



IBM Software Group

IBM Systems & Service Management

What is Tivoli?

*Angus Jamieson
Tivoli Technical Ambassador &
IBM Certified IT Specialist*

ON DEMAND BUSINESS™

Tivoli software

Tivoli Enterprise Portal



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What is Tivoli?

- Tivoli is Market Expertise
- Tivoli is Service Management
- Tivoli is People: Clients, User Groups, Partners and Employees
- Tivoli is Evolution and Growth
- Tivoli is Solutions
- Tivoli is the Market Leader



Tivoli is Service Management

Helping clients deliver quality service through Visibility. Control. Automation.™

Visibility



*See your
Business*

*Respond faster
and make better
decisions.*

Control



*Manage risk and
Compliance*

*Assure quality
and reduce risk.*

Automation



*Improve your
Business*

*Lower costs and
build agility.*



Tivoli is a Vibrant User Group Community

Peers sharing best practices

Tivoli UK User Group (www.tivoliusergroup.com) next meets December 4th

- *Groups of clients who actively work with Tivoli solutions and convene to learn and share*
- *Independent organizations owned and run by members*

Global Tivoli User Community Facts:

<http://www.tivoli-ug.org/>

- 106 worldwide user groups
- 14,000+ Registered members
- 14,600 members estimated for 2007
- 85% hold 2+ meetings/year
- 17,600 site visits/month and rising..
- Maximo User Groups have joined the community

Europe/Middle East/Africa:

23 user groups
2,713 members

North America:

52 user groups
6,428 members

Latin America:

7 user groups
1006 members

Global:

8 user groups
451 members

Asia Pacific:

17 user groups
2,199 members



as of 11/07



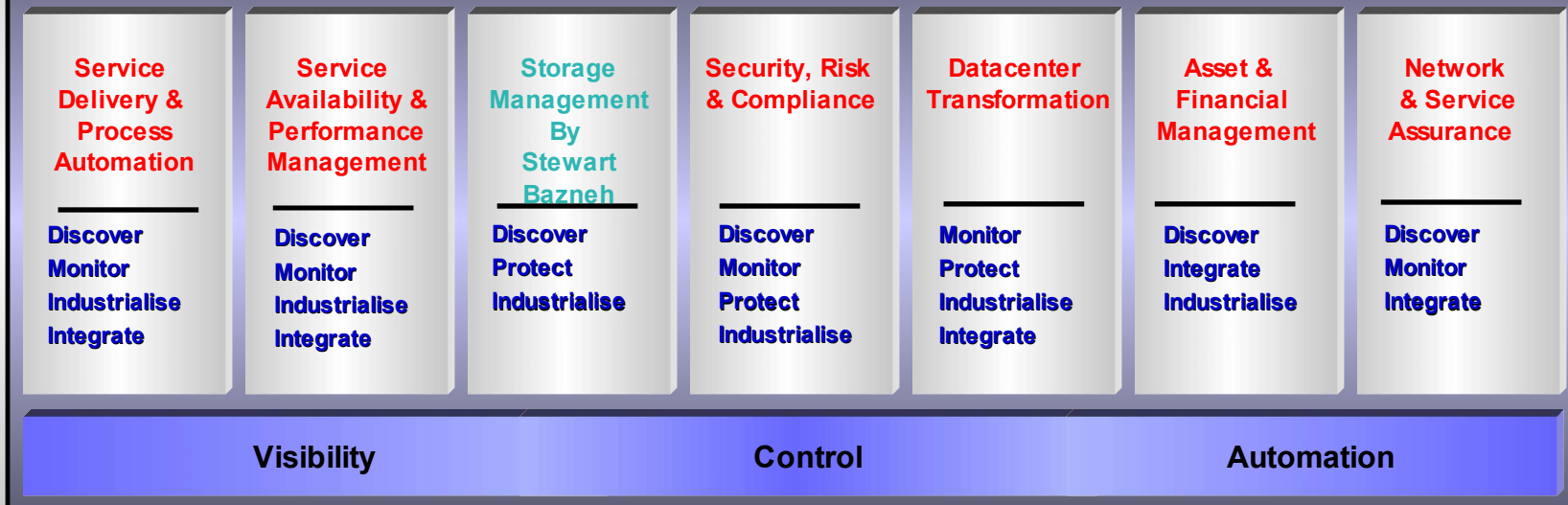
Tivoli is Solutions

Integrated service management platform for clients to deliver quality service

IBM Service Management

Best Practices, Methodologies, and Services

Service Management Platform



Entry Points: **Discover, Monitor, Protect, Industrialise, Integrate.**



Tivoli is the Market Leader

Market Share Leader

- #1 WW IT Operations Management S/W - Gartner
 - 6th consecutive year
 - \$11.4B market opportunity
- #1 in Performance & Availability – IDC
- #1 in Event Automation – IDC
- #1 in Configuration Management – Gartner
- #2 in Job Scheduling – Gartner
- #1 in Network Management – Gartner
- #2 in IP Fault and Event Mgmt – OSS Observer
- #1 in Server Provisioning – IDC
- #1 in Archive and Hierarchical Storage Mgmt – IDC
- #2 in DBMS Management
- #1 in Identity and Access Management - IDC
- #1 in Enterprise Asset Management – ARC Insight
- #1 in Service Assurance, Event Management and Performance Management- OSS Observer

Gartner Magic Quadrant Leadership

- SRM/SAN Management
- Application Management
- User Provisioning
- Web Access Management
- IT Event Correlation and Analysis
- Enterprise Asset Management: Power Generating, Manufacturing and Distribution Utility



Recent Awards

- 2007 Plant Engineering Magazine Reader's Award, Silver in Best Maintenance Software category
- 2006 VARBusiness Annual Report Card Award, Enterprise Storage Management S/W
- 2006 VARBusiness Tech Innovator Company of the Year, IBM Tivoli Continuous Data Protection for Files



IBM Software Group

Addressing key IT challenges with IBM Service Management

Angus Jamieson



ON DEMAND BUSINESS™

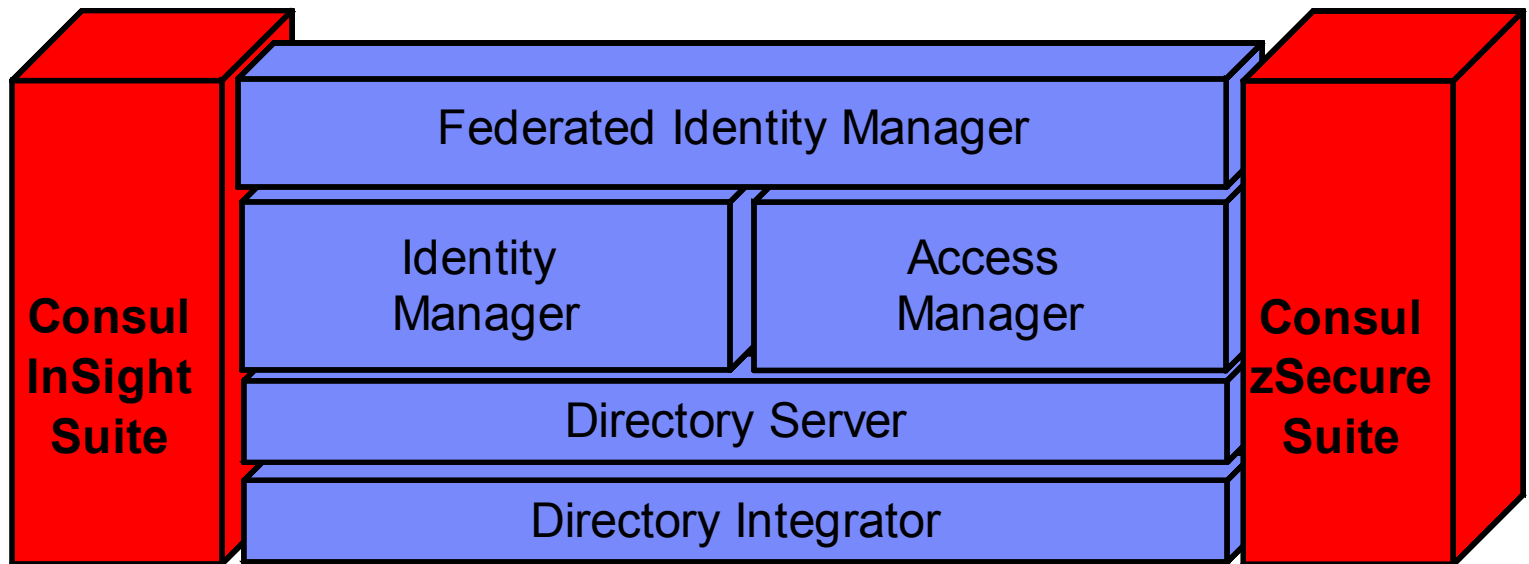
Tivoli software

Tivoli Enterprise Portal



© IBM Corporation

Access: IBM Tivoli Security Solutions

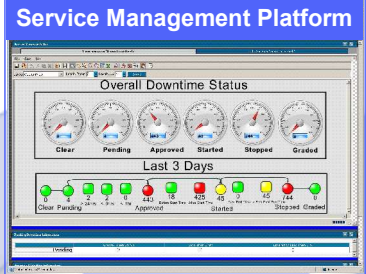


Leveraging Knowledge of People and Processes to Create Business Value



Service Management Requires a Closed-Loop Approach

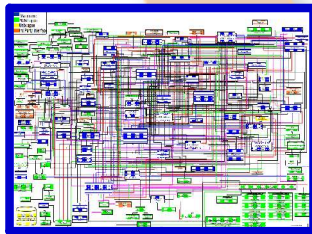
- Service Dashboard
- Business Service Management



- Service Level Management
- Infrastructure, Application Discovery and Mapping

How does this relate to the business service?

- Server monitoring
- Storage monitoring
- Network monitoring
- Data monitoring
- Application monitoring



What's happening with the infrastructure?



What actions do we take to correct the problems?

- System reconfiguration
- Data restore
- User identity provisioning
- System and application restart
- Infrastructure deployment

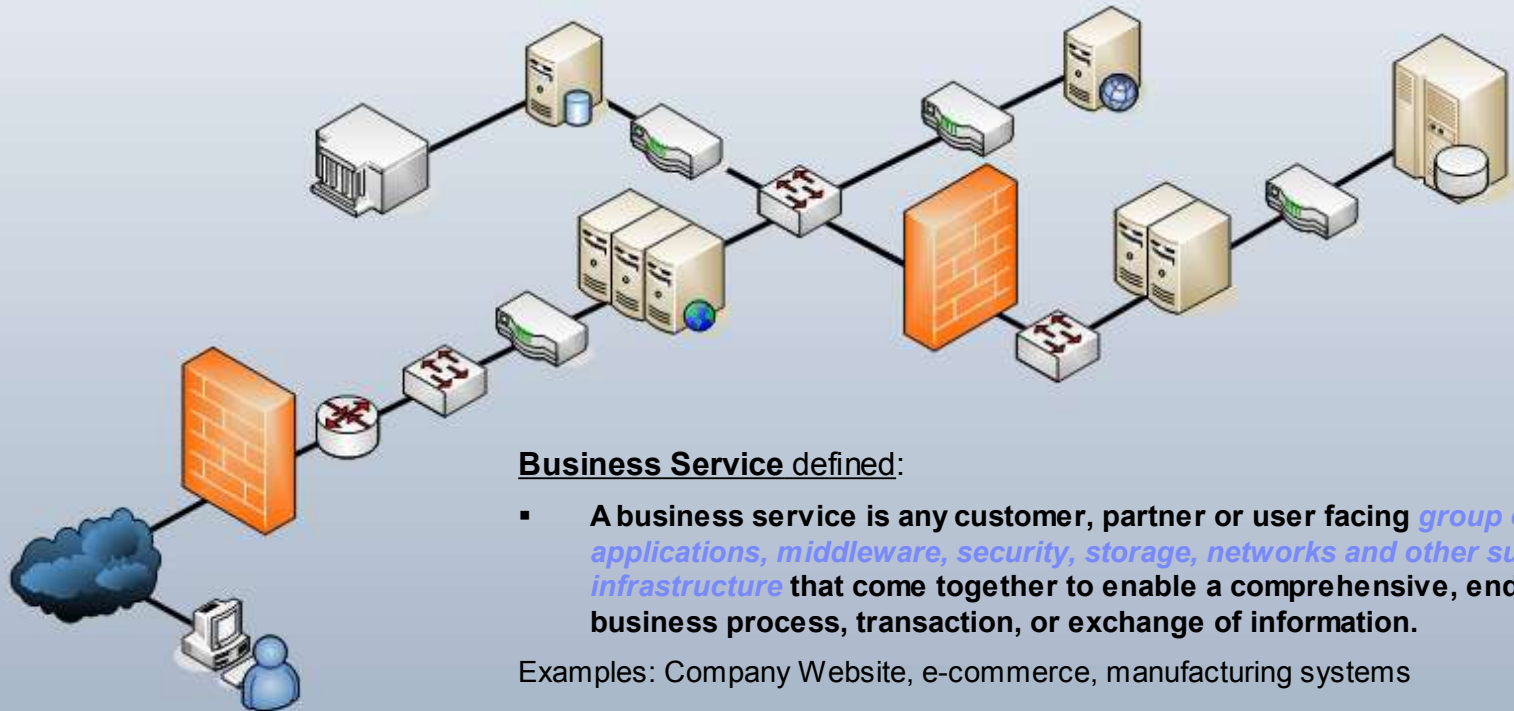


What is a Business Service?

Traditional understanding:

- A customer, partner or user facing *business application*.
 - Examples: SAP, Seibel, Oracle, Microsoft Exchange

Business Service Infrastructure



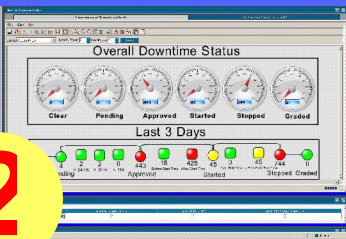

Business Service defined:

- A business service is any customer, partner or user facing *group of applications, middleware, security, storage, networks and other supporting infrastructure* that come together to enable a comprehensive, end-to-end business process, transaction, or exchange of information.

Examples: Company Website, e-commerce, manufacturing systems


Key Areas in Deloitte Service Management

Service Management Platform

Experience

Real-time Transaction Performance, Service Status, and End-User & Service Experience



Dependencies

Relationship and Discovery Data

2

How does this relate to the business service?

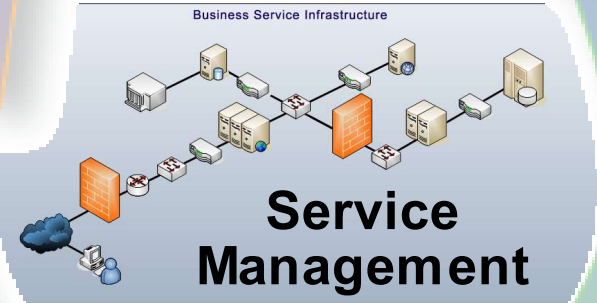
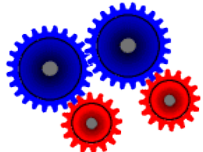
3




Infrastructure Events




1

Business Metrics



4



Actions

Impact Analysis, Task Automation, Config, Provisioning, Activation, and Orchestration

6

5



Views

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

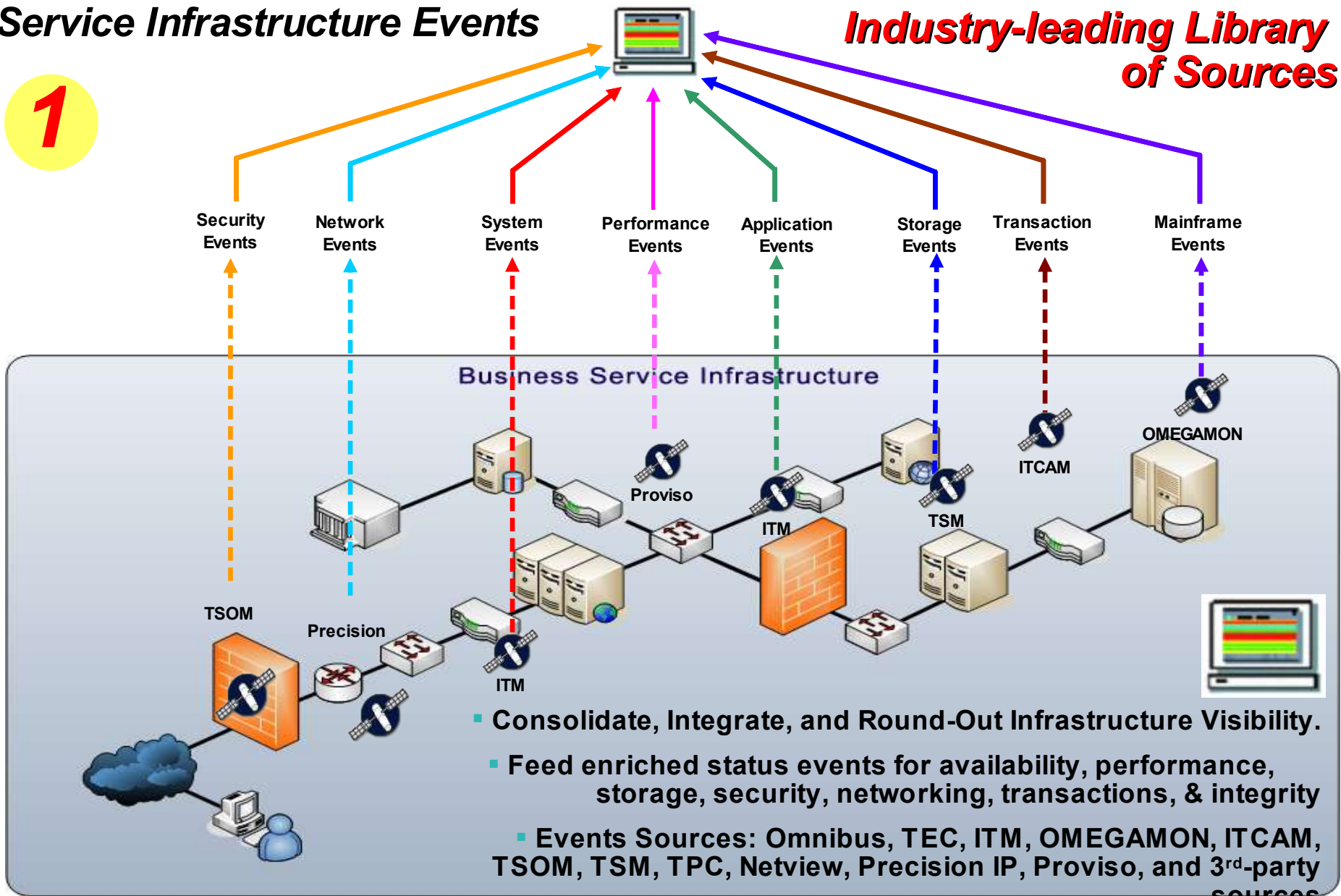
What's happening with the infrastructure?

What actions do we take to correct the problems?

Service Infrastructure Events

Industry-leading Library of Sources

1



- Consolidate, Integrate, and Round-Out Infrastructure Visibility.
- Feed enriched status events for availability, performance, storage, security, networking, transactions, & integrity
- Events Sources: Omnibus, TEC, ITM, OMEGAMON, ITCAM, TSOM, TSM, TPC, Netview, Precision IP, Proviso, and 3rd-party sources

IBM Tivoli Monitoring for Microsoft Applications

Systems Management Support

**Operating
Systems**

**Wintel Virtual
Servers**

**Microsoft
SQL**

**Microsoft
Exchange**

**Microsoft
Infrastructure**

**Microsoft
Applications**

**Extending
Microsoft
Environments**



At a Glance - Tivoli Monitoring

Operating Systems	Infrastructure	Application and Collaboration	Business Integration	Web Environment	Database	Universal Agent	
Windows	VMware	Exchange .Net Biztalk Commerce Content Manager Host Integration ISA Server Sharepoint Portal		IIS	SQL	Agentless or Agent Adapter	
	Citrix			WebSphere			
	Clustering			WebLogic			
Linux	Virtual Servers and Clustering		CICS	Oracle	Oracle	OPAL solutions (100+ packages) Microsoft Message Queue and more.... Blackberry Micromuse	
Unix			Web Services	NetWeaver	Sybase		
AIX			SAP	IMS	JBoss		Informix
OS/400			Tuxedo	MQ	Apache		
			Domino	MQ Integrator	SunOne		DB2
z/OS							



User & Service Experience

Measure Real Transactions

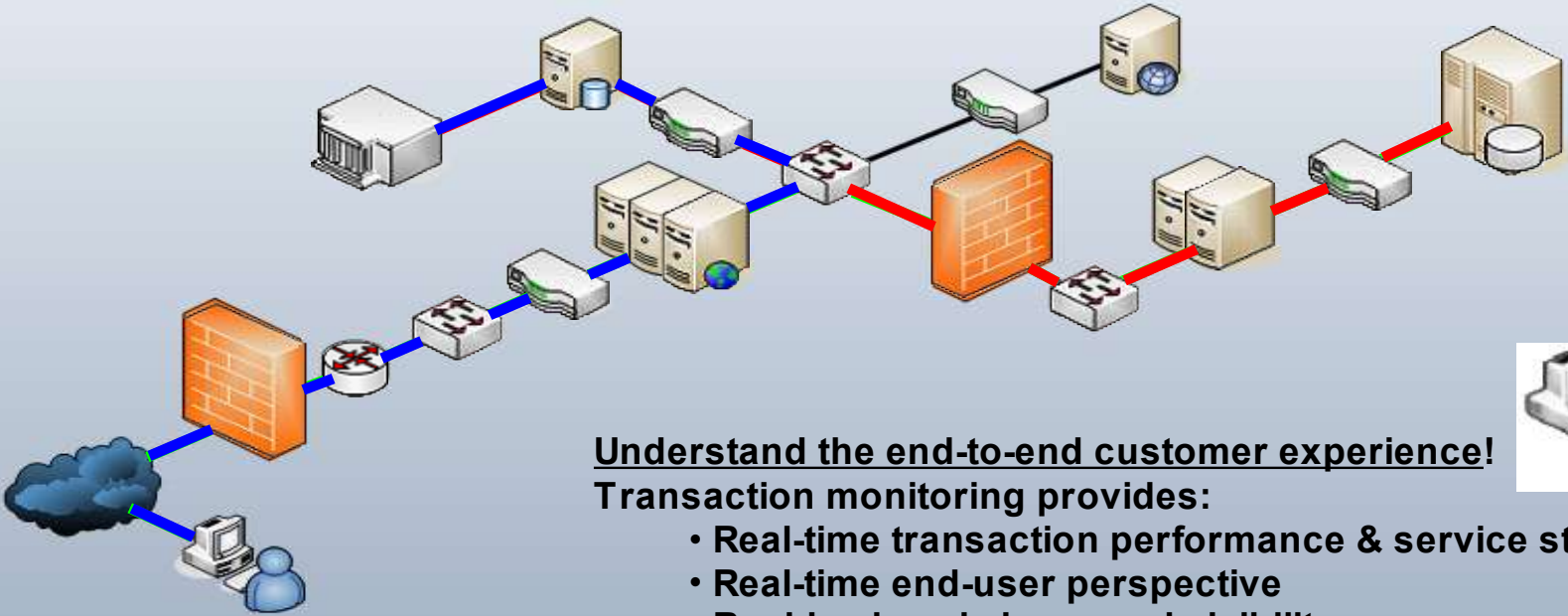


2

Full Transaction Effects the Business
Transaction Step Below Baseline Avg.

Service Tree	State	Tranx/15min	Prev/15min	Bad Tranx/15min	Tranx/Cur Hour	Bad Tranx/Hour	Qty Tranx \$0-99	Qty Tranx \$100-199	Qty Tranx \$200-299	Qty Tranx \$300-499	Qty Tranx \$500+	Total Value	Total Revenue	Total Cost
ATL Datacenter	●	818.0	829.0	6.0	3718.0	49.0	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	6.0	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	1.0	653.0	300.0	29.0	0.0	0.0	\$42500.00	\$6375.00	\$42.50
LAX Datacenter	●	1061.0	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	●	788.0	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:

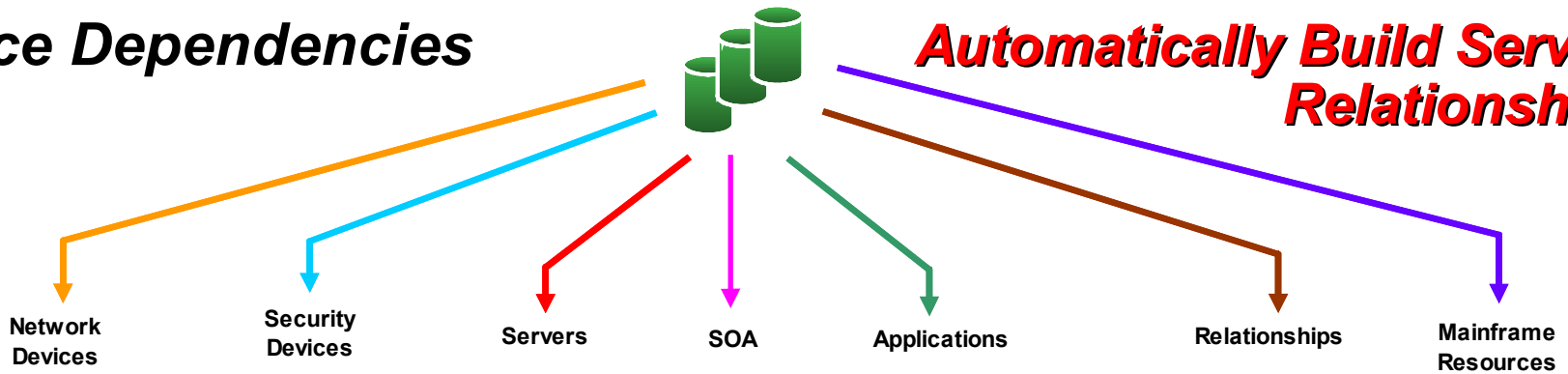
- Real-time transaction performance & service status
- Real-time end-user perspective
- Rapid value via improved visibility



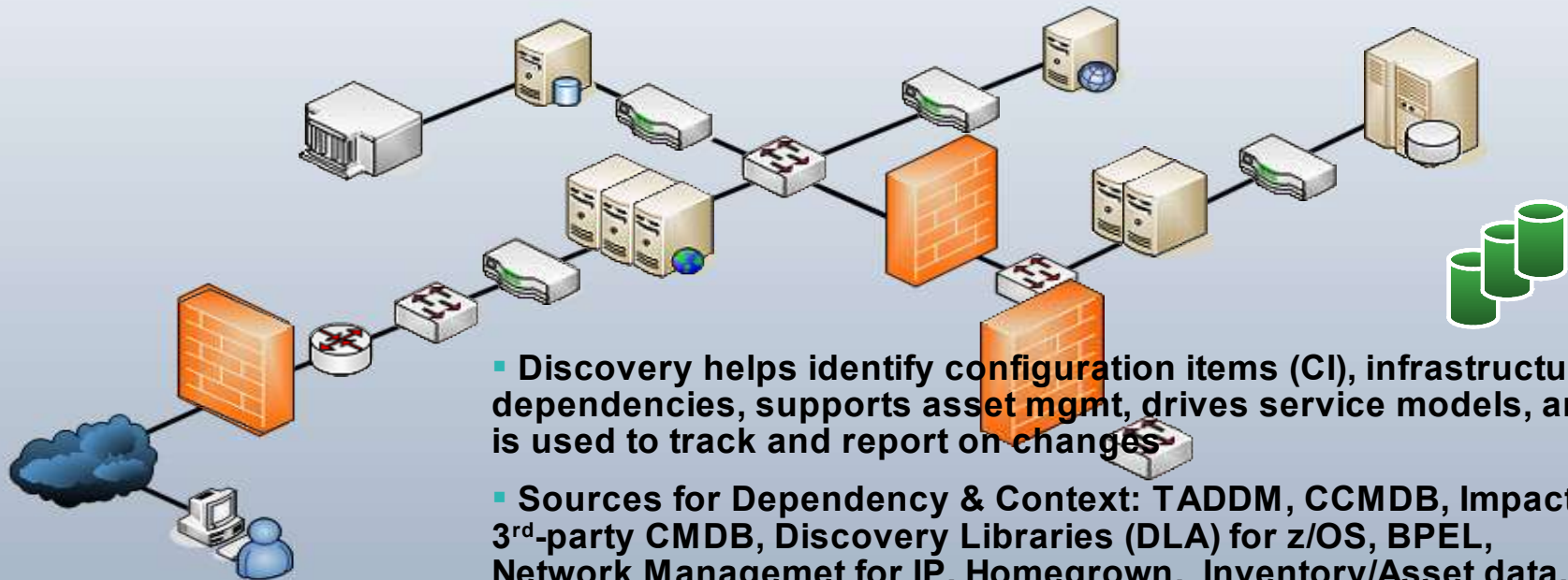
Service Dependencies

3

Automatically Build Service Relationships



Business Service Infrastructure

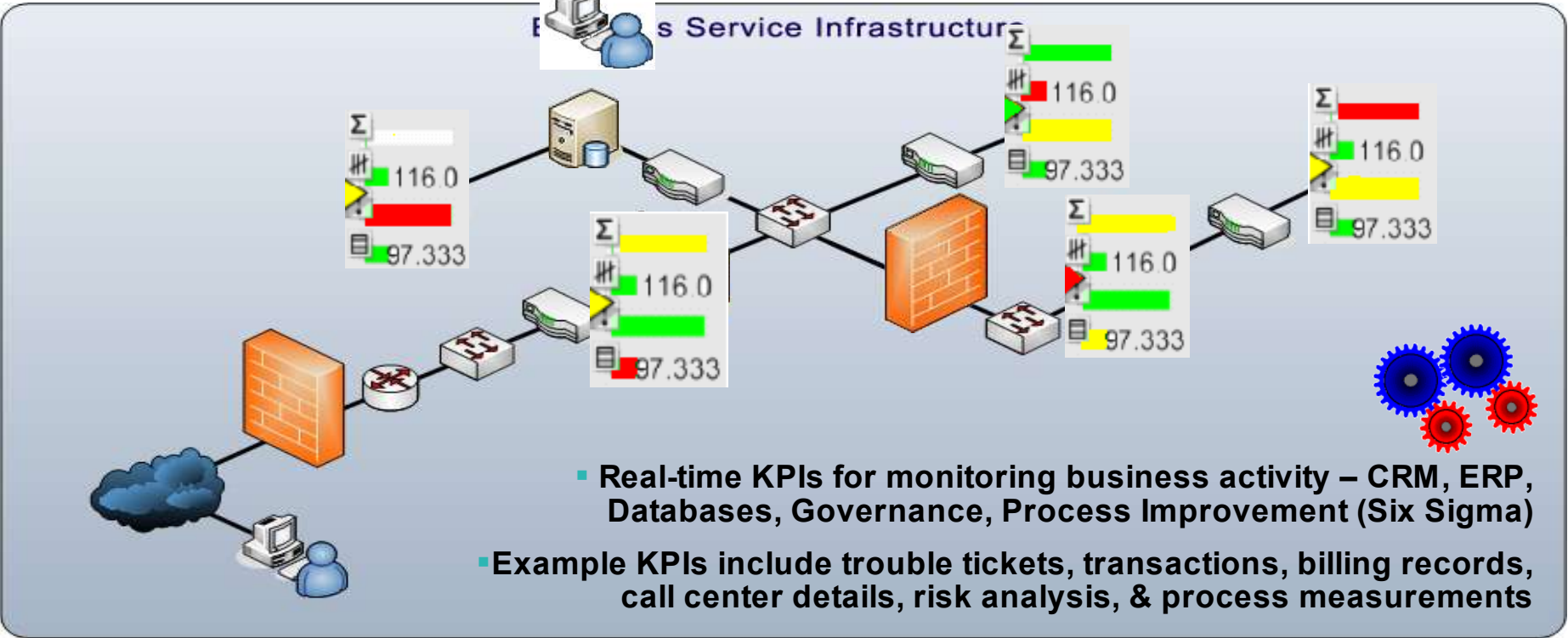
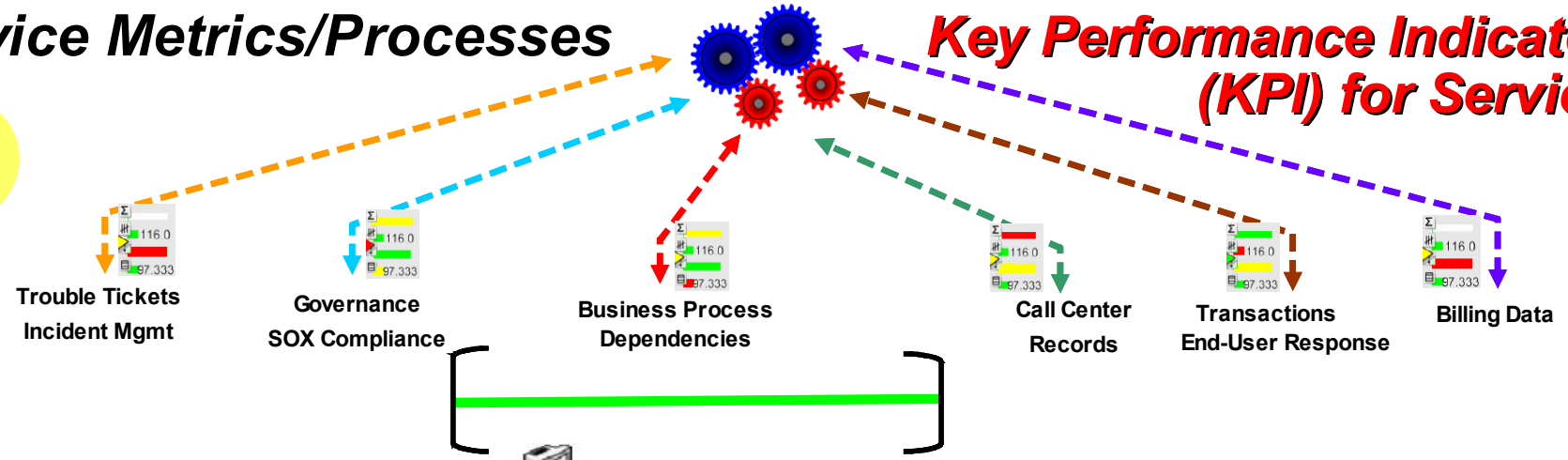


- Discovery helps identify configuration items (CI), infrastructure dependencies, supports asset mgmt, drives service models, and is used to track and report on changes
- Sources for Dependency & Context: TADDM, CCMDB, Impact, 3rd-party CMDB, Discovery Libraries (DLA) for z/OS, BPEL, Network Management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

Service Metrics/Processes

Key Performance Indicators (KPI) for Services

4



- Real-time KPIs for monitoring business activity – CRM, ERP, Databases, Governance, Process Improvement (Six Sigma)
- Example KPIs include trouble tickets, transactions, billing records, call center details, risk analysis, & process measurements

5

Targeted Service Views

Service Intelligence

Operational Views – GIS, Charts, Events

Deep Real-time Federated Data across Sources

Server Dashboard

Server	Type	Operating System	IP Address
d02rdb108	Pseries	AIX	9.43.74.171

Purpose	Application	Location
DB2	CCE	Southbury

Change Management

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

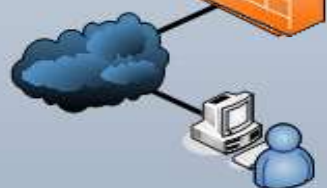
Service Details

Node	Summary	AlertKey	Class
10.10.10.7	Test event for rad instance Bad St...		Default Class
10.10.10.2	Test event for rad instance Bad St...	/home/jwang/bea70/	Default Class

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

Integrated Operational Service Intelligence
 Integrated management views on what matters most to quality delivery
 Operational Consoles for Service Impact & RCA, Infrastructure Management, and Compliance



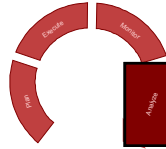
Targeted Service Actions

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



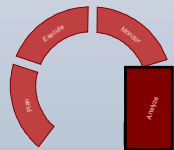
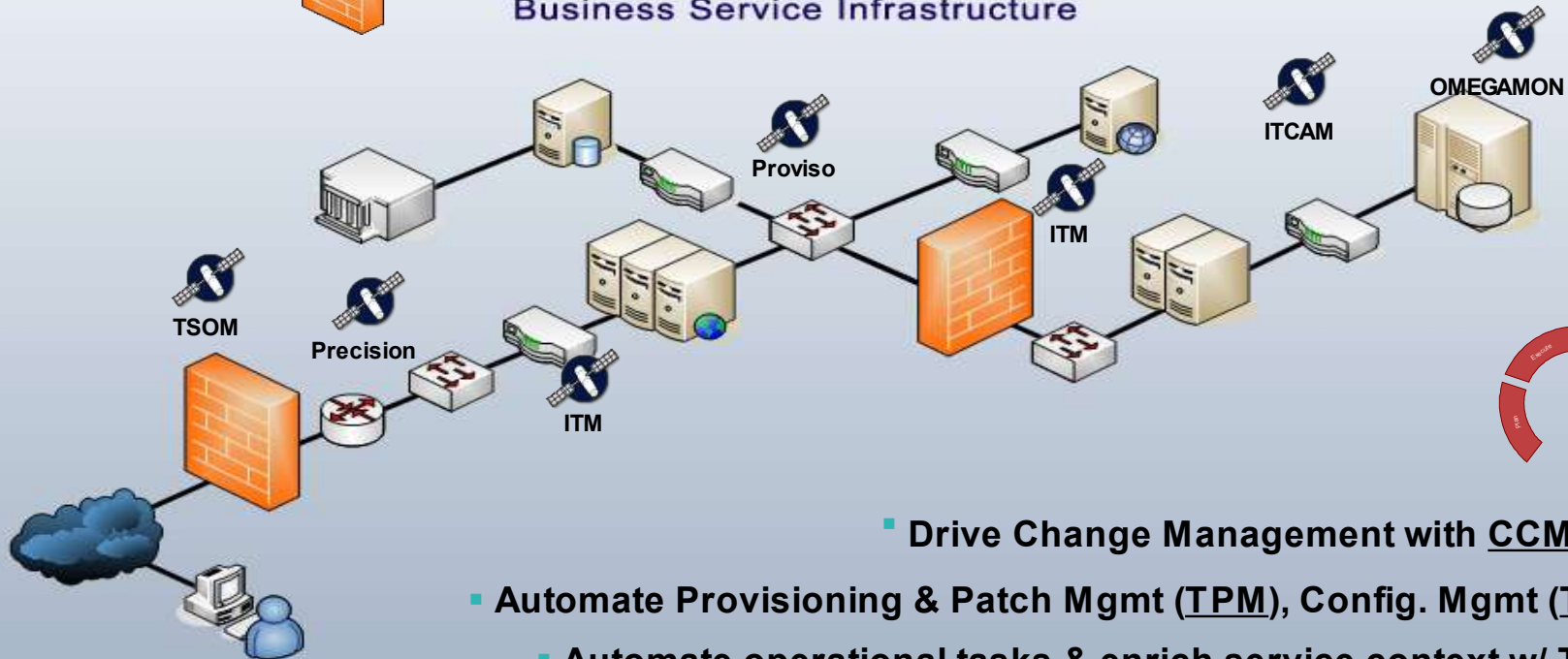
Resource Pool



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 & Patch Mgmt (TPM), Config. Mgmt (TCM)
- Automate operational tasks & enrich service context w/ Tivoli Impact

Improving the Process of Service Mgmt

Experience



Real-time Transaction Performance, Service Status, End-user Experience (TTCAM portfolio, 3rd Party)

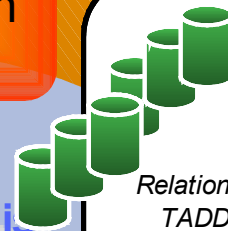
Availability Management



How does this relate to the business service?

Incident Management

Dependencies



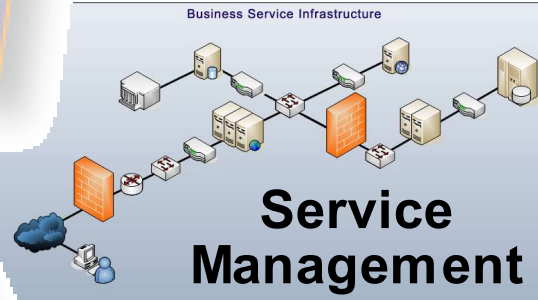
Relationship and Discovery Data – TADDM, CCMDB, MRO Asset, Inventory, Network Mgmt, BPEL, 3rd Party CMDB

Infrastructure Events

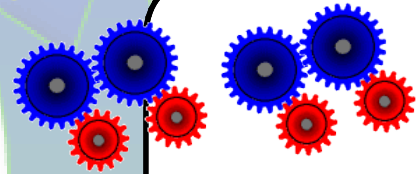


Any Event or Fault from Any Source – ITM, Omnibus, TEC, OMEGA, MON, YE, NMS, EMS, Devices, etc.

Release Management



Service Management



Business Metrics

Business Support Data – Business Support Records, Billing Data, Access dependencies, Revenue, and Risk Analysis data

What's happening with the infrastructure?

Actions

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

Configuration Management



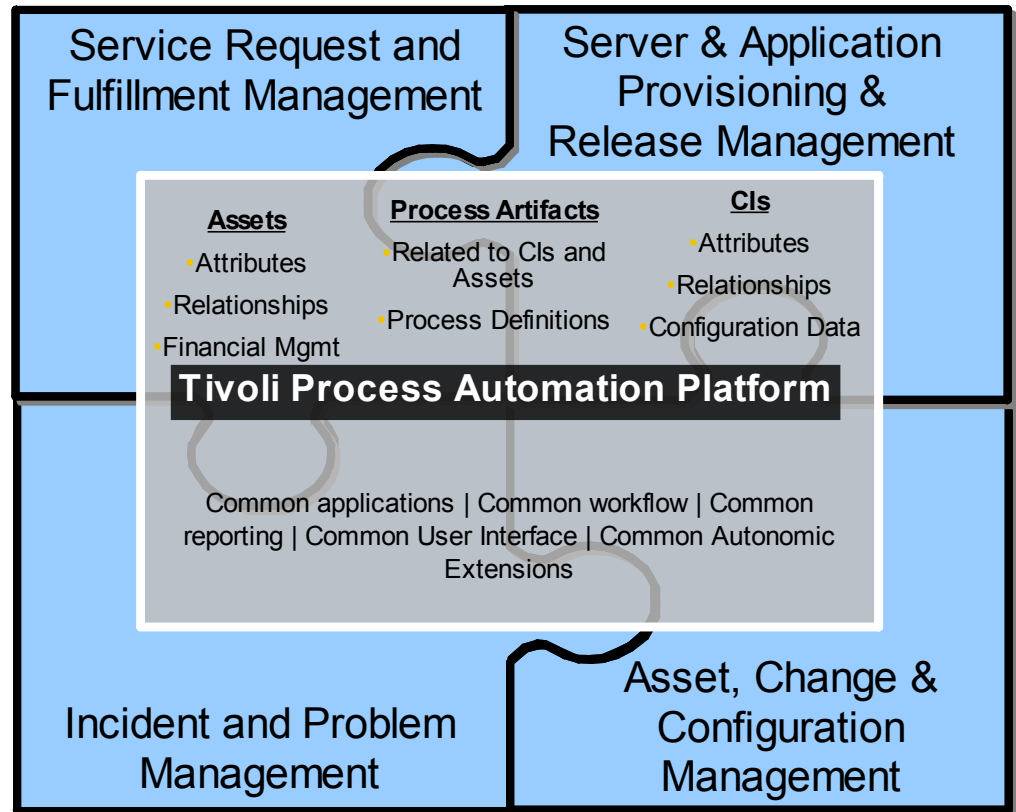
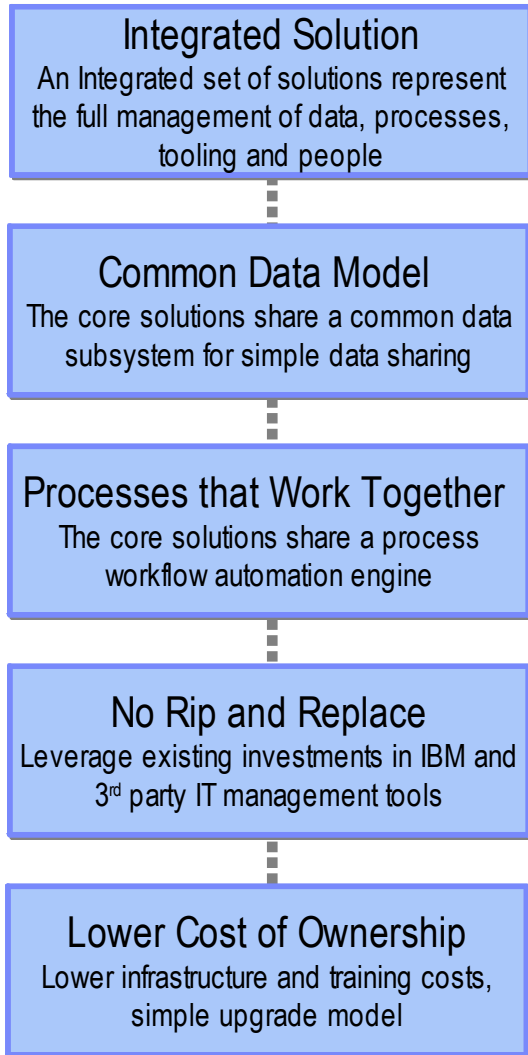
Views

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

Service Level Management

What actions do we take to correct the problems?
w/ IBM Process Managers

An integrated approach that provides faster time to value, grows easily with your needs, and preserves your investments



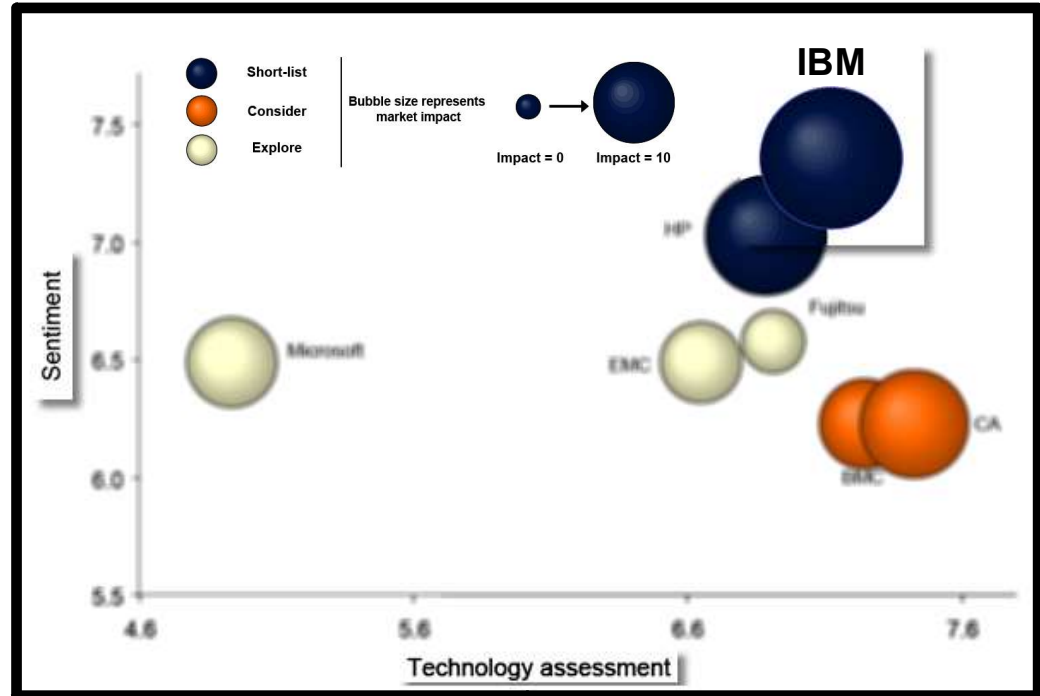
Several Analyst's View

Customer's Should Consider ITIL and Service Management

IBM is in a **clear overall lead** in IT systems management, with its **broad and extensive** Tivoli offering that spans almost all aspects of IT systems management...

Datamonitor believes IBM **will continue to lead** in this market due to its superior vertical reach and continuous improvement of its technology.

Datamonitor Analyst Report – March 2007



With the introduction of **ITIL version 3** we expect many savvy customers to embrace this **more end-to-end view** of services and service lifecycle management and that a vendor's ability to help customers adopt this **more integrated approach** to service management will become a critical differentiator... As a result, IBM comes out as **the player with the greatest basis of differentiation.**

Ovum IT Service Management Vendor Report Card 2006



Key Links

- Visit <http://www-306.ibm.com/software/tivoli/> to learn more about how Tivoli can help you unlock innovation through Visibility. Control. Automation.™
- Visit http://www-306.ibm.com/software/tivoli/tivoli_user_groups/index.html?&ca=qapromo&met=swnewsletter-s0swg-b0swg-l0tiv-d0swgmer-n062-o0tug-g0usen for more information about Tivoli News & Events, Hot Links, Newsletters, Acquisitions and User Community Groups
- Visit <http://www-01.ibm.com/software/tivoli/governance/servicemanagement/itup/tool.html> for a fantastic free tool - **IBM Tivoli Unified Process (ITUP)**. ITUP is a Web-based tool that provides detailed documentation of service management processes based on industry best practices, including the recently released ITIL® V3 best practices.



Don't Miss Pulse 2009, Feb. 8-12, in Las Vegas

- Join over 5,500 attendees for an even bigger and better event
- Hear more service management experts, technical presentations and customer testimonials
- Enjoy expanded hours and a Cyber Cafe at the Pulse Expo
- Stay at the MGM Grand with all Pulse attendees: 5,000+ rooms
- Register at: <http://www-306.ibm.com/software/tivoli/pulse/> (begins Aug. 29)
- Create personal agenda with customized agenda tool on conference website
- Help shape Pulse 2009 – post your suggestions to online forum
- Sign up! Call for expert speakers begins in September



Thank You

- Questions

