

# **Drive Operation Effectiveness and Efficiency**

Joao Perez, Vice President, Tivoli Software



#### As the world gets smarter...





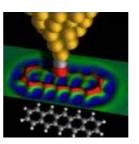
Traffic systems



Oil Fields



Food systems



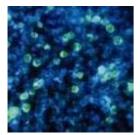
Healthcare



Energy grids



Retail



Water supplies



Supply chains



Weather forecasts



Countries



Regions



Cities

...demands on the infrastructure will grow.

#### **Technology is Driving Change and Creating Opportunity**



Transistors per human:

**2001:** 60 million **2010:** One billion



#### Global cellular service:2

2007: 3.3 billion connections 64% of users are in emerging markets 2010 (Q1): 4 billion connections





RFID Tags:<sup>3</sup>
Nearly 4 trillion RFID events transmitted each day



#### Smart Sensors:5

"...nearly half of all sensors used for critical measurements across transportation, facilities & production equipment are now smart sensors."



2007: 37k on US government / private sector 158% increase in cyber attacks since 2006



#### But Systems and Infrastructure are Reaching a Breaking Point



#### **Inefficient Systems**

70 cents per dollar spent on maintenance

45% traffic circling looking for parking in NYC

#### **Outdated Processes**

\$40B annual loss due to supply chain inefficiencies

\$11.5 billion worth of produce is wasted in India because of outdated post-harvest infrastructure

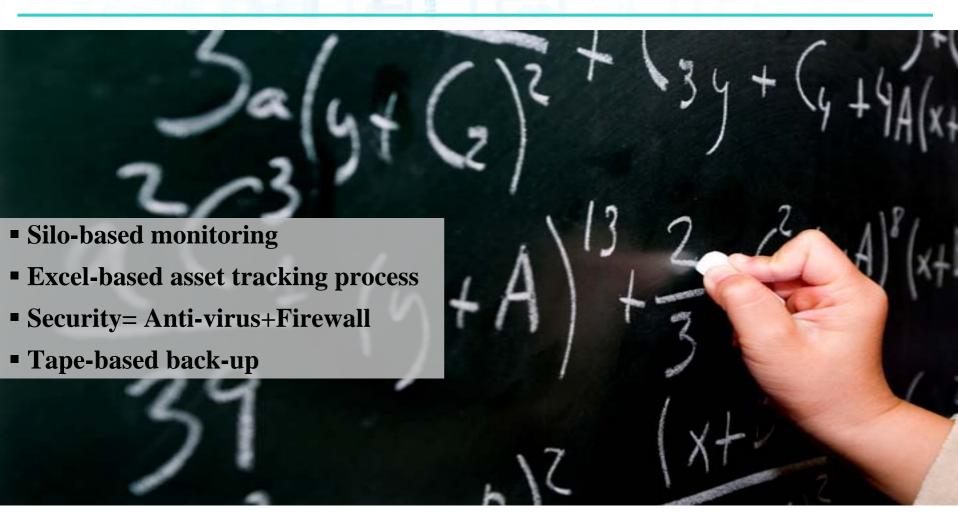
#### **Wasted Resources**

85% idle computing capacity

2.9 billion gallons of gasoline wasted annually due to congested roadways

# Yet the approach for managing this complexity remains the same









# YOU CANNOT BE SERIOUS!





Asset: turbine bucket

Unit cost: \$5000



# in system: 703

Total asset value: \$3,515,000



Maintenance: yes - 4,000 & 24,000 fired hours

Tracking System: Microsoft Excel





















The state of the s

**OVER** Assets **OVER** CapEx



# SERIOUS!

#### Integrated Service Management Smarter Software





Knows & acts



Delivers

Enable business service and product innovation



Adapts
Increase agility



**Optimizes** 

Drive enterprise operations effectiveness and efficiency



Connects
Connect & collaborate



Protects

Manage risk, security, and compliance

# The need for efficiency and superior service from IT Operations is more critical then ever.





#### INTEGRATED SERVICE MANAGEMENT





**INSTRUMENTED** 



Integrated Service Management enables delivery of innovative services by providing Visibility.

Control. Automation.™ across business infrastructure.



**VISIBILITY** 



CONTROL





#### INTEGRATED SERVICE MANAGEMENT





- Service architectures tailored by industry
- Service lifecycle management
- Service dashboards
- Unified management of service requests and incidents
- Asset management
- Automated management.

#### IBM Tivoli leads Service Management





#### **Gartner Market Share Leader**

- #1 Overall ITOM category (8th consecutive year)
- #1 Availability and Performance
- #1 Event, Fault and Log Management
- #1 Network Management
- #1 Web Access Management
- #1 Security Information & Event Management
- #1 HSM and Archive Software

#### **Gartner Magic Quadrant Leadership**

- EAM for Power Generation Leader
- EAM for Energy Distribution Utility Leader
- EAM for Manufacturing Leader
- User Provisioning Leader
- Web Access Management Leader
- SOA Governance Leader

#### **OSS Observer**

- #1 Service Assurance
- #1 Event Management
- #1 Performance Management





#### **IDC Marketshare**

- #1 Overall in Systems / Network Management
- #1 in Overall Performance and Availability Management
- #1 Performance Management
- #1 Event Automation
- #1 Network Management
- #1 Archiving
- #1 Identity and Access Management
- #1 Security and Vulnerability Management
- #1 Enterprise Asset Management

#### **Forrester Waves**

- IT Asset Lifecycle Management (our 1st inclusion!)
- Identity and Access Management

#### **ARC**

- #1 in EAM Worldwide and in North America
- #1 in EAM Software Revenues and Service Revenues
- #1 in EAM for Oil & Gas, Pharmaceutical & Biotech, Automotive, Logistics,
- #1 in Government, and independent Maintenance Service Providers





#### Integrated Service Management Solves Customer Problems

Only IBM delivers quantifiable benefits whatever the challenge





#### **Harley Davidson**

- Globally integrated its IT Management Operation
- Recorded savings of \$25 million over 5 years
- 201% Return on Investment



#### Vale, World's 2nd Largest Mining Company



- Leveraging IBM to achieve Proactive maintenance for 1.2 Million assets at 52 sites
- Support real-time data collection from legacy to RFID interfaces



#### **European Insurance Provider-**Leveraged IBM Security to

- •Reduce administrative costs by 40%
- Eliminate 1500 obsolete user accounts within 3 months of deployment



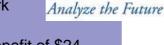
#### **Bharti Airtel**



- Secured Sign-on Framework
- 20 ID's per user reduced to one single-sign-on
- User account provisioning time reduced from 2 days to < 1 hour</li>



According to **IDC**, client using IBM's network management tools



- Realize annual benefit of \$24 million per year
- Reduced capital expenditures by 1.3 million annually



#### IBM Toronto Labs, through automation



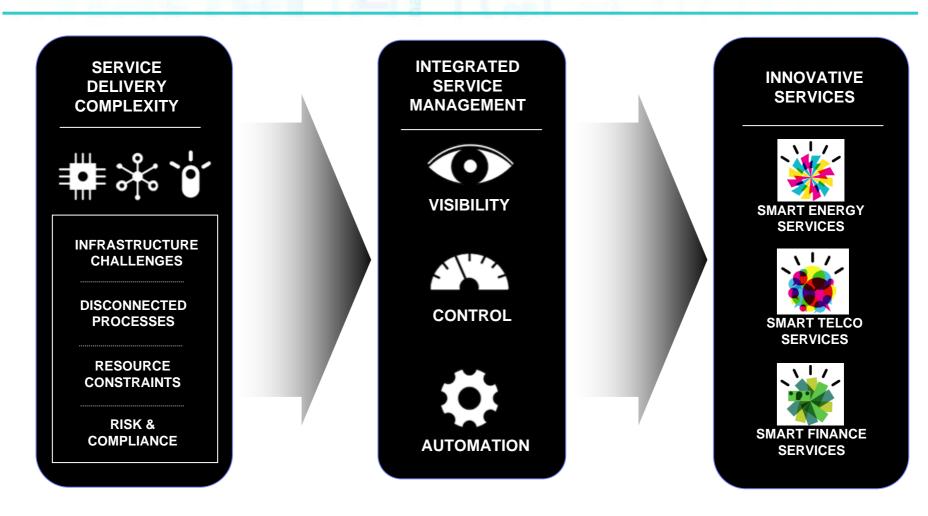
- Reduced provisioning processes from 25 to 5
- ■Freed-up 7 person-years of developers' time
- Recorded 305% return on its initial investment





# Integrated Service Management Visibility. Control. Automation.™ for a Smarter Planet

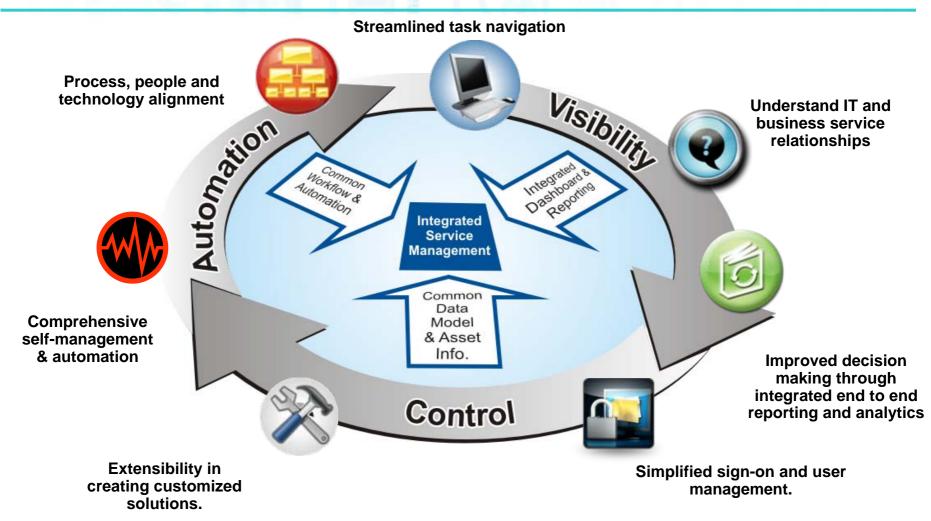




#### **Integrated Service Management**

Integration is a key differentiator for us in the marketplace





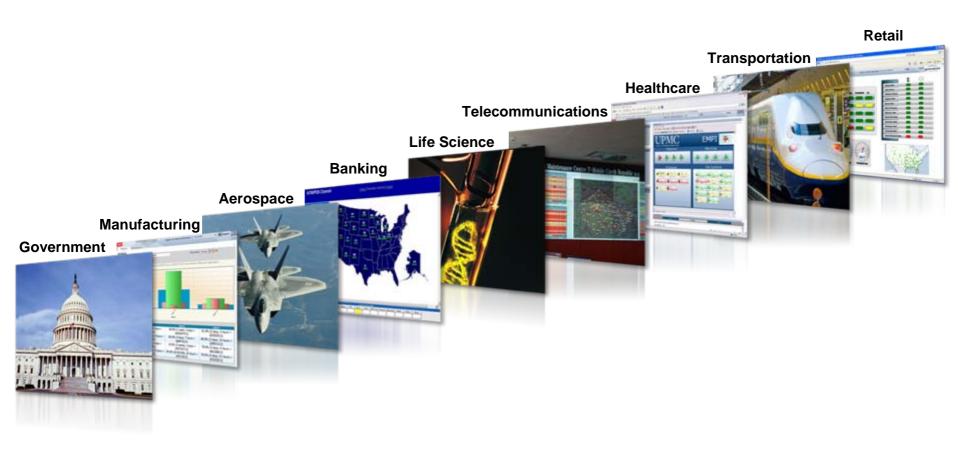
#### Integrated Service Management Providing end-to-end Service Visibility





# 

#### **Integrated Service Management- Across Industries**









Tivoli is Service Management

#### IBM's internal adoption of Cloud

#### Without cloud

With cloud

\$3.4M annual expense

\$1.03M annual expense

New Development

Software and other costs

Labor costs (operations & maintenance)

Depreciation (and amortization)

Liberated funding for transformation investment or direct saving

development (for businessenabling capabilities)12

New

**Deployment (1-time)** 

Software and other costs

Labor cost ( - 80.7 percent)

Depreciation ( - 91.6 percent)

Annual cost of operation (- 79.0 percent)

**Strategic** 

change capacity

Note: 5-year depreciation period with 5 percent discount rate

### IBW.

# Reducing expenses and driving innovation at IBM



#### **Business challenge:**

- Reduce operational expenses and capital investment
- Deliver end-user services with elastic scaling

#### **Smarter Software Helped:**

- Reduce labor expenses by 81%
- Capital depreciation savings of 92%
- On-demand self-service
- Ubiquitous network access
- Location independent resource pooling
- Pay per use pricing model

# Increasing revenue and profitability with effective asset management at Rolls Royce





#### Challenges

- Reduce cost around operation expenditure
- Improve the efficiency of the asset
- Manage and maintain safety of asset and service
- Better manage and mitigate technical risks

#### Smarter Software Helped

- Increase revenue and profitability
- Savings of \$3.5 m p.a. in IT infrastructure costs
- 60% of aftermarket engines now managed with IBM Maximo

#### Reducing Software License Cost at KPIT Cummins





#### **Business Challenges**

- Reduce software license and IT costs
- Inability to verify license compliance
- Managing unnecessary licenses in a resource constrained environment.

#### **Smarter Software Helped**

- Reduce Software Cost & Mitigate Risk
  - Pinpoint under utilized software
  - Avoid over purchasing
  - Mitigate risk and fines due to failed license compliance and audits
- Increased negotiating power with software vendors
- Alignment of software usage with end-user needs

#### **Improving Security and Governance at Bharti**





#### **Business Challenges:**

- Security Infrastructure not keeping pace with business growth
- Regulatory Compliance
- Controlling access to sensitive data
- Increasing cost of IT help-desk operations

#### **Smarter Software Helped:**

- Enhance Enterprise Level Security
  - Uniform Security Policy Management
  - Workflow based ID Lifecycle Management
  - Automated Dormant ID de-activation
- Employee Convenience
  - Single Sign On to multiple applications
  - Enhanced On-boarding experience
  - Self services for password reset
- Operations Automation
  - Automated user-id/password creation
  - User notifications by Email/SMS

#### **Improving Security and Governance at Bharti**



	Before	After
Average number of ID's per user	<b>&gt;</b> 20	Single Sign On
Time required for password reset or account unlock	> 2 hour	10 Minute (Self Services)
New employee's email/user Id creation and delivery to new employee	24 hour (Automated)	< 1 hour
Time taken for getting account provisioned to each application	2 Days (Automated)	< 1 hour

#### **Helping Swiss meet Swiss Expectations**







#### **SWISS RAILWAYS**

- #1 transportation company in Switzerland 860,000 pax/day
- #1 in network efficiency in the World ~ 92%

#### **NIGHTMARE: 22nd June, 2005**

- The good news
  - Nobody hurt
  - 2 passengers fell in love and got married
- The bad news
  - 199,998 passengers affected
  - 5,000,000 U\$ of direct costs incurred
- The ugly news
  - ■There would have been enough time, to handle the situation correctly but ....

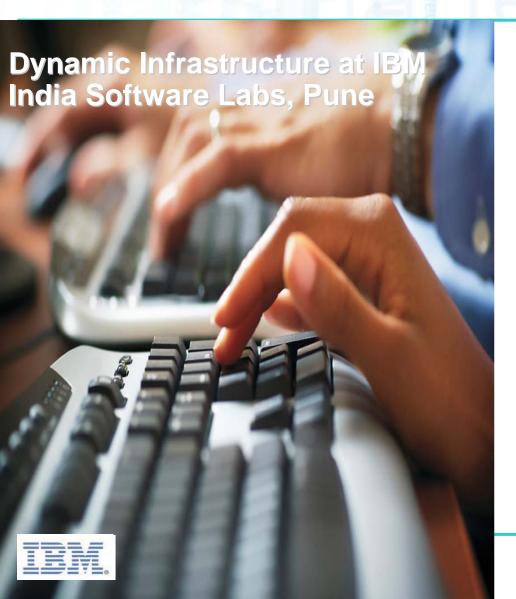
.... there were 18,000 system alarms within 60 minutes .... and the tools to handle them correctly were missing!

#### **Smarter Software Helped**

- Convergence of Service Management and Asset Management layers
- System Alarms from Infrastructure giving pro-active communication to Service View
- Setting Incident Management and Change Management policies

#### Energy efficiency through monitoring & energy mgmt.



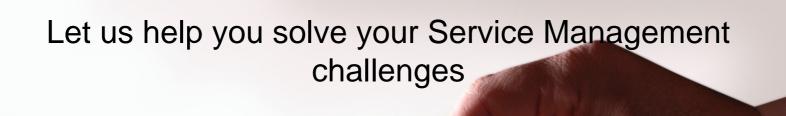


#### Business Challenges

- One of the largest IBM product development supporting multiple brands
- Complex heterogeneous production IT environment that is evolving with the everincreasing needs of thousands of developers & testers
- Increasing capital costs & lab proliferation
- High energy consumption
- Lack of consistent asset usage tracking
- Silos of automation with inconsistent reporting

#### Smarter Software Helped

- 20% more lab assets discovered through automated discovery
- Smaller lab footprint with virtualization
- Energy monitoring for policies to minimize usage
- Cost savings of 475K with server virtualization
- Automated monitoring & provisioning
- Data protection and recovery services



## Next Steps!



#### Share your IT priorities

> Tick your priorities on the feedback form























#### Contact your IBM rep

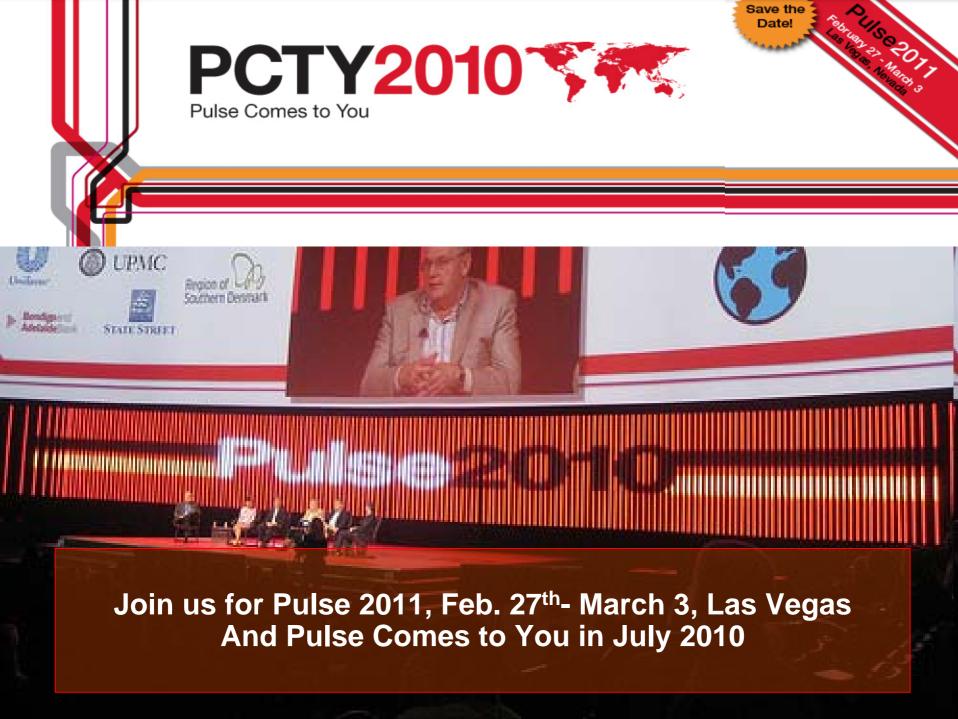
➤ Get started with an IBM Service Management whiteboarding session



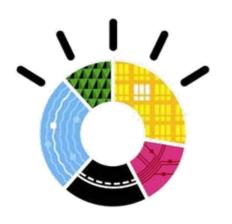


# INTEGRATED SERVICE MANAGEMENT

MAKE YOUR MARK!







# Thank you!

Joao Perez Vice President, Worldwide Sales, Tivoli Software

