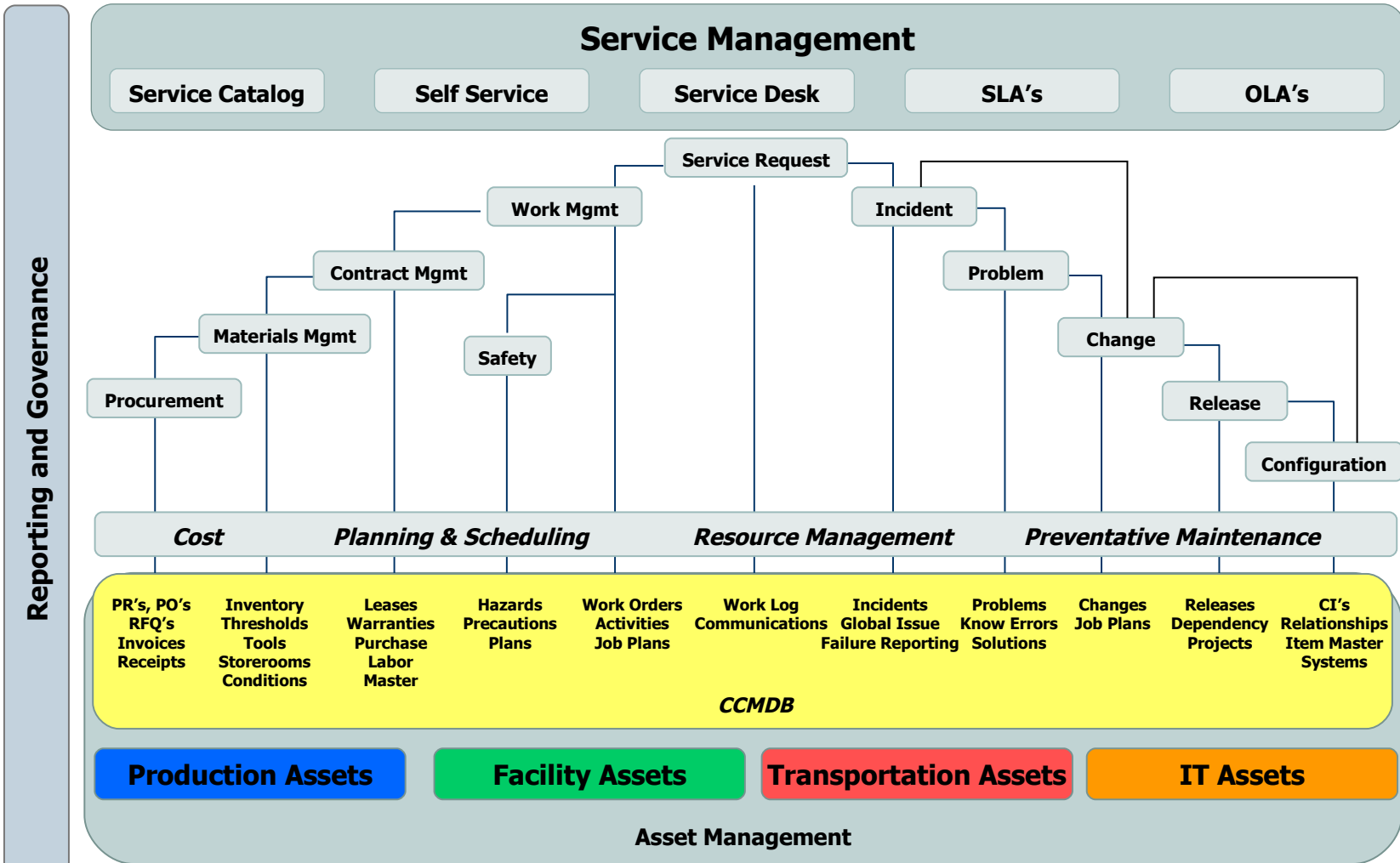


Component	Type	Change	Date	Attribute	Old Value	New Value	Id
cleopatra.lab.collation.net:8080	Apache	Updated	8/14/06 4:52 EDT				AS57C61ASF03294977D7CD955B43D5
ApacheWebContainer	ApacheWebContainer	Updated	8/14/06 4:52 EDT	keepAliveTimeout	30	40	A1A1D500BC0039A38C479CB38663169
ApacheWebContainer	ApacheWebContainer	Updated	8/14/06 4:52 EDT	maxClients	140	50	A1A1D500BC0039A38C479CB38663169
conf#httpd.conf	ConfigFile	Updated	8/14/06 4:52 EDT				C3A0B7232BA3A3548854FA297E90F1A88
conf#httpd.conf	ConfigFile	Updated	8/14/06 4:52 EDT	content	## Based upon the NCSA server configuration...	## Based upon the NCSA...	C3A0B7232BA3A3548854FA297E90F1A88
conf#httpd.conf	ConfigFile	Updated	8/14/06 4:52 EDT	checksum	LbP48ZhvYJlToorFsStEA==	EVMkOwzGUB9WwMpd...	C3A0B7232BA3A3548854FA297E90F1A88
conf#httpd.conf	ConfigFile	Updated	8/14/06 4:52 EDT	lastModified	1152914865000	1155014041000	C3A0B7232BA3A3548854FA297E90F1A88

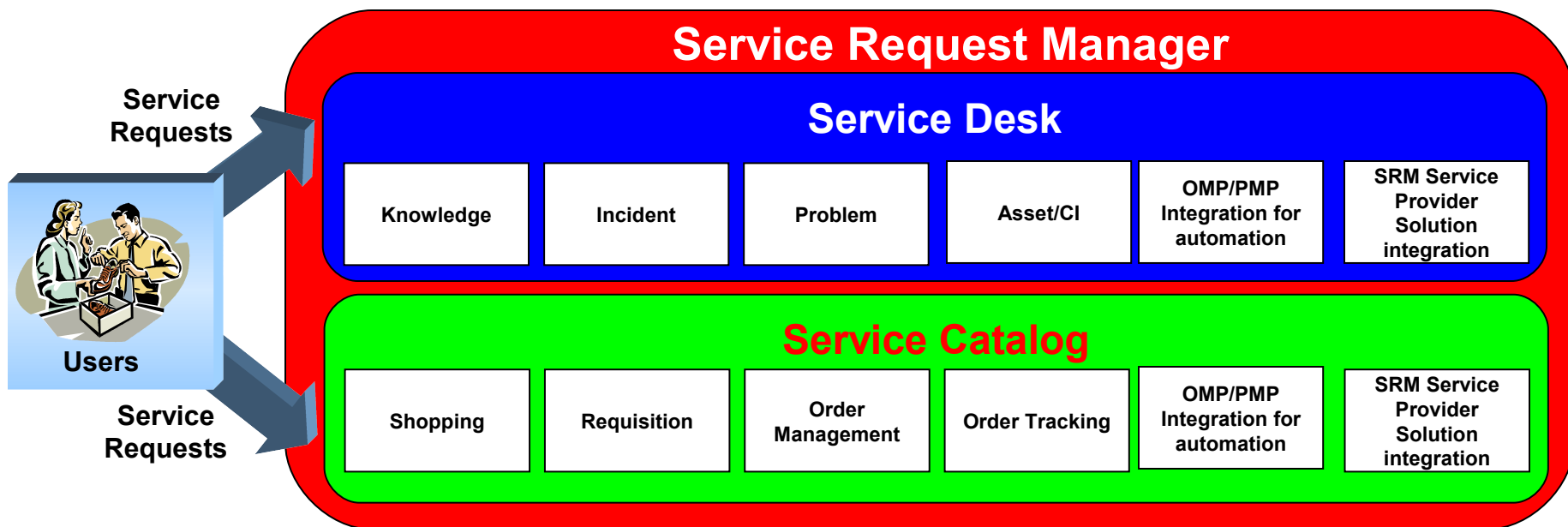
Step 3 – View detailed history of the changes by attribute

Service Request Management – Solution Capabilities

The Business: (Missions, Goals, Customers, Users)

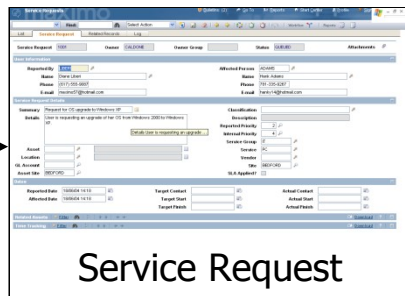
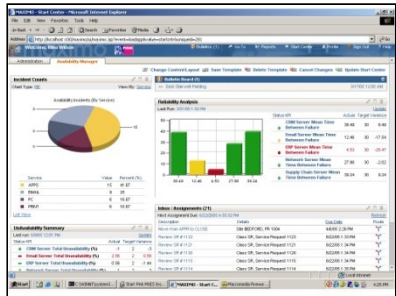


Unified Solution to Improve Productivity

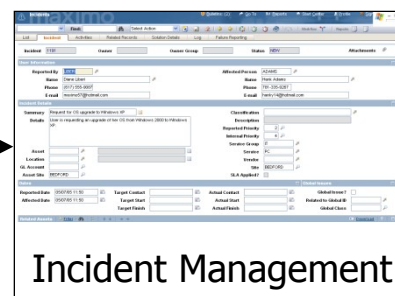


- Advanced work management processes
- Flexible and easy to configure, no coding required
- Integration with CCMDB, TEC & other OMPs
- Multi-customer support
- Based on leading standards-based technology – J2EE, SOA, XML
- Process integration, built from the ground up on ITIL
- Single user interface
- Dashboards and reports
- Data integration
- Enterprise asset management integration

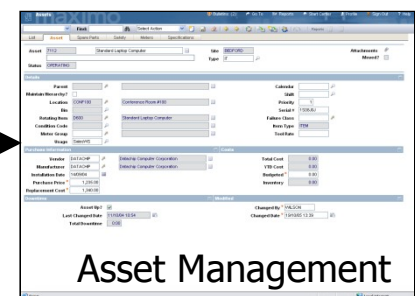
End-to-End Best Practice Service Management



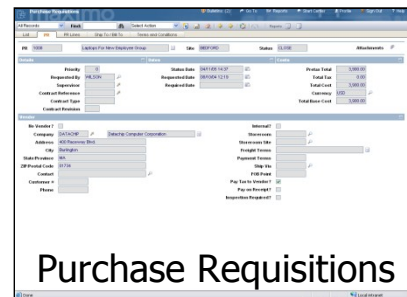
Service Request



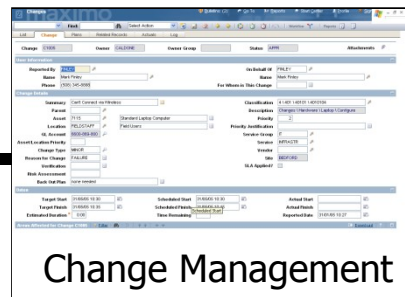
Incident Management



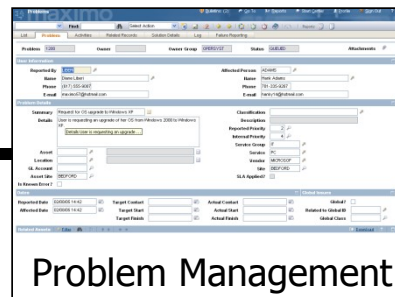
Asset Management



Purchase Requisitions



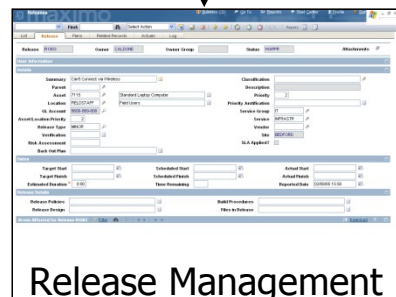
Change Management



Problem Management



Service Level Agreements



Release Management

- One Web-based platform
- One integrated technology
- One CMDB instance

IT Asset Lifecycle and Software License Management

What did we purchase versus what is deployed?
Should we buy or lease?
How do I manage vendor contracts and volume purchase agreements?
How do I optimize my inventory?
How do I validate invoices and enable accurate reporting?

IT Asset Lifecycle Management

IBM Tivoli Asset Management for IT

What do we own?
Have we over-purchased? Savings opportunity?
Have we under-purchased? Is this a compliance risk?
How do we manage complex license types?
What about virtualized environments?

SW License Management

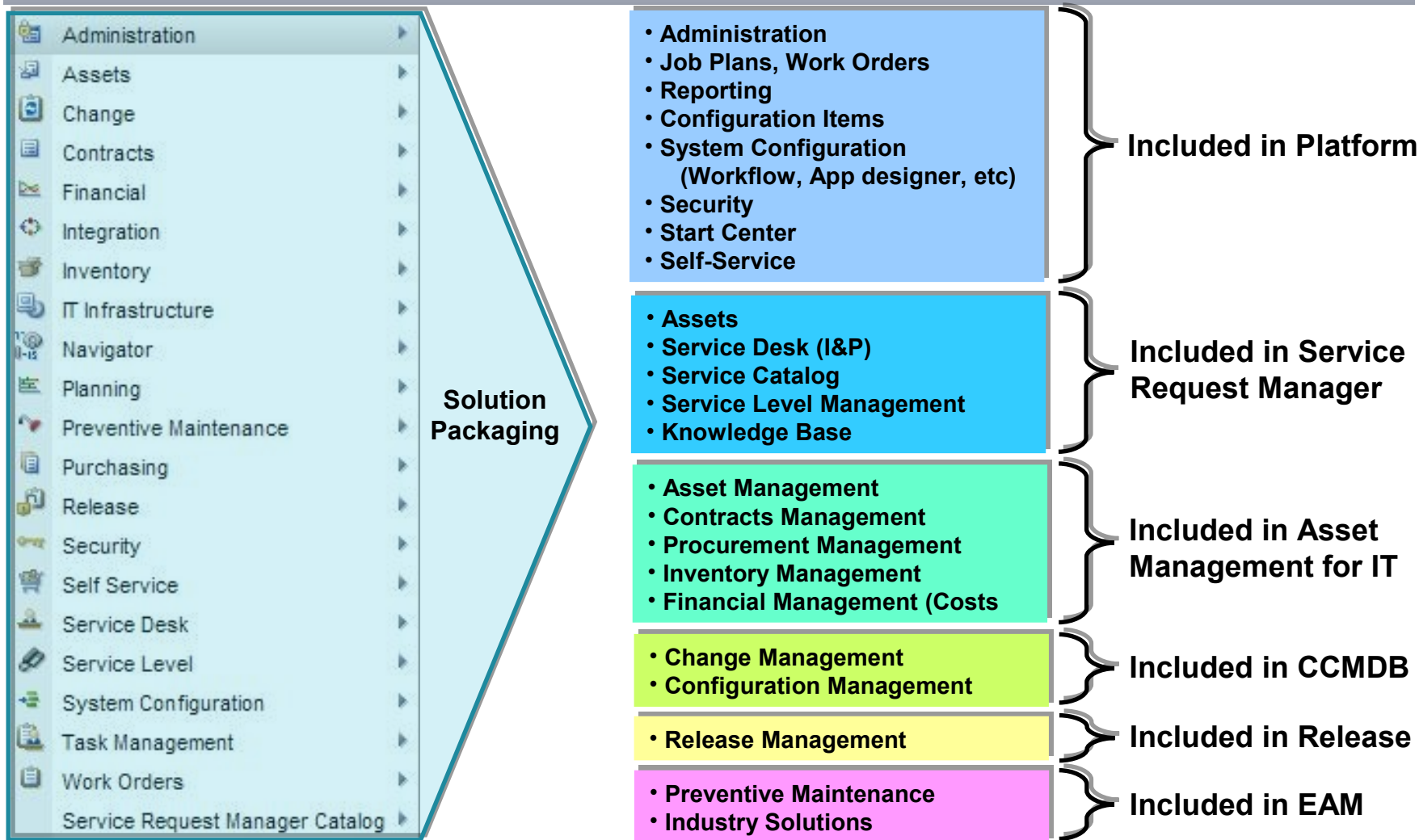
IBM Tivoli License Compliance Manager

What hardware and software is deployed?
What is the software use?
What is the license use?
Who has it?
Where is it located?
How do we keep this up to date?

IT Asset Inventory

Integration Enables Productivity and Adds Value

IBM Service Management Platform puts everything seamlessly in one place



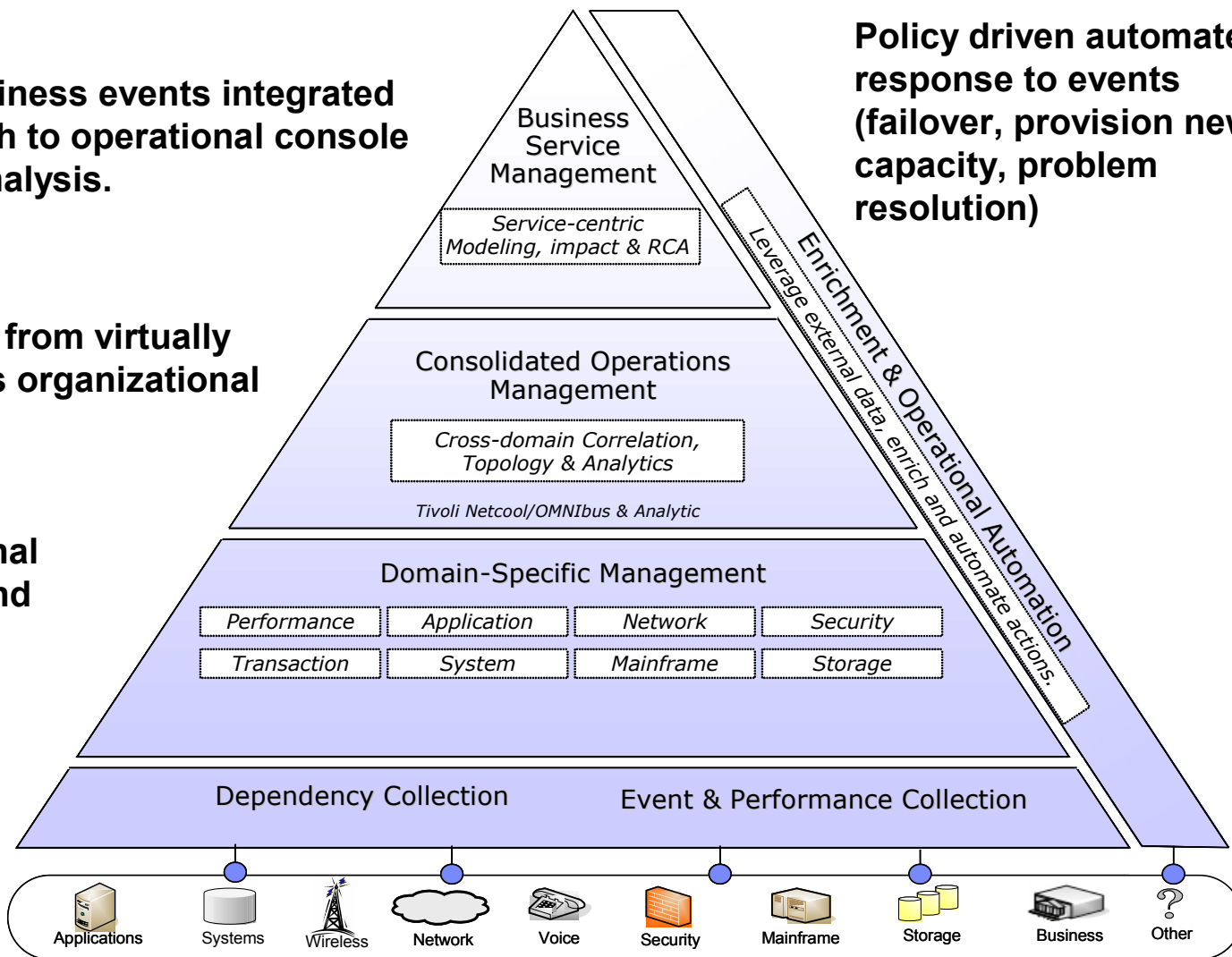
Business Service Management

IT Operational and business events integrated in one console. Launch to operational console for quick root cause analysis.

Real-time data access, from virtually any data source across organizational boundaries

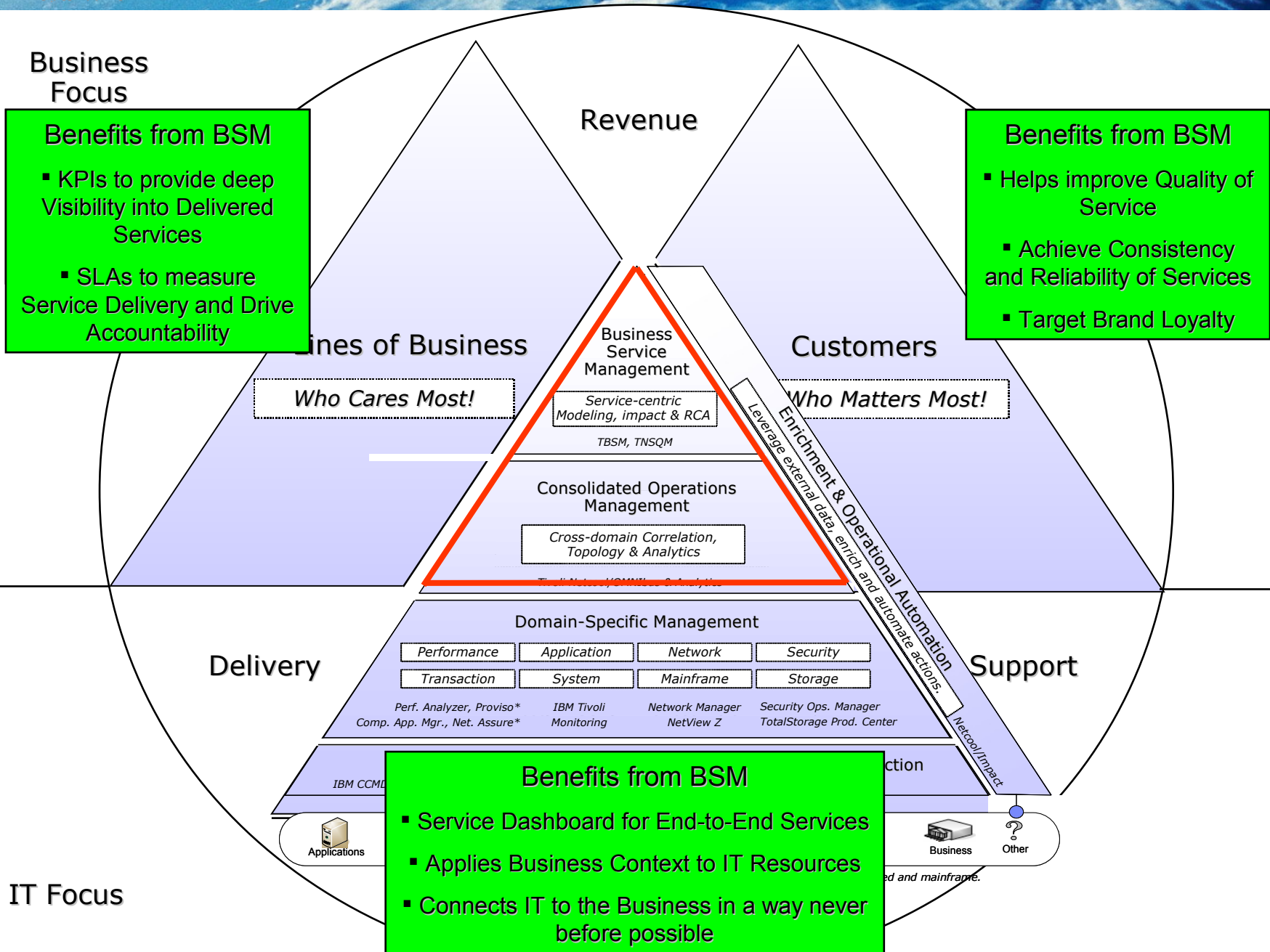
Consolidated operational view of performance and availability

Complete coverage of over 1000 device types



Policy driven automated response to events (failover, provision new capacity, problem resolution)

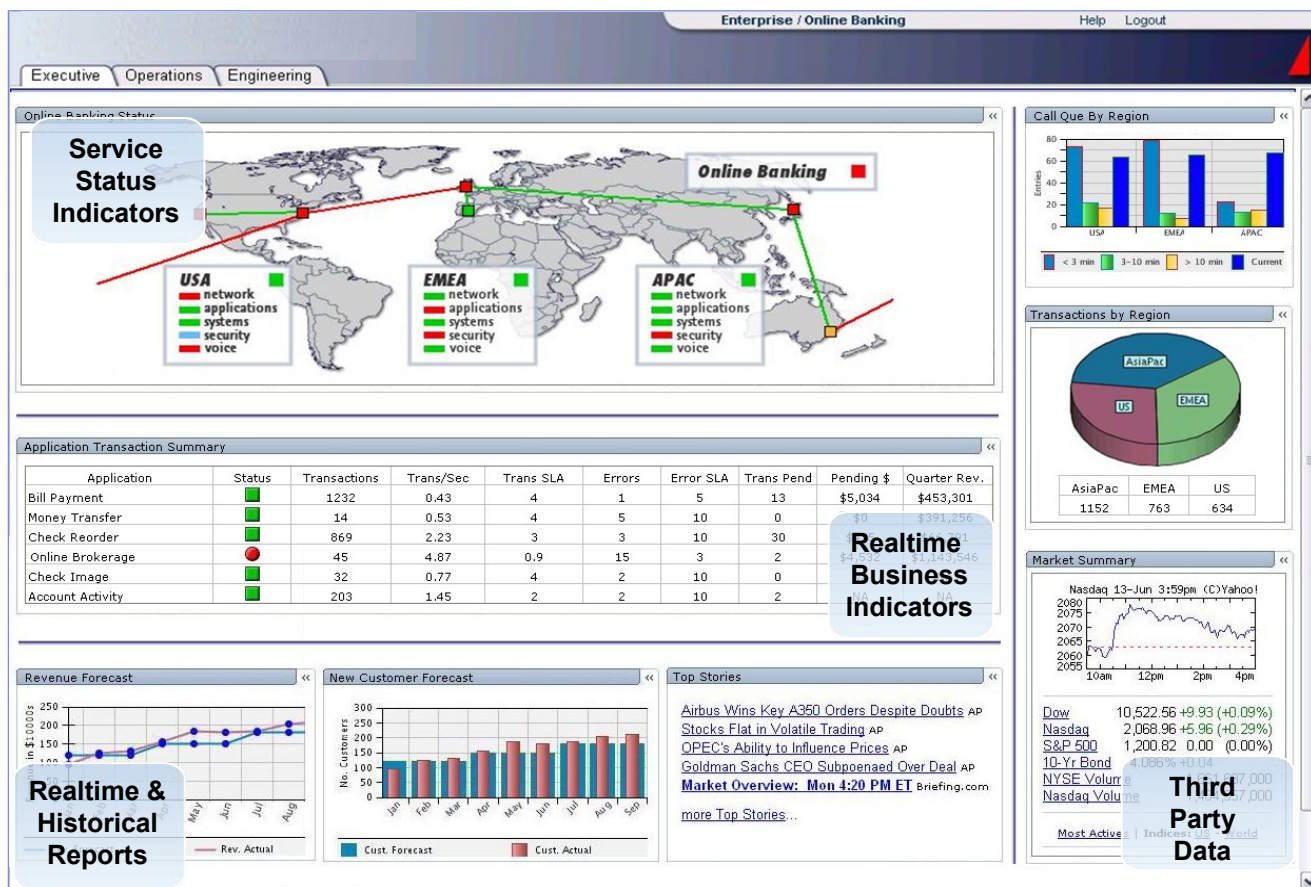
Note: All layers are inclusive of distributed and mainframe.



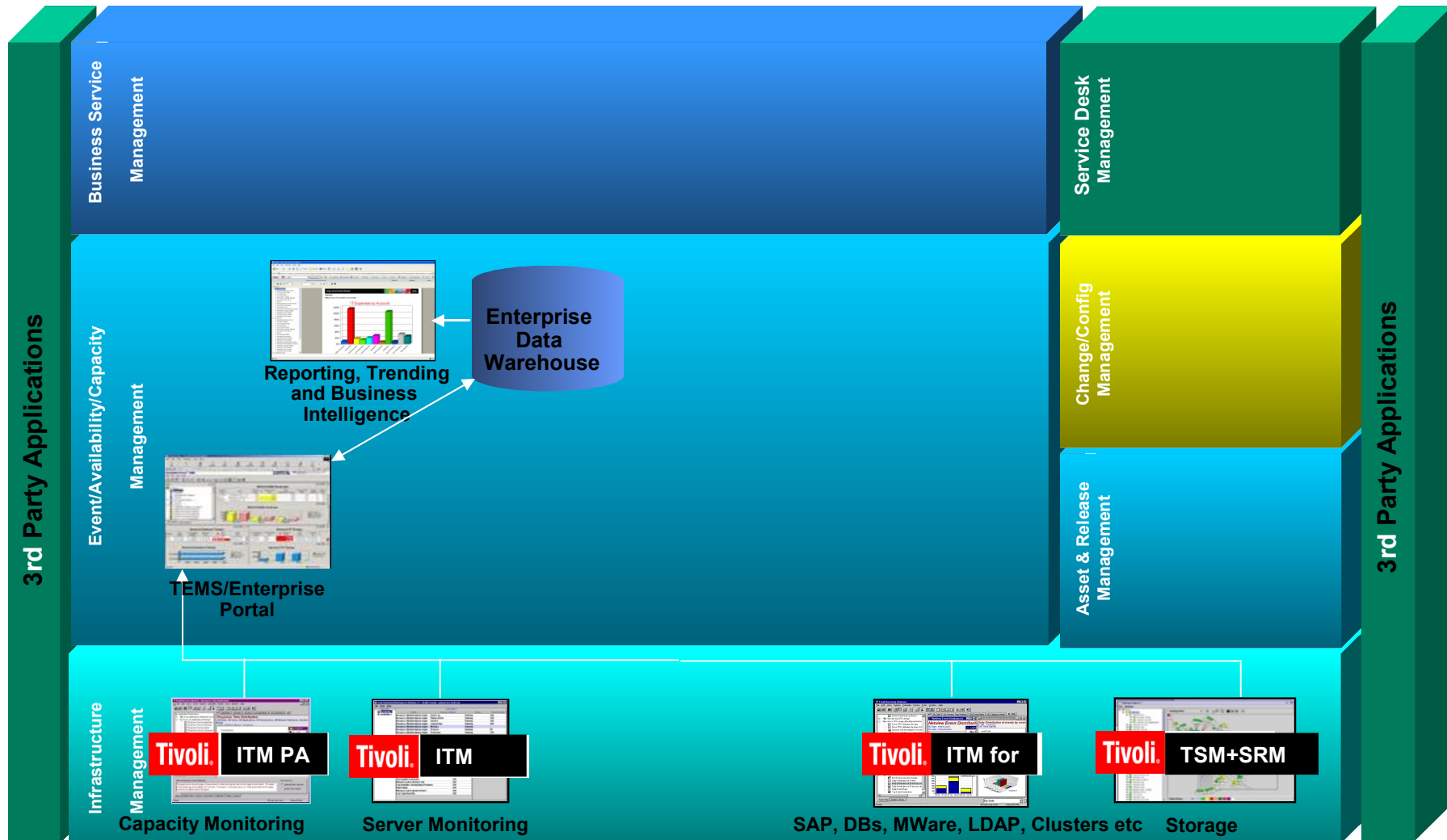
Business Service Management Vision

The “Single Pane of Glass” to Manage Your Business Services

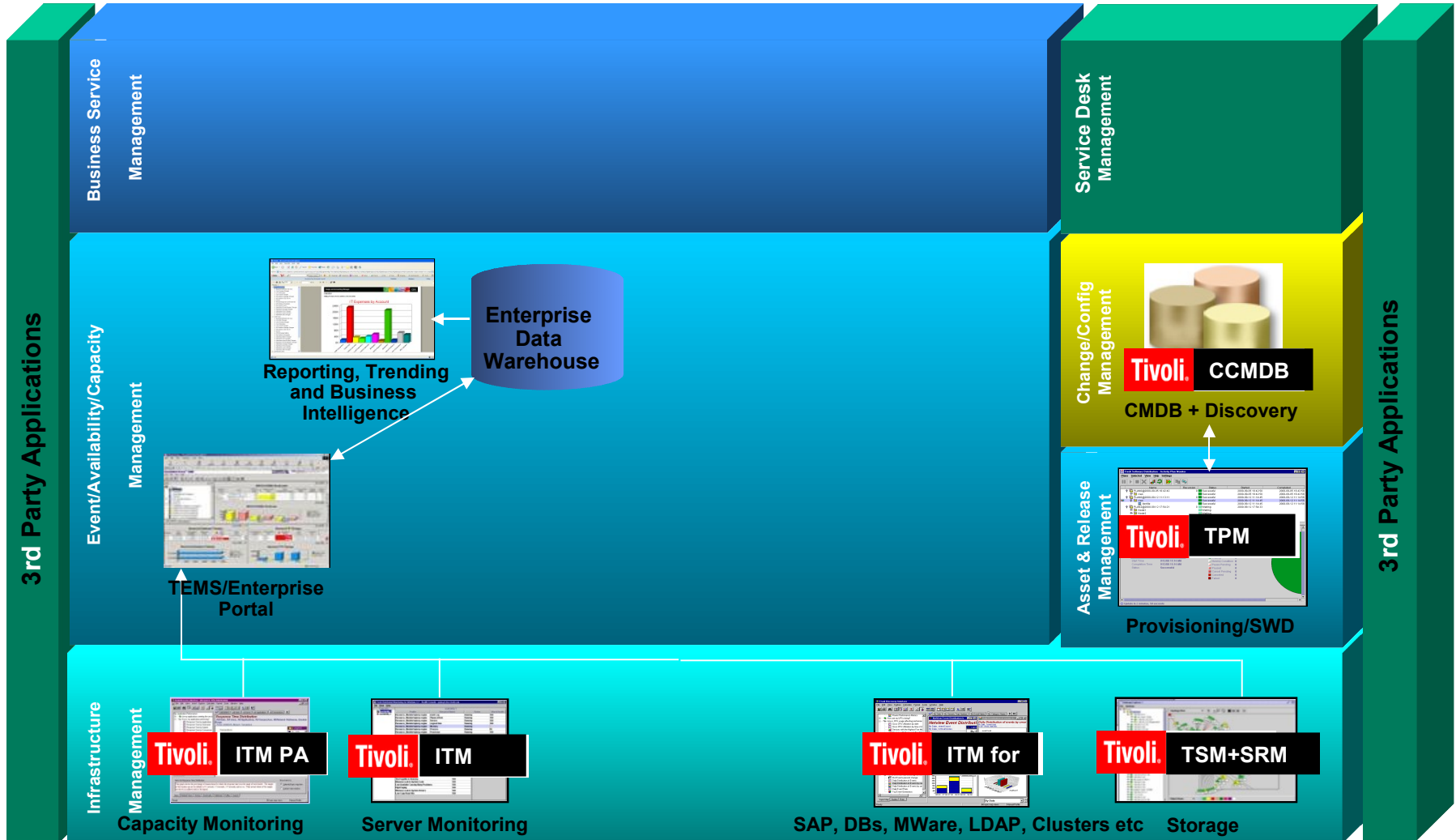
- Line of Business Views
- Service Health Views
 - Availability
 - Performance
 - SLA Status
 - E2E Visibility
- Business Activity Views
 - Real-time KPIs



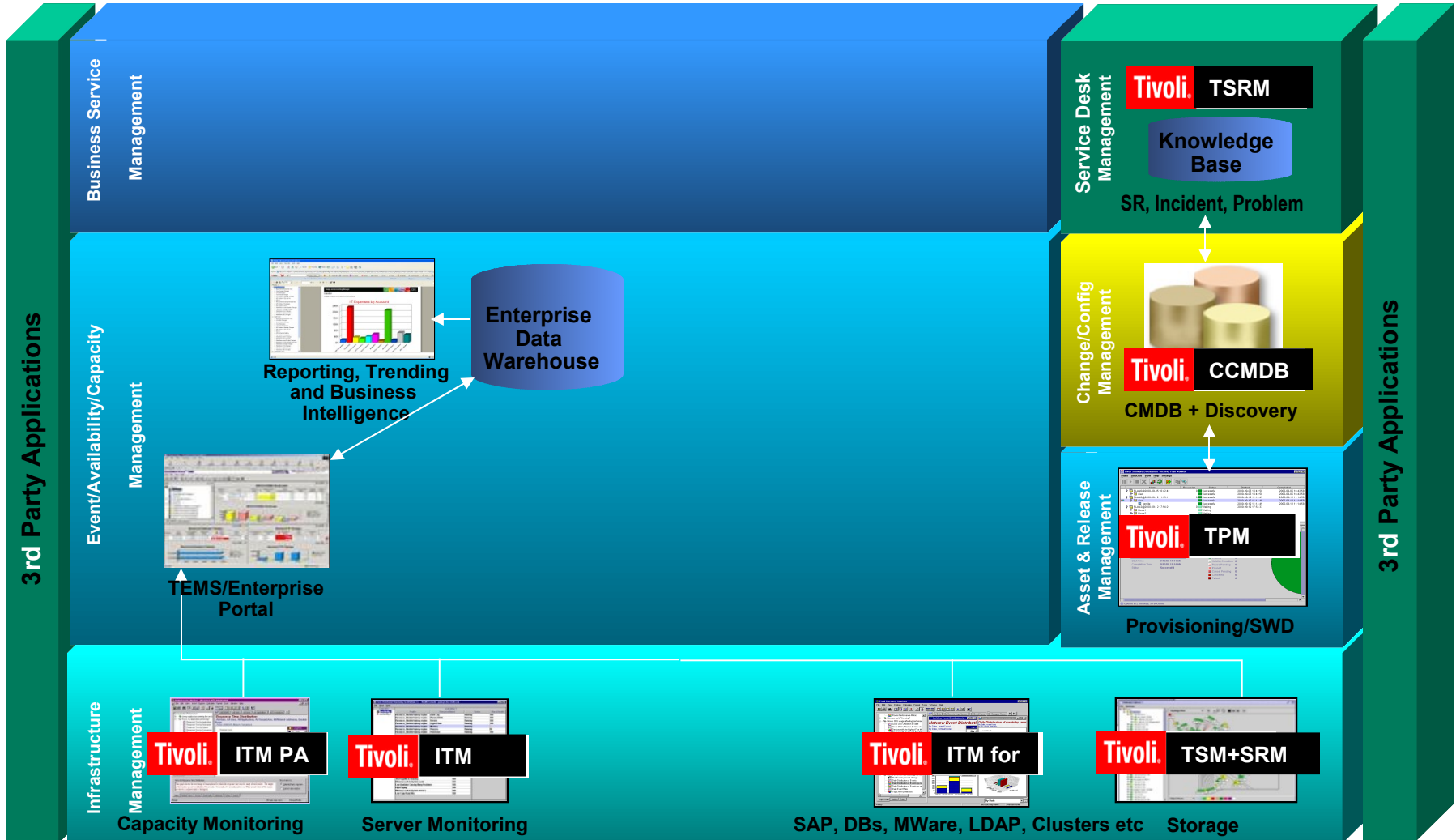
Tivoli Phased Approach – Phase 1



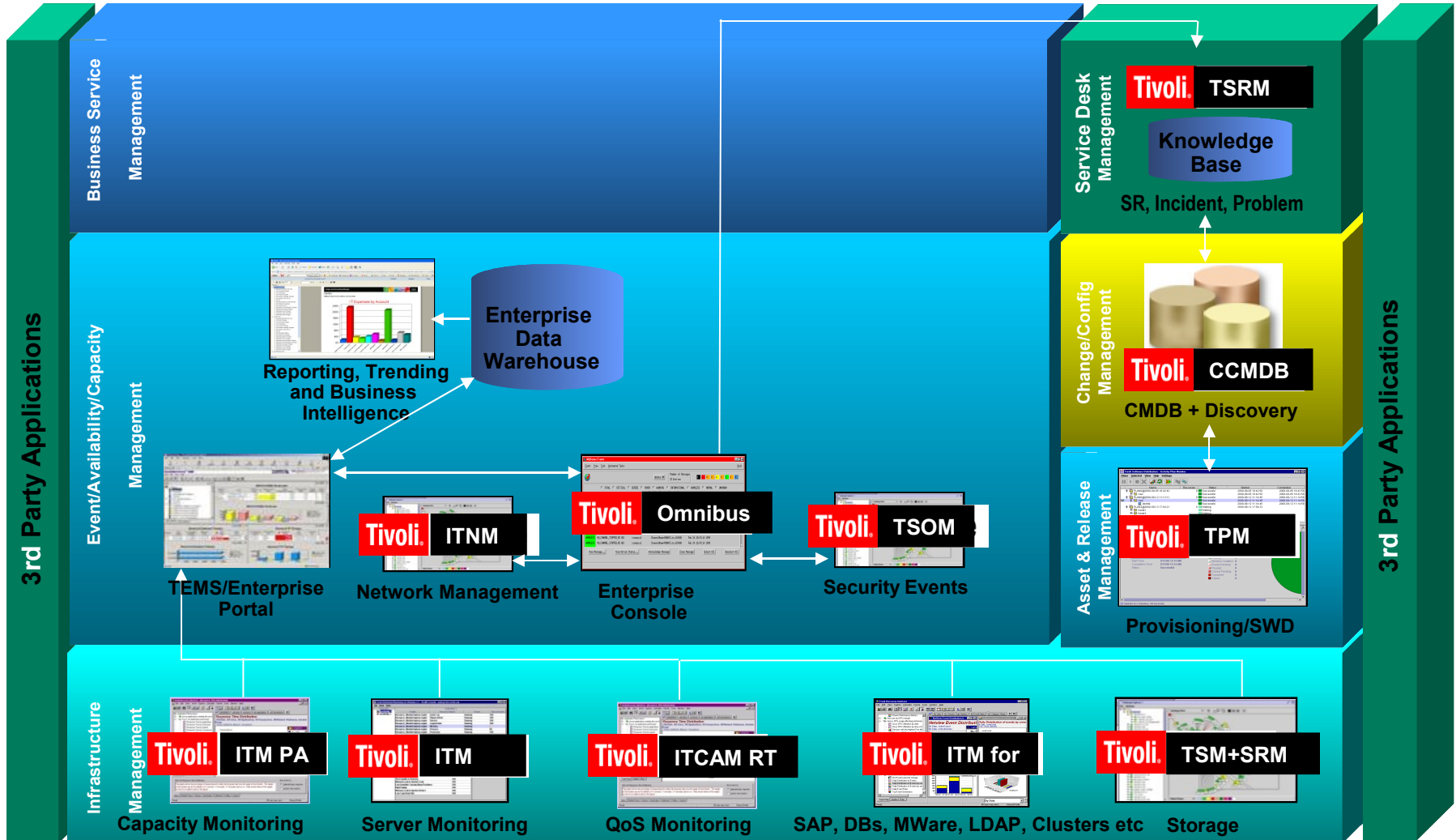
Tivoli Phased Approach – Phase 2



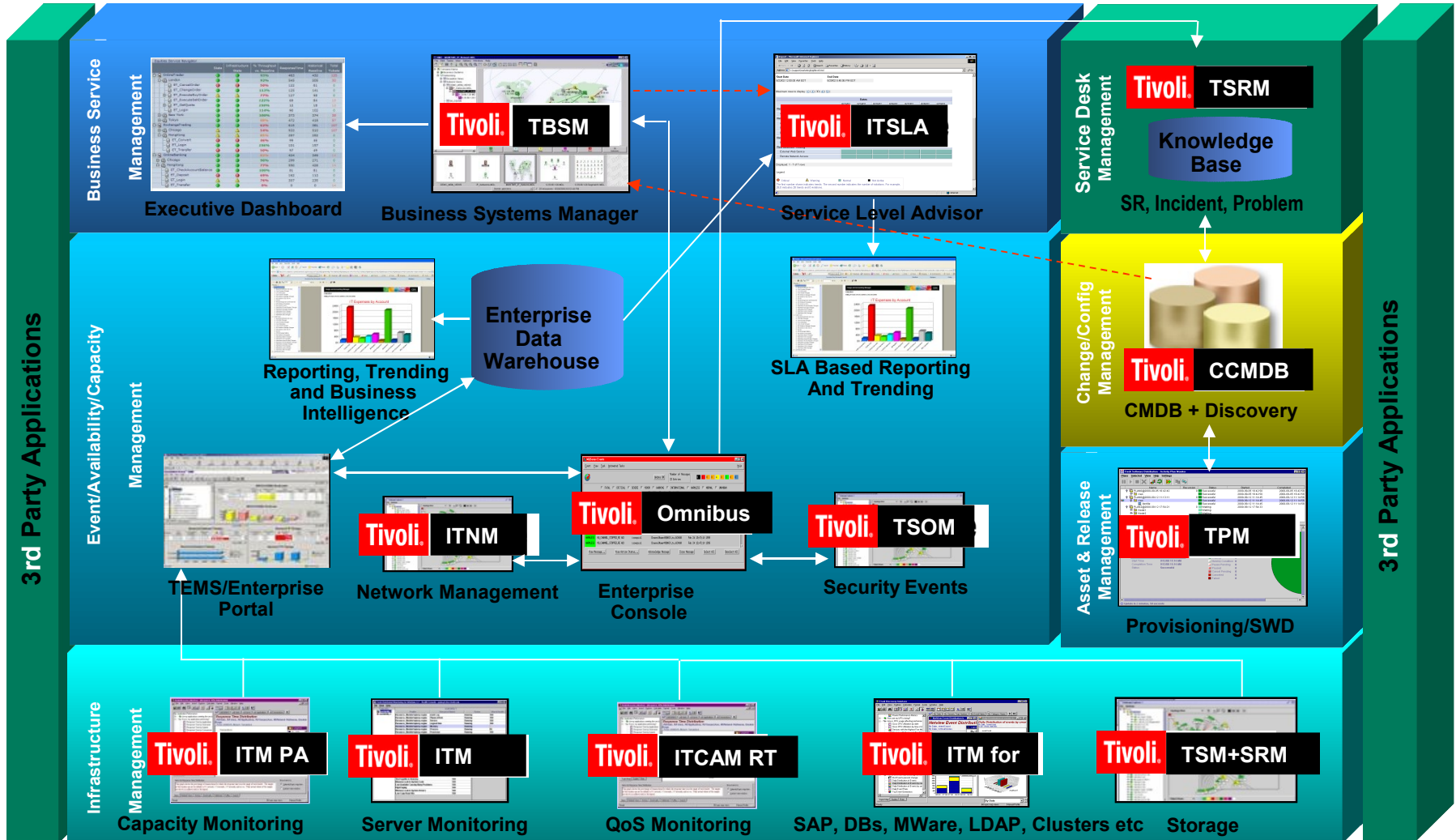
Tivoli Phased Approach – Phase 3



Tivoli Phased Approach – Phase 4



Tivoli Phased Approach – Phase 5

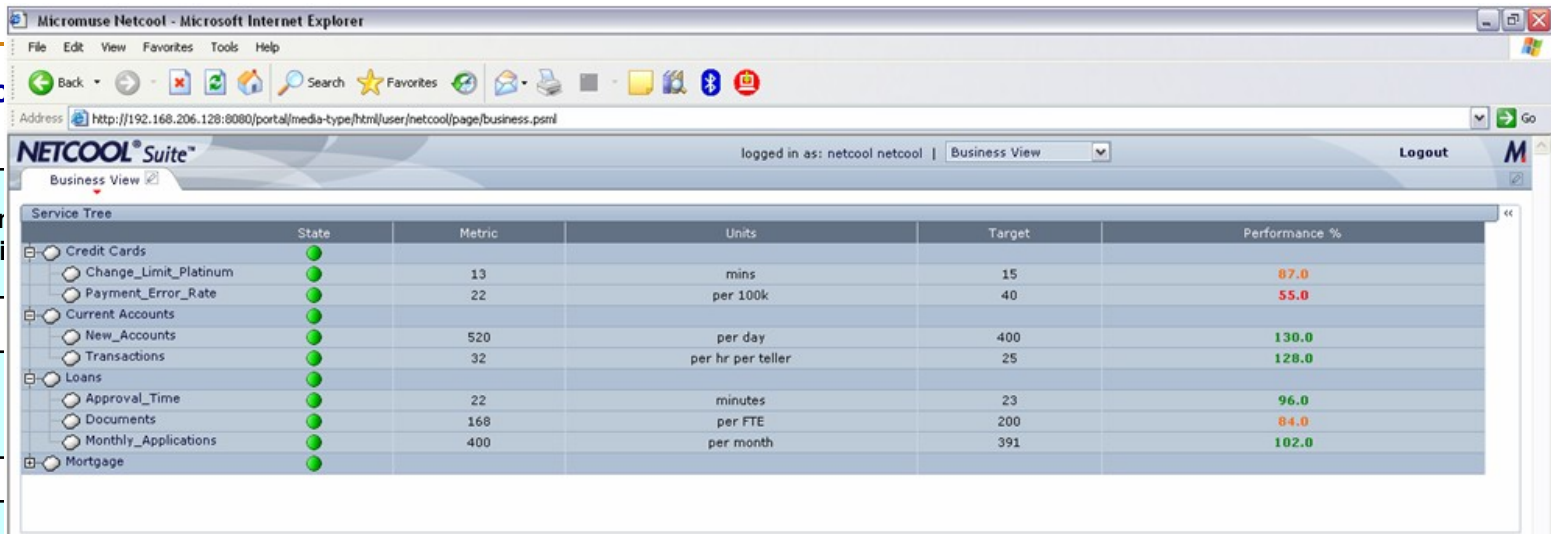


Align the Metrics to Manage Business Services

IT Service

Performance & Capacity

Usage

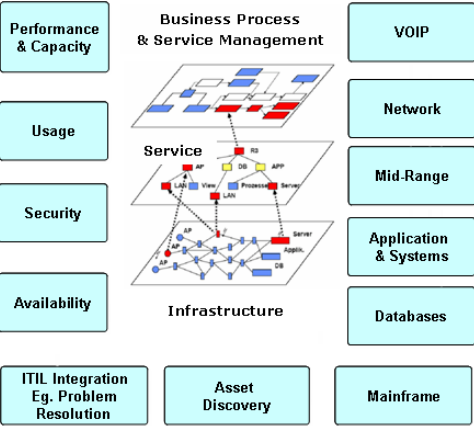


Units of payments

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credit cards

IT Service Matrix – Availability, Performance & Capacity



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Business Metrics - Capacity, Cost & Quality

Credit Card			
Value Category	Metric	Data	Units
Capacity	No of payments processed per FTE per month	37000	No of payments
Cost	Amortised sales costs	40	€
	Cost of capital	21	€
	Cost to service	28	€
	Transaction cost	50	€
Service Quality	Cross sell rate from credit cards	28%	% credit cards
	Error rates for payment processing	100,000 payments	
	Payment reject rate for data entry	1.7% - 3%	
	Time to open account (branch representative)	2-24 mins	
	Time to respond to approve application	1 day	
	Time to respond to query - credit limit change	30 mins	
	Time to respond to query - credit limit change - Web channel	15 mins	
	Timeliness standard for credit card processing	95% same day	% payments processed
ATM			
Value Category	Metric	Data	Units
Capacity	Weighted Availability - cash	% uptime	€ Threshold breach
	Weighted Availability - operational	%	% available by region
Cost	Over stock		
	Under stock		
	Annual Maint		€
Service Quality	Time to repair	mins	
	Stand in and deal	# per hour	
	Transaction failures		
	Branch response time		
Security Full back mode - mag strip only Sev 1			

Key Areas in Delivering Service Management

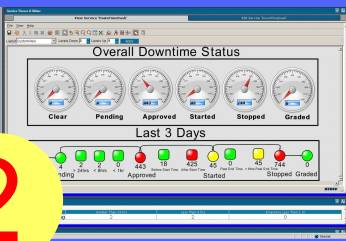


Experience

Real-time Transaction Performance, Service Status, and End-User & Service Experience - (ITCAM portfolio, 3rd Party)

2

Service Management Platform



How does this relate to the business service?



Dependencies

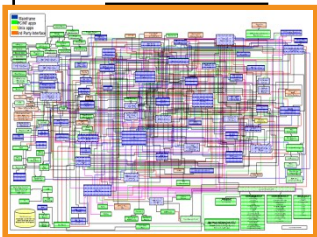
Relationship and Discovery Data – TADDM, CCMDB, MRO Asset, Inventory, Network Mgmt, BPEL, 3rd Party CMDB

3

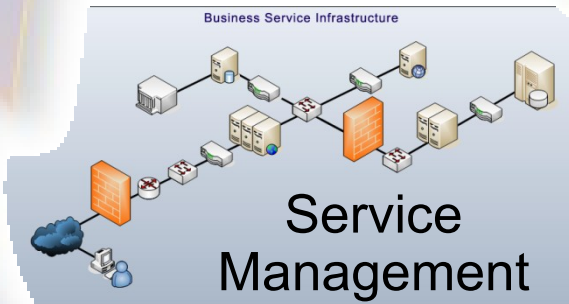


Infrastructure Events

1

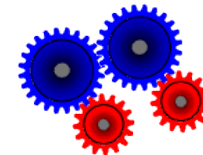


What's happening with the infrastructure?



Service Management

4



Business



What actions do we take to correct the problems?

6



Actions

Impact Analysis, Task Automation, Config, Provisioning, Activation, and Orchestration – TPM, TCM, TIO, Impact

5



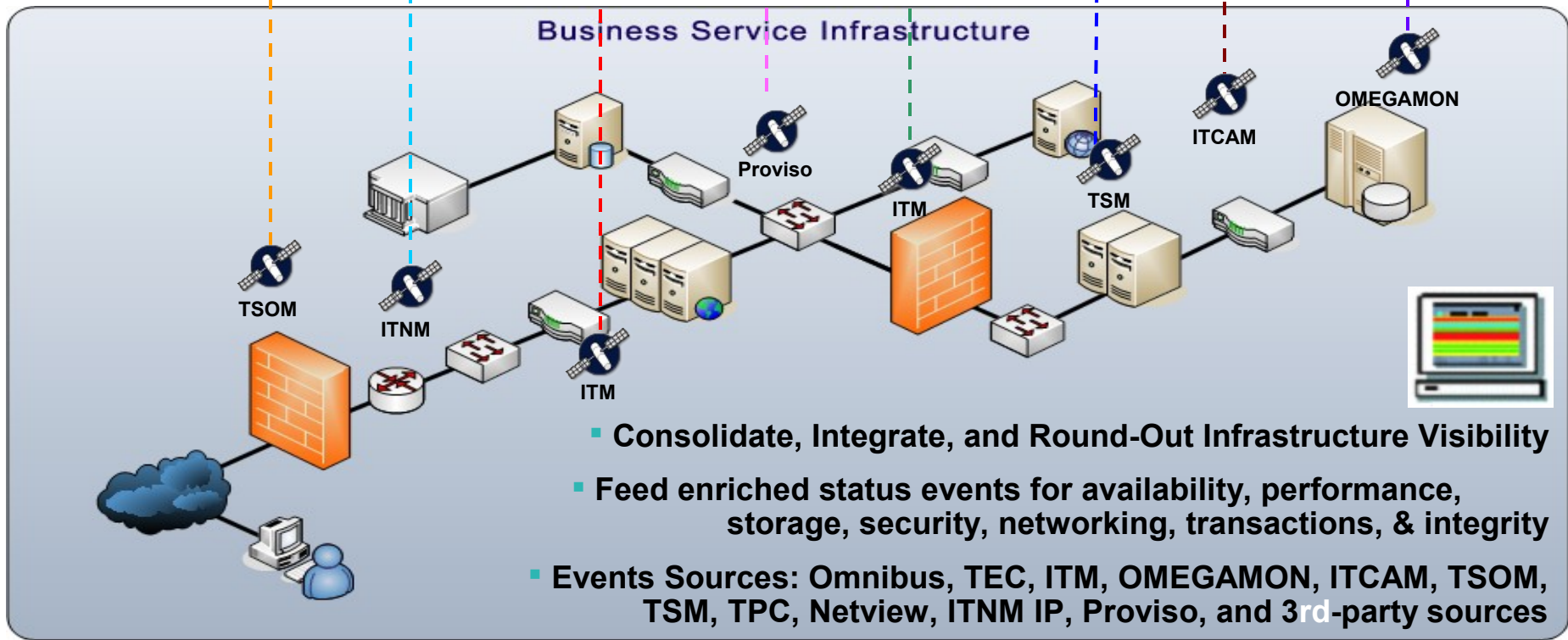
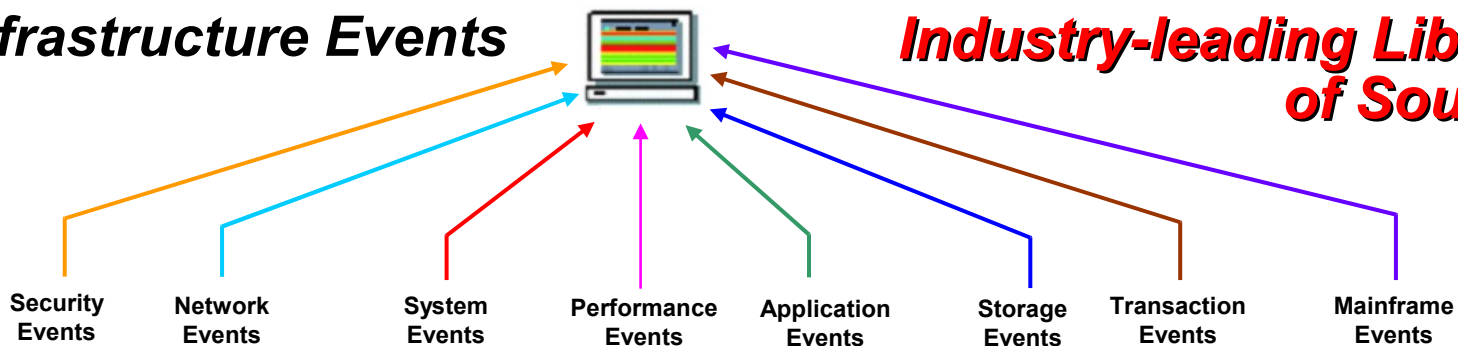
Views

Business Views: SLM/SLA, Rev\$\$, Health, Customer
Operational Views: RCA, Compliance, Impact Analysis, Incident Mgmt.

Service Infrastructure Events

1

Industry-leading Library of Sources



User and Service Experience

Measure Real Transactions

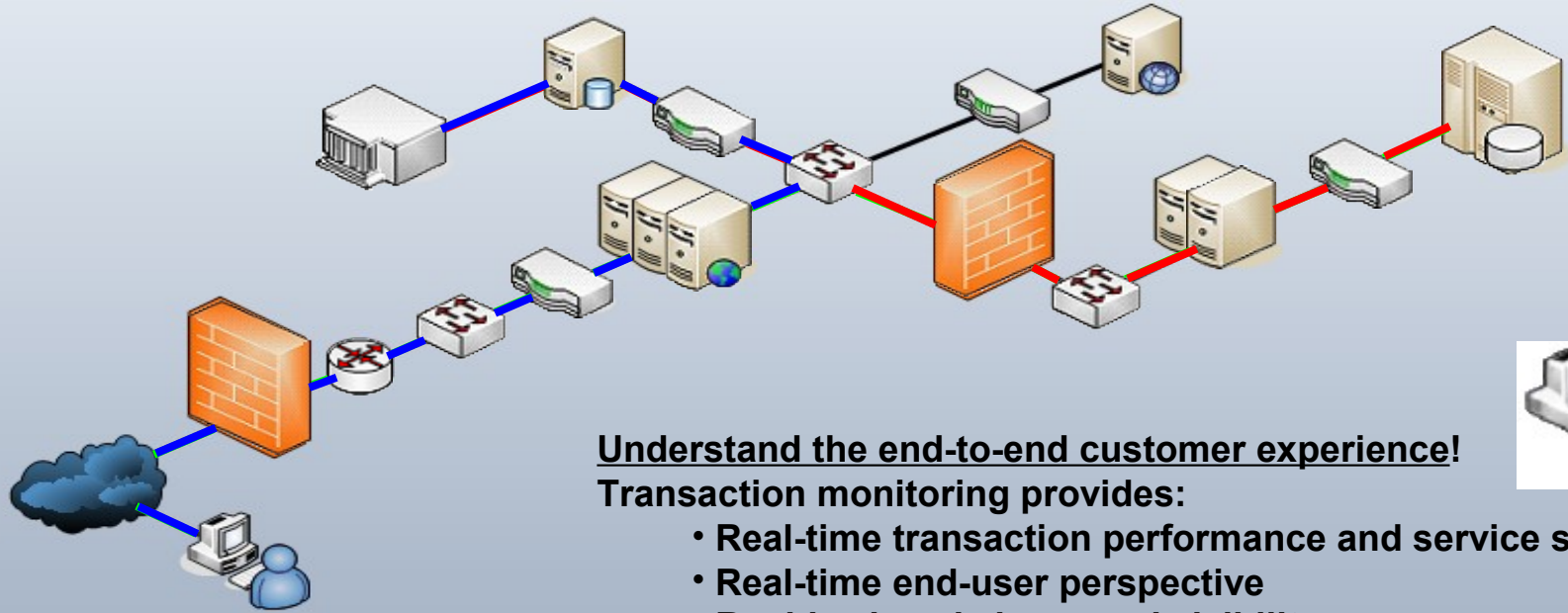


2

First Transaction Step **End-to-End Business.**

Service Tree	State	Tranz/15min	Prev/15min	Bad Tranz/15min	Tranz/Cur Hour	Bad Tranz/Hour	Qty Tranz \$0-99	Qty Tranz \$100-199	Qty Tranz \$200-299	Qty Tranz \$300-499	Qty Tranz \$500+	Total Value	Total Revenue	Total Cost
ATL Datacenter	●	918.0	829.0	6.0	3718.0	48.0	1904.0	940.0	98.0	2.0	0.0	\$130500.00	\$19575.00	\$130.50
Comcast	●	304.0	210.0	0.0	1409.0	4.0	750.0	290.0	39.0	0.0	0.0	\$45000.00	\$6750.00	\$45.00
GA Natural Gas	●	324.0	299.0	0.0	1209.0	5.0	501.0	350.0	30.0	2.0	0.0	\$43000.00	\$6450.00	\$43.00
GA Power	●	290.0	320.0	0.0	1100.0	46.0	653.0	300.0	29.0	0.0	0.0	\$42500.00	\$6375.00	\$42.50
LAX Datacenter	●	861.0	812.0	0.0	3269.0	58.0	6411.0	1019.0	79.0	3.0	0.0	\$144000.00	\$21600.00	\$144.00
City of Los Angeles	●	339.0	287.0	0.0	1233.0	51.0	1250.0	278.0	28.0	0.0	0.0	\$51000.00	\$7650.00	\$51.00
DirectTV	●	288.0	250.0	0.0	1002.0	5.0	1750.0	407.0	25.0	0.0	0.0	\$51000.00	\$7650.00	\$51.00
SBC Telephone	●	34.0	275.0	0.0	1034.0	2.0	3411.0	334.0	26.0	3.0	0.0	\$42000.00	\$6300.00	\$42.00

Business Service Infrastructure



Understand the end-to-end customer experience!

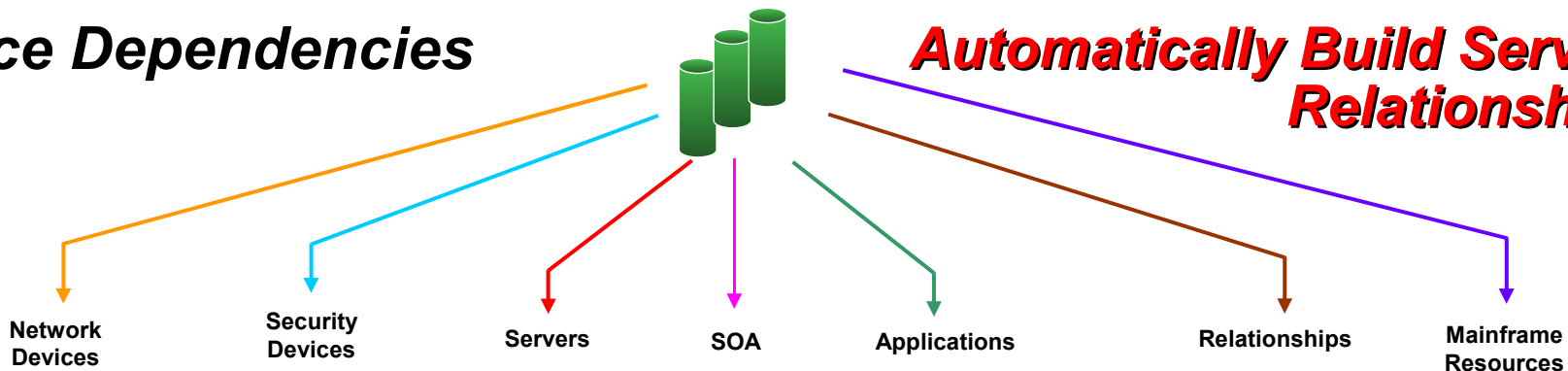
Transaction monitoring provides:

- Real-time transaction performance and service status
- Real-time end-user perspective
- Rapid value via improved visibility

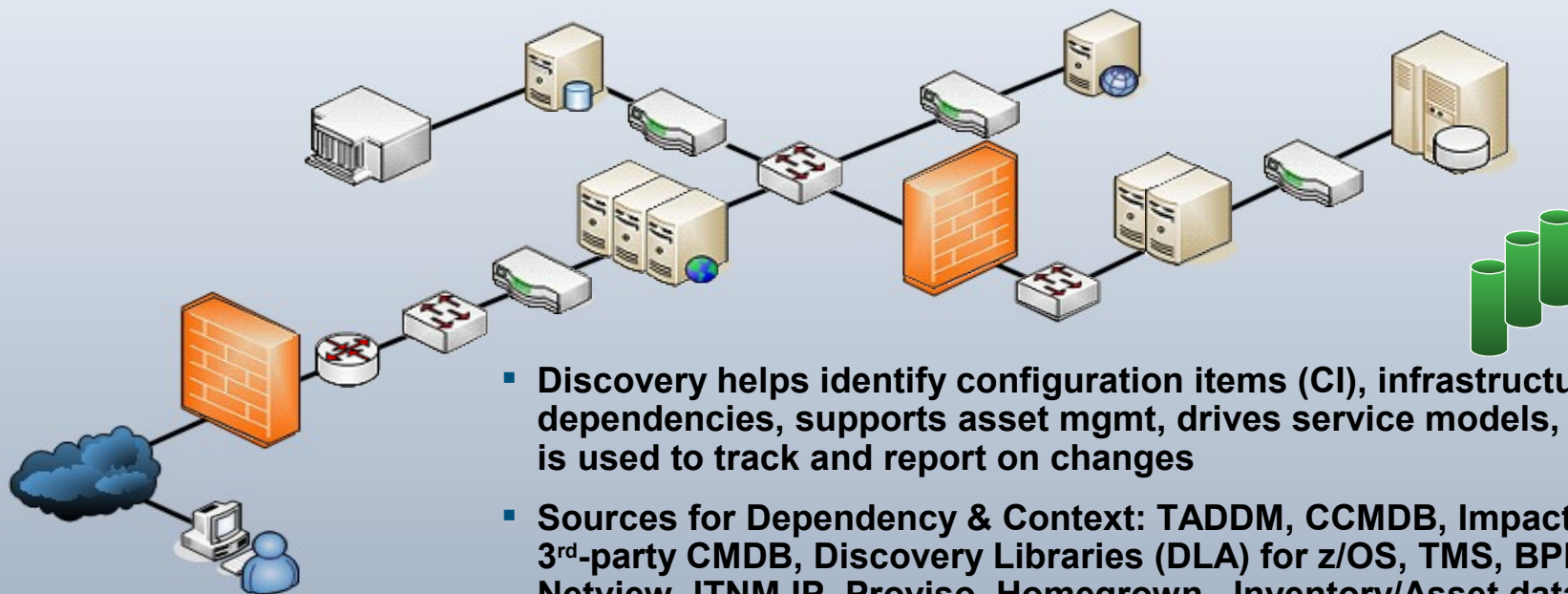


Service Dependencies

3



Business Service Infrastructure

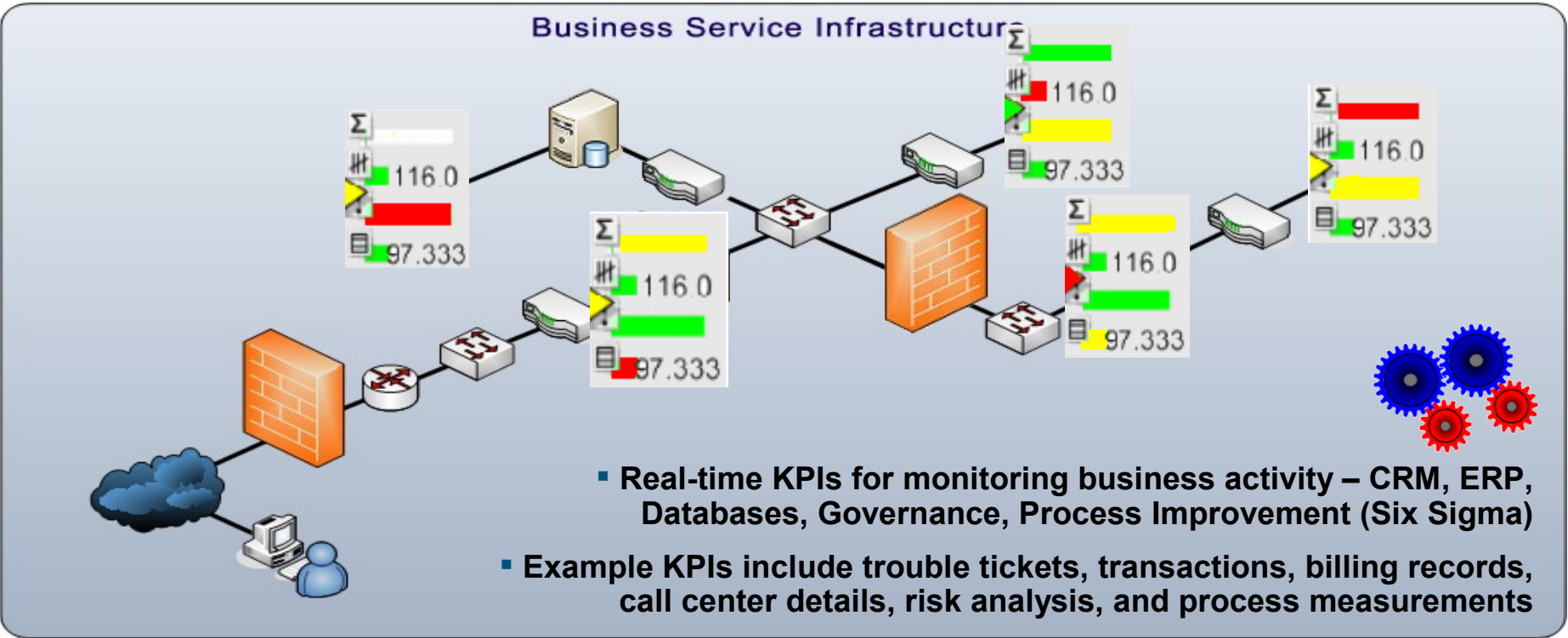
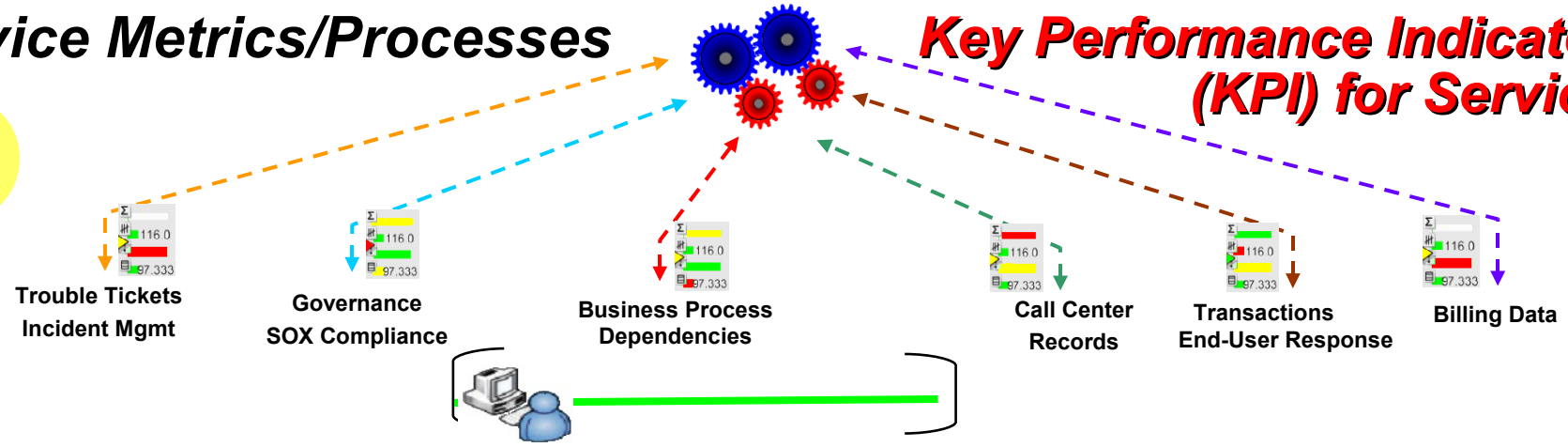


- Discovery helps identify configuration items (CI), infrastructure dependencies, supports asset mgmt, drives service models, and is used to track and report on changes
- Sources for Dependency & Context: TADDM, CCMDB, Impact, 3rd-party CMDB, Discovery Libraries (DLA) for z/OS, TMS, BPEL, Netview, ITNM IP, Proviso, Homegrown, Inventory/Asset data

Service Metrics/Processes

Key Performance Indicators (KPI) for Services

4



Targeted Service Views

Service Intelligence

5

Operational Views – GIS, Charts, Events

Server Dashboard

Configuration Management

Server	Type	Operating System	IP Address
d02rdb108	Pseries	AIX	9.45.74.171

Change Management

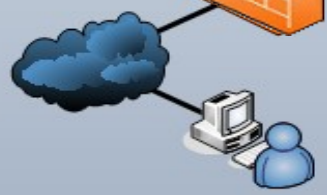
Recent Changes	Risk	Scheduled Start	Scheduled End	Abstract
848981	Medium	06-10 21:00	06-10 23:00	APAR Updates
848324	High	06-11 15:00	06-11 19:00	

Omnibus Events

Node	Summary	Tally	Severity	Customer	LastOccurrence
d02rdb108.southbury.ibm.com	DVC Failed - Pings Complete: Timed out	302	5	Lenovo	1162579115
d02rdb108.southbury.ibm.com	Event based attribute lsmicmpStatusRules of template Host and service d02rdb108.southbury.ibm.com has value Bad	1	5		1162525167
Application DB2:d02rdb108.southbury.ibm.com	Overall Attribute of the Application tag of DB2:d02rdb108.southbury.ibm.com is Bad.	1	5		1162525167
d02rdb108.southbury.ibm.com	Host children of DB2:d02rdb108.southbury.ibm.com (d02rdb108.southbury.ibm.com) are Bad.	1	5		1162525167
d02rdb108.southbury.ibm.com	Overall Attribute of the Host tag of d02rdb108.southbury.ibm.com is Bad.	1	5		1162525167
Application DB2:d02rdb108.southbury.ibm.com	Overall Attribute of DB2:d02rdb108.southbury.ibm.com is Bad.	1	5		1162525167
d02rdb108.southbury.ibm.com	Overall Attribute of d02rdb108.southbury.ibm.com is Bad.	1	5		1162525167

Deep Real-time Federated Data across Sources

Integrate Manager views on what matters most to quality delivery
 Operational Consoles for Service Impact & RCAs, Infrastructure
 Service Intelligence Management, and Compliance



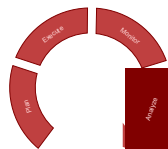
Targeted Service Actions

Automatically Provision Resources

6

Change, Provision, & Automate

- Shorten Mean-Time to Repair (MTTR)
- Reduce capital and labor costs
- Setup time reduced to hours vs. days
- Increase service delivery quality



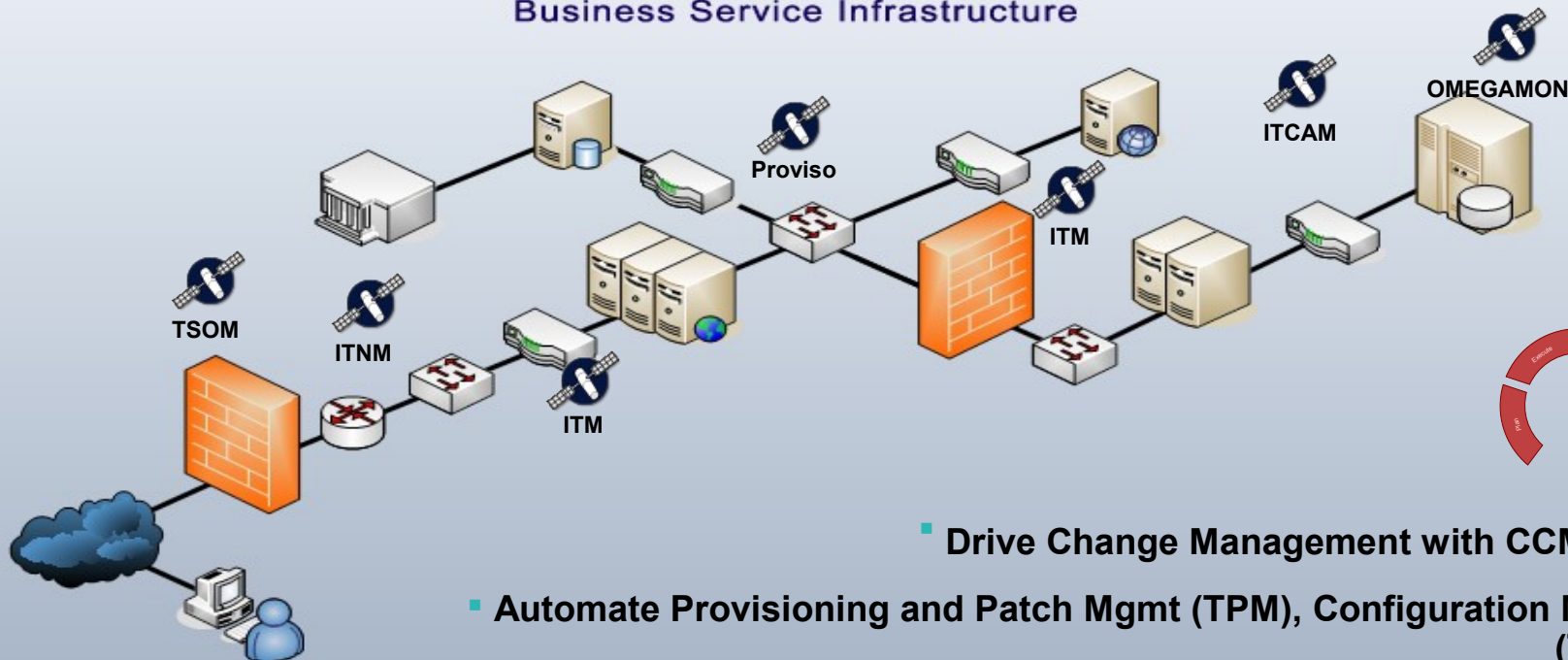
Resource Pool



Actions

- Increase Server capacity
- Add Redundant Database
- Need WebServer to meet demand
- Manage new resources

Business Service Infrastructure



■ Drive Change Management with CCMDB

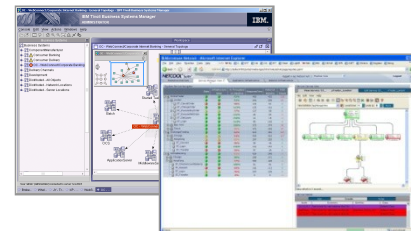
■ Automate Provisioning and Patch Mgmt (TPM), Configuration Mgmt (TCM)

■ Automate operational tasks and enrich service context w/ Tivoli Impact

Benefits of IBM Service Management

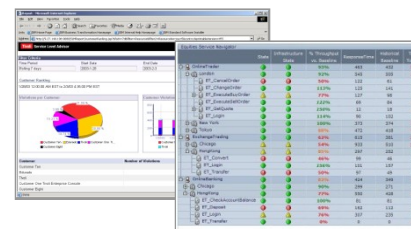
Visualize

- *How does the underlying service infrastructure support the provided application or service?*



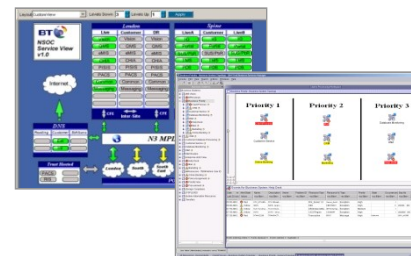
Prioritize

- *Are problems impacting service availability, performance, integrity and delivery against SLAs?*



Communicate

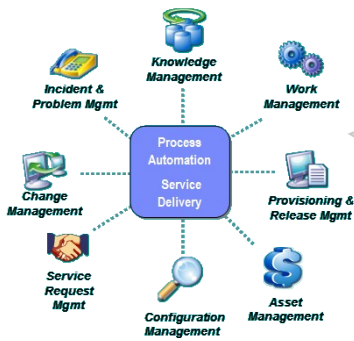
- *How to deliver contextual service intelligence to the operational staff that must manage service performance?*
- *How to deliver the relevant business metrics to the lines of business that must manage service level agreements?*



“IBM (software) allows us to view our IT infrastructure from a business process perspective in real-time, and respond to problems with the correct priority. This helps to ensure that we maintain the service levels that our customers demand.”

– Arndt Kollett , Lead Architect, E.ON IS GmbH, Germany

Sample Value Progressions – Value Grows as Needs Change



Incident and Problem Management

Adds self-help to LOB for reduced costs and call volume

e.g. TSRM

Service Request and Fulfillment

Adds automation of service deployment reducing errors

e.g. TSRM

Service Request and Fulfillment

Adds automation of service deployment reducing errors

e.g. TSRM

Asset, Change and Configuration Management

Adds Awareness, Change and Cost Control of Deployment

e.g. TAMIT, TADDM, CCMDB

Incident and Problem Management

Adds proactive awareness of incidents due to changes

e.g. SRM, TEC

Server and Application Provisioning Release Management

Adds Automated Changes to Configurations further reducing errors

e.g. TPM

Server and Application Provisioning Release Management

Adds Automated Deployment of Service Requests

e.g. TPM, RPM

Server and Application Provisioning Release Management

Adds Automated Changes to Configurations

e.g. TPM

Asset, Change and Configuration Management

Add Control and Discovery, reducing errors due to changes

e.g. TAMIT, TADDM, CCMDB

Service Request and Fulfillment

Automate end user requests into IT

e.g. RSRM

Asset, Change and Configuration Management

Discovery and App Mapping to understand environment

e.g. TADDM

Incident and Problem Management

Identify and Resolve incidents BEFORE they become a problem

e.g. TSRM, TEC

Maximize asset utilization, reduce cost, mitigate risk, exploit asset convergence

Thank
You

The words "Thank You" are displayed in a large, bold, sans-serif font. Each letter is filled with a different photograph of a diverse group of people, including men and women of various ethnicities, smiling or looking thoughtfully at the camera. The text is centered on a white background.

Bu sunum 28 Mayıs 2009 tarihinde Swiss Otel'de yapılan Tivoli Pulse 2009 toplantısı için hazırlanmıştır.

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