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## **Le novita' a supporto dei processi di Business**



# Agenda

- **Cloud Computing & WebSphere in the Cloud**
- **IBM BlueWorks**  
**The BPM initiative starts form the cloud**
- **IBM BPM enhancement**  
**Business Rules – ILOG BRMS V 7.0**

**IMPACT NOW**



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## Globally, systems and infrastructure are reaching a breaking point

- Explosion of data, transactions, and digitally-aware devices strains IT infrastructure and operations.
- Exponential growth in communications subscribers and services exposes bandwidth limitations.
- Supply inefficiencies and demand spikes tax energy and utility systems.
- Clogged and congested roadways impact productivity.
- Networks, supply chains, and borders face a proliferation of new risks and threats.

Meanwhile, customer expectations and competitive pressures are increasing.

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# We must move past today's challenges to seize tomorrow's opportunities

## HOW CAN WE ADDRESS ...

### HIGHER SERVICE EXPECTATIONS

Internet-savvy consumers and employees expect 24x7 access to quality services.

### RISING COST PRESSURES

Staggering levels of complexity and inefficiency drive up cost and stifle innovation.

### NEW RISKS & THREATS

The connected, collaborative world is also a more vulnerable world.

## WHILE ALSO LAYING A FOUNDATION FOR ...

### BREAKTHROUGH PRODUCTIVITY

Almost any person, object, or service can become digitally aware and connected creating new possibilities for change.

### ACCELERATED VALUE CREATION

More adaptive capabilities like cloud computing create new opportunities.

### INCREASED VELOCITY

The faster pace of business and society demands a more responsive, agile infrastructure.

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# What is Cloud Computing?

## A user experience and a business model

- Standardized offerings
- Rapidly provisioned
- Flexibly priced
- Ease of access

## An infrastructure management and services delivery method

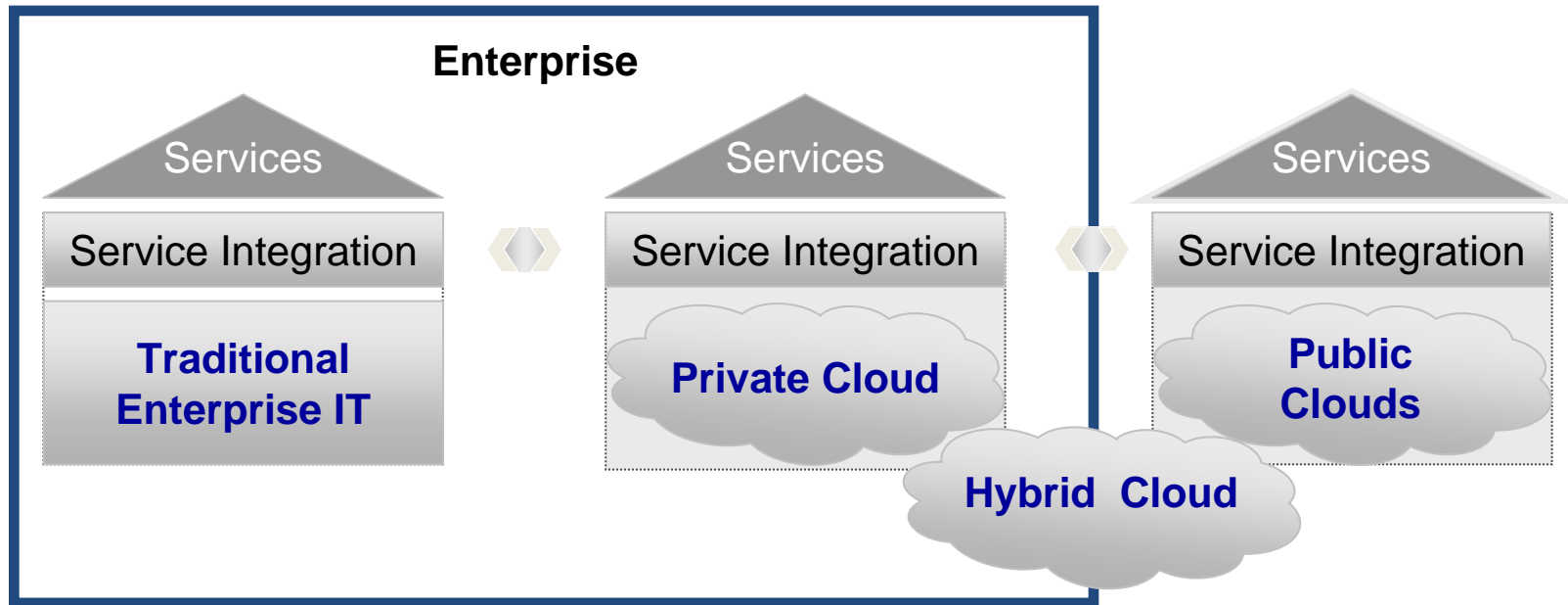
- Virtualized resources
- Managed as a single large resource
- Delivering services with elastic scaling

## Similar to Banking ATMs and Retail Point of Sale, Cloud is Driven by:

- Self-Service
- Economies of Scale
- Technology Advancement



## The future: Three co-existing delivery models



### IT portfolio aspects migrating to cloud today:

- Mission Critical
- Packaged Apps
- High Compliancy
- Test Systems
- Pre-production
- Developer Platform
- Variable Storage
- Software as a Service
- Web Hosting



# WebSphere CloudBurst Launches at IMPACT!

**"IBM WebSphere Cloudburst Appliance is poised to make a big splash in the cloud computing market."**



- 70+ press and blog pickups
  - Major pubs: [eWeek](#) [Information Week](#) [Insurance & Technology](#) [forbes.com](#) [wsj.com](#)



- 59 analysts attended analyst event
- 5 keynote sessions including Inner Circle
- 10 Cloud and CloudBurst sessions
- 6 demos in 3 peds
  - Cross-brand with [GTS & Tivoli](#) [Rational](#)
- [ibm.com/cloudburst](#) landing page
- [Press release](#)

*"IBM is ahead of its competition in its cloud thinking and it is now beginning to take a technology lead by rolling out cloud products to fit the thinking."*

- **Hurwitz & Associates**, Robin Bloor

*"Wow, IBM actually has a cloud on the stage."*

- **ZapThink**, Jason Bloomberg

*"This appliance approach to private clouds will be a big trend in the industry, with Oracle (using acquired Sun technology), HP and perhaps Cisco sure to follow. Cuts cost, complexity."*

- **Interarbor Solutions**, Dana Gardner

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## Intelligent management for Virtualized Infrastructure

### **WebSphere® Application Server Hypervisor Edition**

- New edition of WAS optimized for virtualized environments
- Pre-configured, ready to run on a hypervisor
- Images supported and maintained by IBM

### **WebSphere CloudBurst Appliance**

- Secure cloud management appliance
- Reduce setup time for WebSphere environments
- Codify your infrastructure for reduced risk
- Simplified maintenance and management
- Dispenses WebSphere virtual image software



**WebSphere Application Server  
Hypervisor Edition**



**WebSphere  
CloudBurst Appliance**



# What is WebSphere Cloudburst?

## 1. An appliance from IBM...

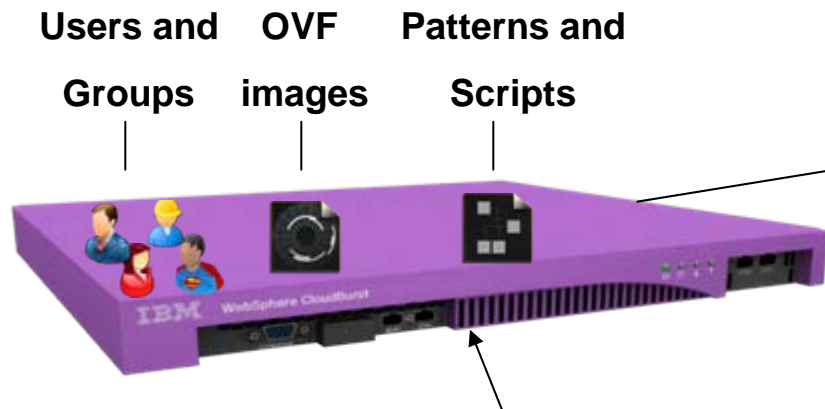
Includes

- hardware
- CloudBurst function
- WebSphere Application Server images
- WebSphere Application Server patterns

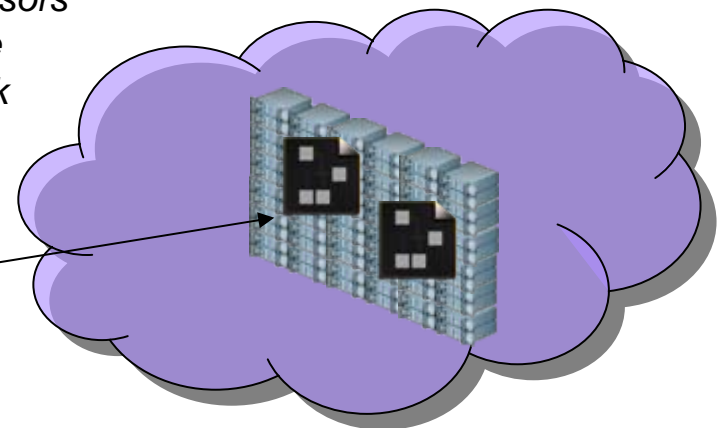
## 2. ...that manages your on-premise cloud...

Bring your own Enterprise cloud

- hypervisors
- storage
- network



Web 2.0 UI, CLI, and REST APIs

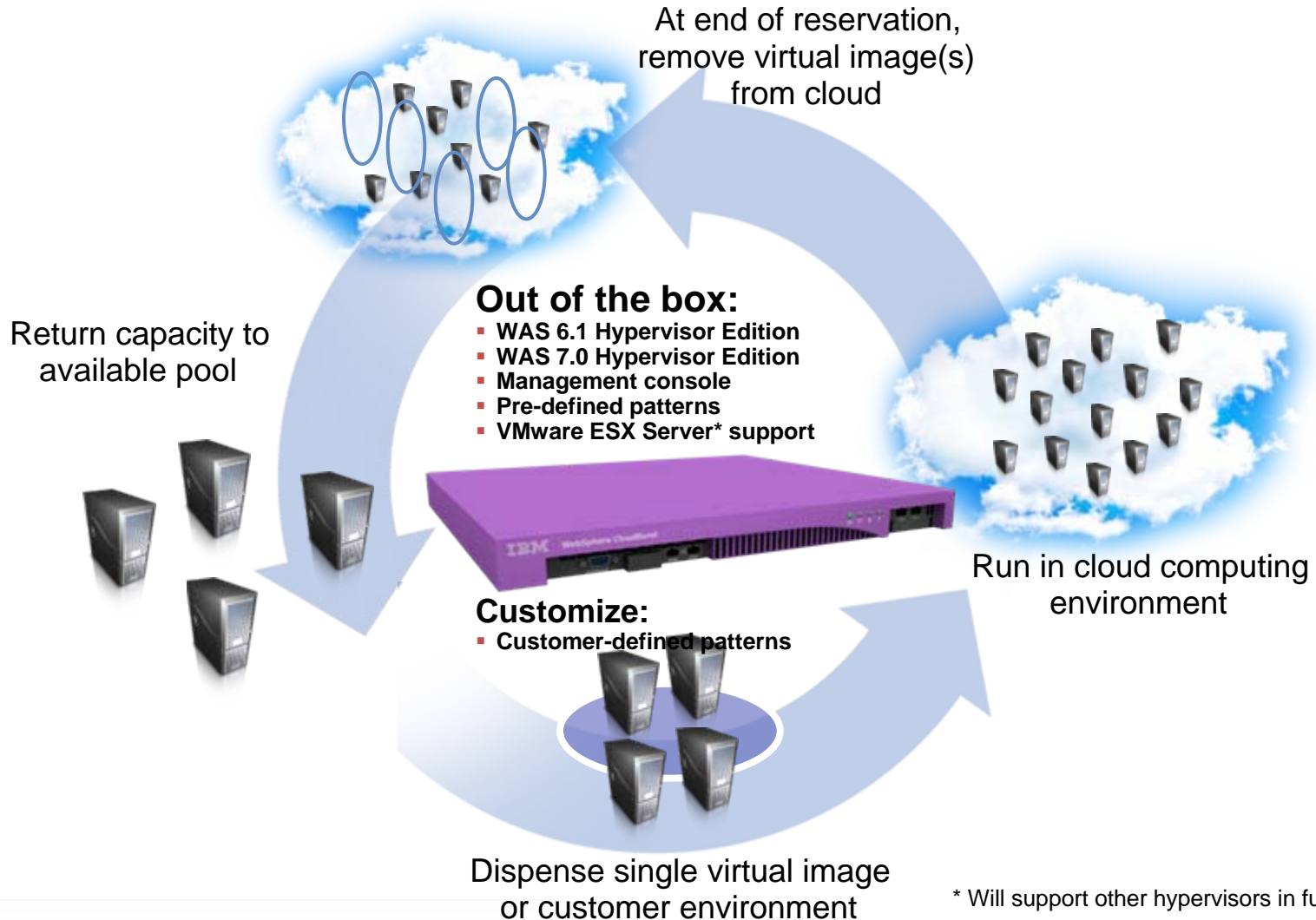


## 3. ... comprising WebSphere Virtual Systems

- Customize and extend images and patterns for your applications
- Dispense and run in the cloud
- Life-cycle management and optimization



# Working Together

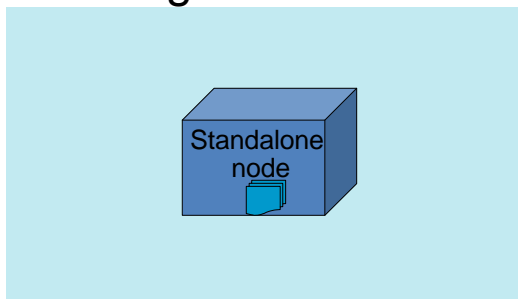


\* Will support other hypervisors in future releases

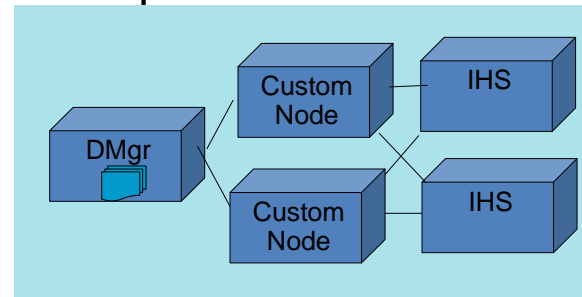


## Preloaded Patterns

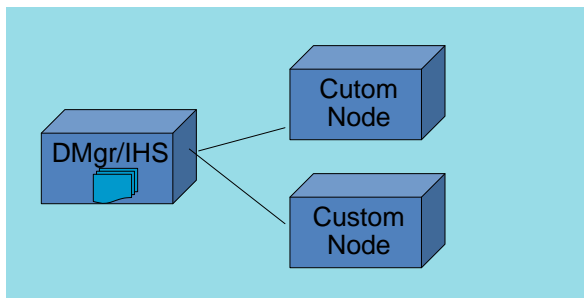
Single Server



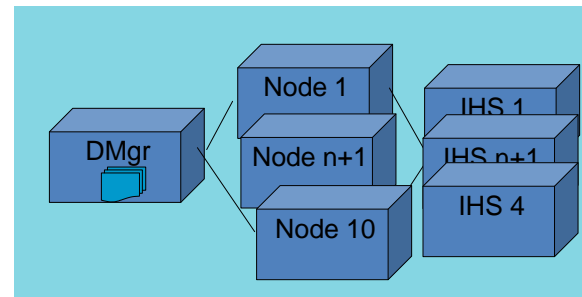
WebSphere cluster



WebSphere cluster (dev)



WebSphere cluster (large)



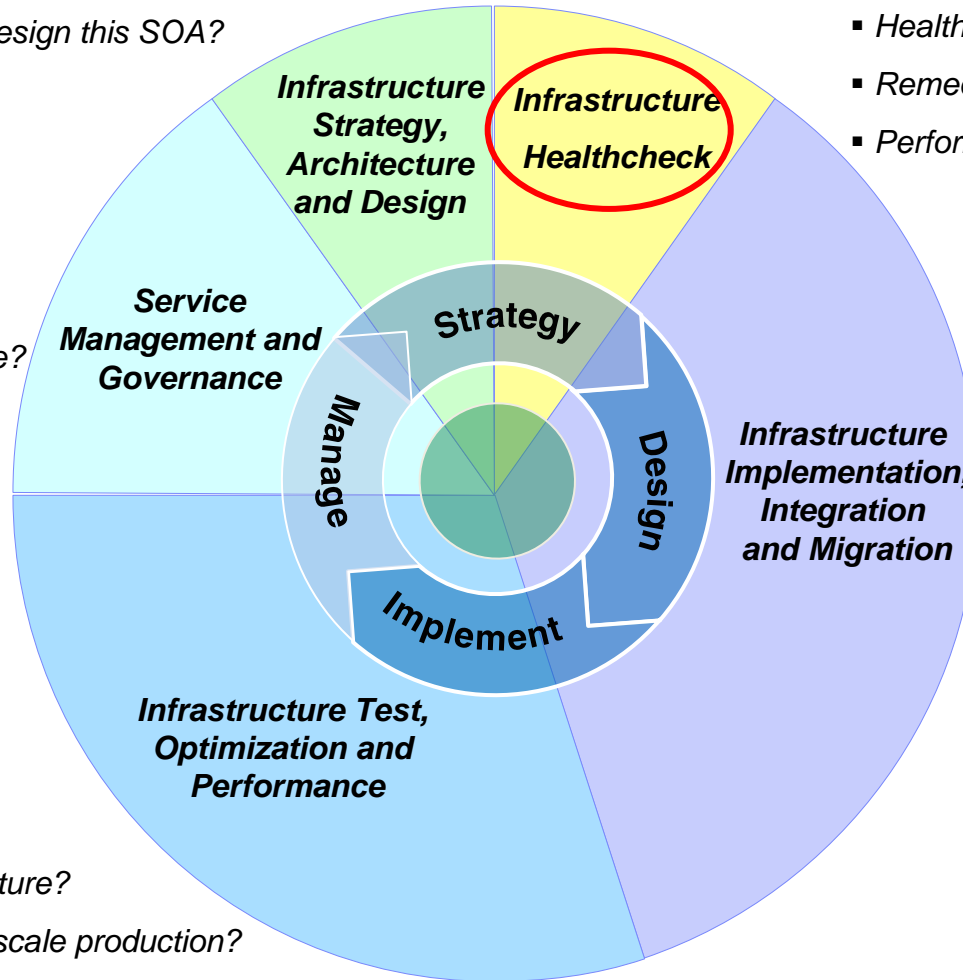
**Advanced Options for messaging, session persistence, and global security available**



- Architect the infrastructure?
- Design this SOA?

- Implement security infrastructure for SOA?
- Manage my SOA?
- Implement governance across my infrastructure?
- Enforce policies in all the infrastructure?

- Optimize for performance?
- Test the SOA infrastructure?
- Virtualize my SOA infrastructure?
- Ready for full scale production?



- Predictive assessment?
- Health check of my infrastructure?
- Remedy options available to me?
- Performance issues?

- Install and configure the products?
- Integrate all the SOA products?
- Integrate with my legacy systems?
- Migrate my existing infrastructure forward?
- Test and validate integration points?
- Access all information in the environment?



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**IMPACT NOW**



## Business Works Smarter with Collaboration and Community

A set of cloud-based BPM tools and content enabling Business Leaders, Business Analysts, and Business Professionals to experience the value of BPM by creating BPM Business Designs in the cloud, leveraging pre-built content, and collaborating through community tools.

With BlueWorks, users can:

### *Learn about BPM*

Learn strategies, trends, and best practices for making smart process decisions

### *Experience BPM*

Capture business intent, understand capabilities, sketch processes



### *Collaborate with the Community*

Leverage community insight and access shared content

### *Optimize Processes*

Extend strategy to drive processes improvement, and deploy with IBM BPM Suite



# The BPM BlueWorks Experience

## Acquire Expertise, Map Strategy, Execute Processes

1. Access business & industry-specific content to understand the value of BPM



Demos /  
Videos



Best  
Practices



Web casts /  
Pod casts



Papers /  
Case Studies

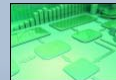
2. Collaborate with the community and leverage pre-built strategies, processes, and measures



Process  
Maps



Capability  
Maps

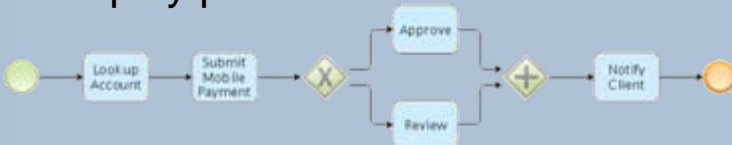


Strategy  
Maps



Business  
Measures

4. Easy on-ramp to BPM suite to test & deploy process



3. Capture business intent, capabilities, & process in the cloud





# Translate Strategy Into Process Improvement *With BPM Business Design Tools*

## Strategic Intent & Motivation

Capture business strategy understanding that guides the operations and actions of the business

## Operational Capabilities

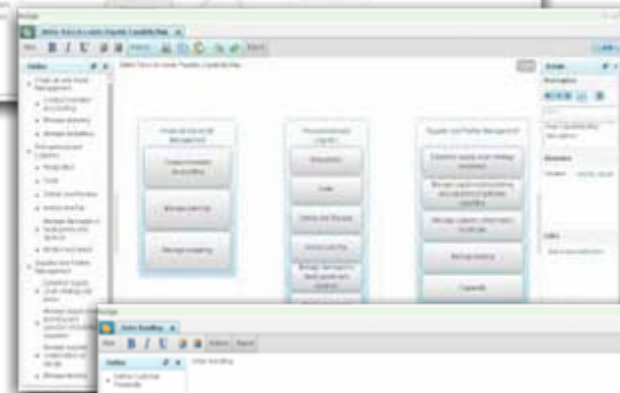
Refine strategic intent into operational capabilities to identify transformation opportunities

## High-Level BPMN Processes

Link operational capabilities to business processes to jump start automation



*Strategy Maps*



*Capability Maps*



*Process Maps*



## Easy On-Ramp to IBM BPM Suite *For Simulation, Testing, & Deployment*



- Import into WebSphere Business Modeler
- Directly deploy to test environment with interactive process design

- Export BPMN artifacts to Rational Asset Manager or file system

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# Get Started with BPM BlueWorks

## *Sign-up on June 30, 2009*

### *Register Your Company*

- The first registered user for a company / group becomes the BlueWorks administrator for the company
- Subsequent registrations for the company / group are approved by the administrator



# BPM from IBM WebSphere

*Work smarter, empower people, optimize business processes*

- Provides a **process-centric, process-aware, and process-driven** environment
- Increases productivity for business users
- Of all the companies who address business or process change, only IBM helps create more agile business processes - empowering business and IT users to rapidly:
  - Take action on business events
  - Make changes, and
  - Implement new business models
- ... in order to capitalize on opportunities and outmaneuver competition

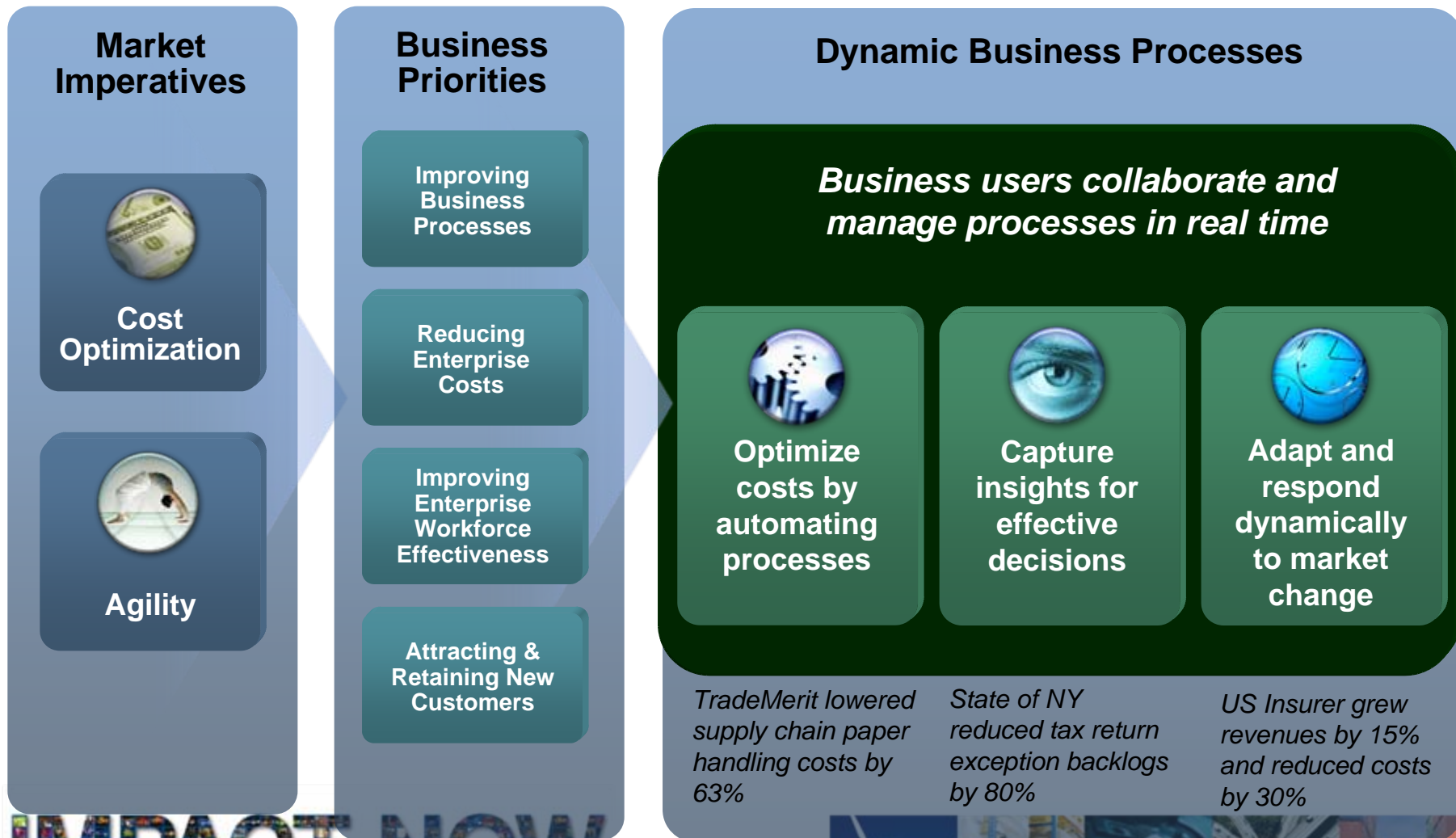


BPM Methodology • BPM Professional Services • BPM Mentoring

Business Rule Management  
Business Event Processing  
Asset Repository for BPM  
Collaboration Tools  
Performance Analytics  
Process Accelerators and Adapters



# Dynamic Business Processes introduce agility & cost reduction



## Dynamic Business Processes Are...

**Explicit:** *Processes are documented, understood, and agreed upon*

**Visible:** *Process performance is available in real-time, measurable, and actionable*

**Easily Changed:** *Process tasks, activities, and end-points are flexible and quickly adjusted*

**Driven by the Business:** *Process management is contextual, governed, and extended to all stakeholders*



## BRMS – Logical Fit within the IBM BPM Suite

*Foundational Offerings:*

**WebSphere Dynamic Process Edition**

**FileNet Active Content Edition**

*Extended Value Offerings:*

### **Business Rule Management System**

Business Event Processing  
Asset Repository for BPM  
Collaboration Tools  
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BPM Methodology • BPM Professional Services • BPM Mentoring



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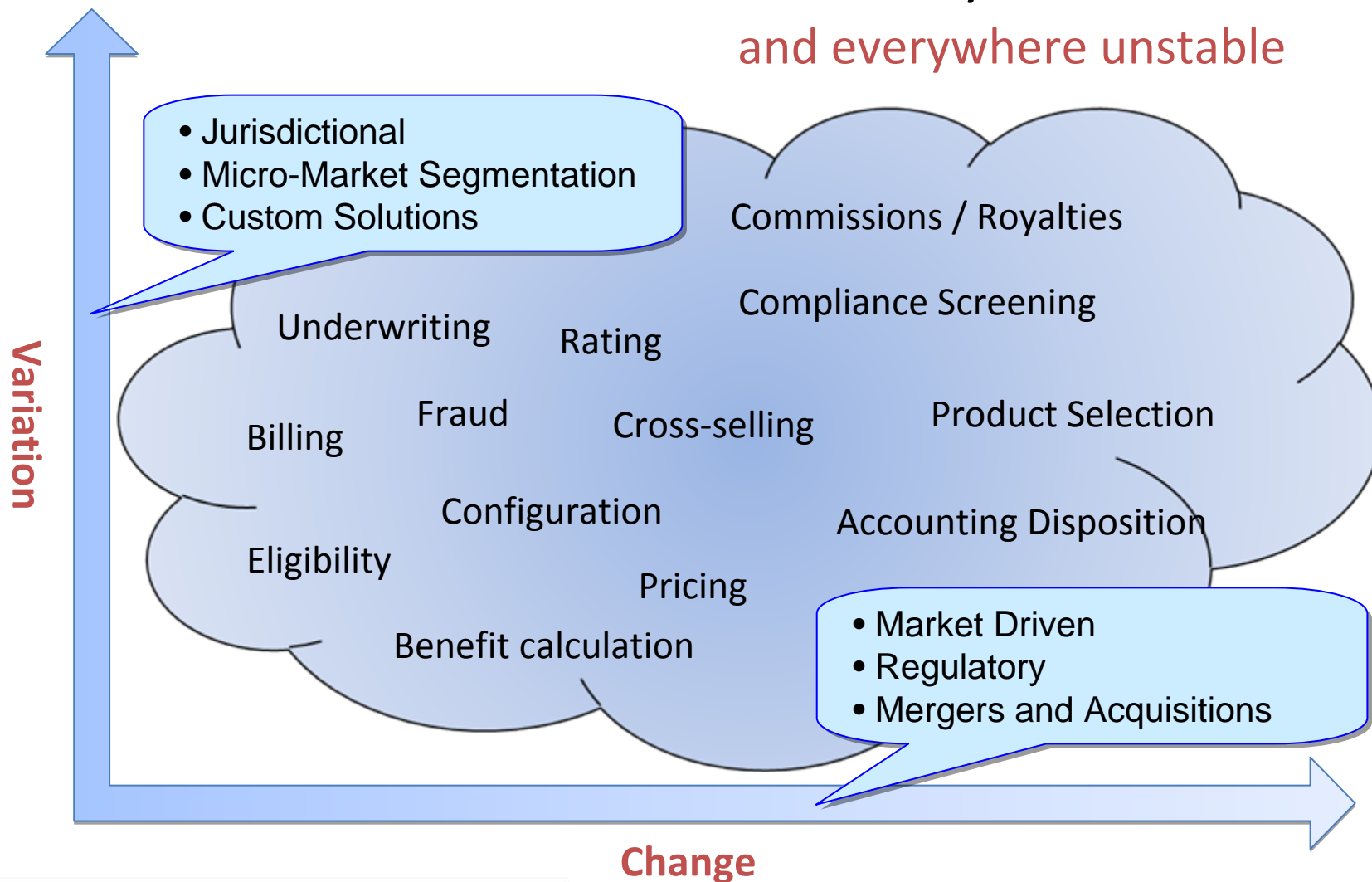
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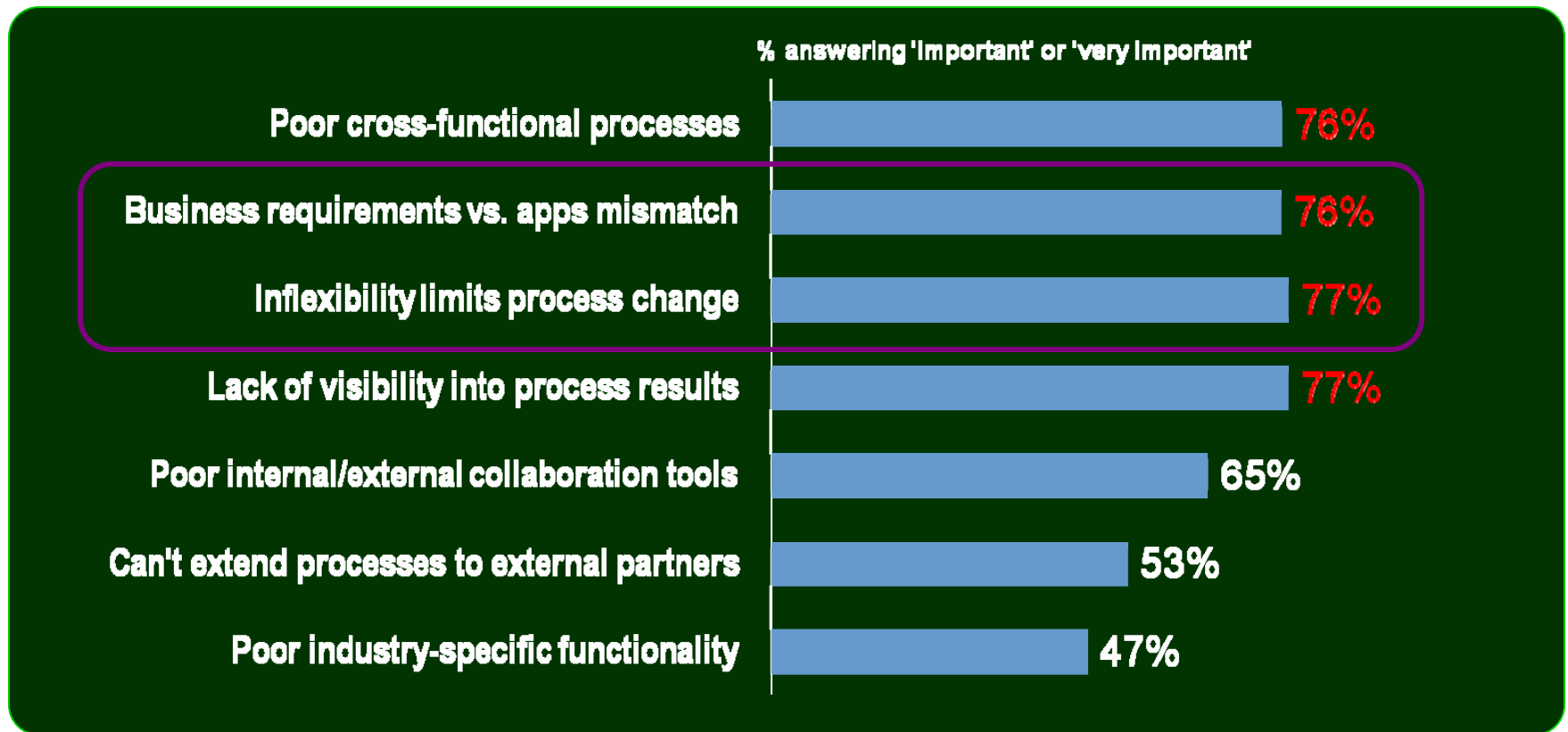
# Automated decisions are everywhere

and everywhere unstable



# Today's business apps are too hard to change

“Considering your existing enterprise app implementations, how important are the following business problems?”



Source Forrester - business and IT decision-makers, Sept 2006



# When business logic is hard coded



- Long change cycle
- Opaque for business users
- Often hidden, scattered and duplicated

Line of Business



IT

```
state = successLoanRequest(Borrower borrower, Loan loan) { // Processing request from  
borrower.getName()); // Approve or reject the loan. checkLoanConditions(borrower, loan); // Display the verdict if  
(loan.isApproved()); System.out.println("==> Loan is approved ->"); } else { System.out.println("==> Loan is rejected -(-");  
for(Object msg : loan.getMessages()) { System.out.println("==> Because " + msg); } } /** * Check conditions on the  
borrower and the loan using hard-coded policies. */static void checkLoanConditions(Borrower borrower, Loan loan) { //  
Check max amount if (loan.getAmount() > 1000000) { loan.addToMessages("The loan cannot exceed 1,000,000");  
loan.reject(); } // Check debt-to-income ratio if (loan.getAmount() > 0) { double debtToIncome = (loan.getPayment()*  
100 / borrower.getAnnualIncome()); if (debtToIncome > 50) { loan.addToMessages("debt-to-income too high compared to credit score");  
(borrower.getAnnualIncome() > 0) { double debtToIncome = (loan.getPayment()*100 / borrower.getAnnualIncome());  
loan.reject(); } if ((val >= 30) && (val < 45) && (borrower.getCreditScore() >= 0) && (borrower.getCreditScore() < 400)) {  
loan.addToMessages("debt-to-income too high compared to credit score"); loan.reject(); } if ((val >= 45) && (val < 50)  
&& (borrower.getCreditScore() >= 0) && (borrower.getCreditScore() < 600)) { loan.addToMessages("debt-to-income too high  
compared to credit score"); loan.reject(); } if ((val >= 50) && (borrower.getCreditScore() >= 0) && (loan.getAmount() >
```

## Business Logic

Application code



# Business Rules bridge Line of Business and IT

## Business Rule

A statement of business logic that:

- ✓ Can be authored by business users
- ✓ Is executable



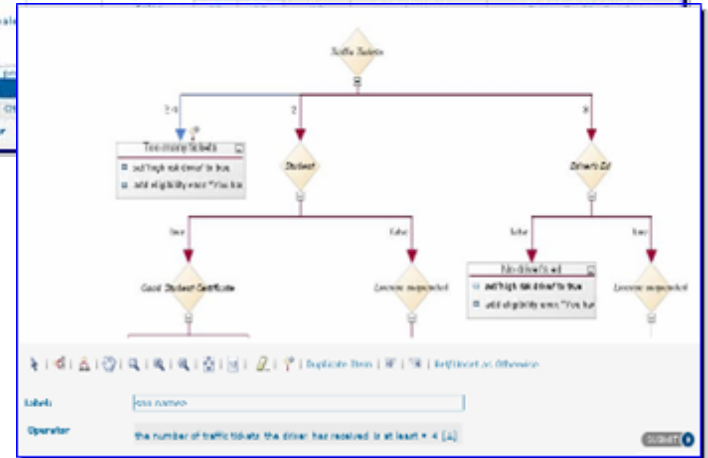
### Quasi-natural language

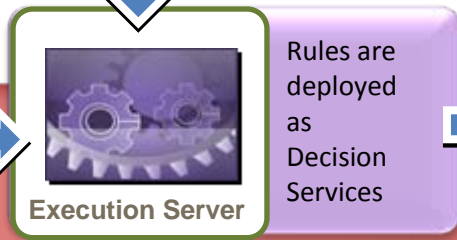
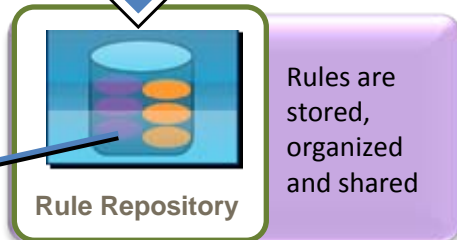
```
if the yearly repayment of 'the loan' is more than
the yearly income of 'the borrower' * 0.3
then
add "Too big Debt-To-Income ratio" to the
message of 'the loan' ;
reject 'the loan' ;
```

### Decision Tables

	Gender	Is Married?	Is Graduate?	Age		Dollar	Adjustment Type	Surcharge	Reason
				Min	Max				
0				< 23		23	surcharge	Driver Profile Surcharge	
1			false	24	30	18	surcharge	Driver Profile Surcharge	
2			false	31	35	13	surcharge	Driver Profile Surcharge	
3			true	< 23		20	surcharge	Driver Profile Surcharge	
4				24	30	15	surcharge	Driver Profile Surcharge	
5	male			31	35	10	surcharge	Driver Profile Surcharge	
6			false	< 23		18	surcharge	Driver Profile Surcharge	
7				24	30	14	surcharge	Driver Profile Surcharge	
8			true	31	35	10	surcharge	Driver Profile Surcharge	
9				< 23		15	surcharge	Driver Profile Surcharge	
10			24	30	10	surcharge	Driver Profile Surcharge		
11						5	surcharge	Driver Profile Surcharge	
12						16	surcharge	Driver Profile Surcharge	
13	female								
14									
15									

### Decision Trees





```
if the yearly repayment of 'the loan' is more than  
the yearly income of 'the borrower' * 0.3  
then  
add "Too big Debt-To-Income ratio" to the  
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```

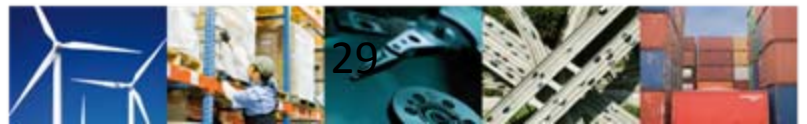
Is this customer eligible for a loan?

No, for the following reason:  
Too big Debt-To-Income ratio

A technology for creating, maintaining and deploying rule based decision services

- Reduces the time to deploy changes
- Improves the understanding of how decisions are made
- Increases opportunities for logic automation
- Favors the reuse of business logic

Application code



# Usage across industries

## Banking

- Loan Origination
- Credit Decisions
- Sales Advisory
- Payments
- Accounting

## Insurance

- Claims Processing
- Underwriting
- Quoting
- Rating
- Commissioning

## Capital Markets

- Automated Trading
- Trade Order Management
- Accounting
- Compliance KYC / AML
- On Boarding

## Public Sector

- Entitlement and Benefit calculation
- Fraud Detection and Management
- Screening and Targeting

## Telecom

- Offer Configuration
- Order Management
- Fraud Detection and Management
- Loyalty Programs
- Network Monitoring

## Transportation and Travel

- Promotions Management
- Loyalty Programs
- Customer Service
- Billing
- Contract Management

## Retail

- Online recommendation
- Campaign Management
- Order Management
- Pricing

## Manufacturing

- Order Management
- Billing
- Contract Management



## Problem

- Lack of flexibility of the Underwriting and Pricing application
  - Unable to differentiate between risks so system priced them all the same, resulting in loss of customers
  - Only 17% of small commercial policies qualified for straight thru processing

## BRMS implementation

- Underwriting and Pricing re-implemented as ILOG BRMS decision services
  - Initial Implementation accounted for 20,000 Rules
  - Currently at 40,000 Rules
  - Reconfiguring to handle 200,000 Rules
- Currently Averaging 3,000 New/Changed Rules Per Month
  - Bi-weekly releases for low complexity rules (written by LOB)
  - Monthly or quarterly releases for complex rules (written by IT)

## Benefits

- Number of Quotes Per Agent increased 26%
- Number of Agents Quoting increased 19%
- Submission Flow increased 50%

**TRAVELERS** 

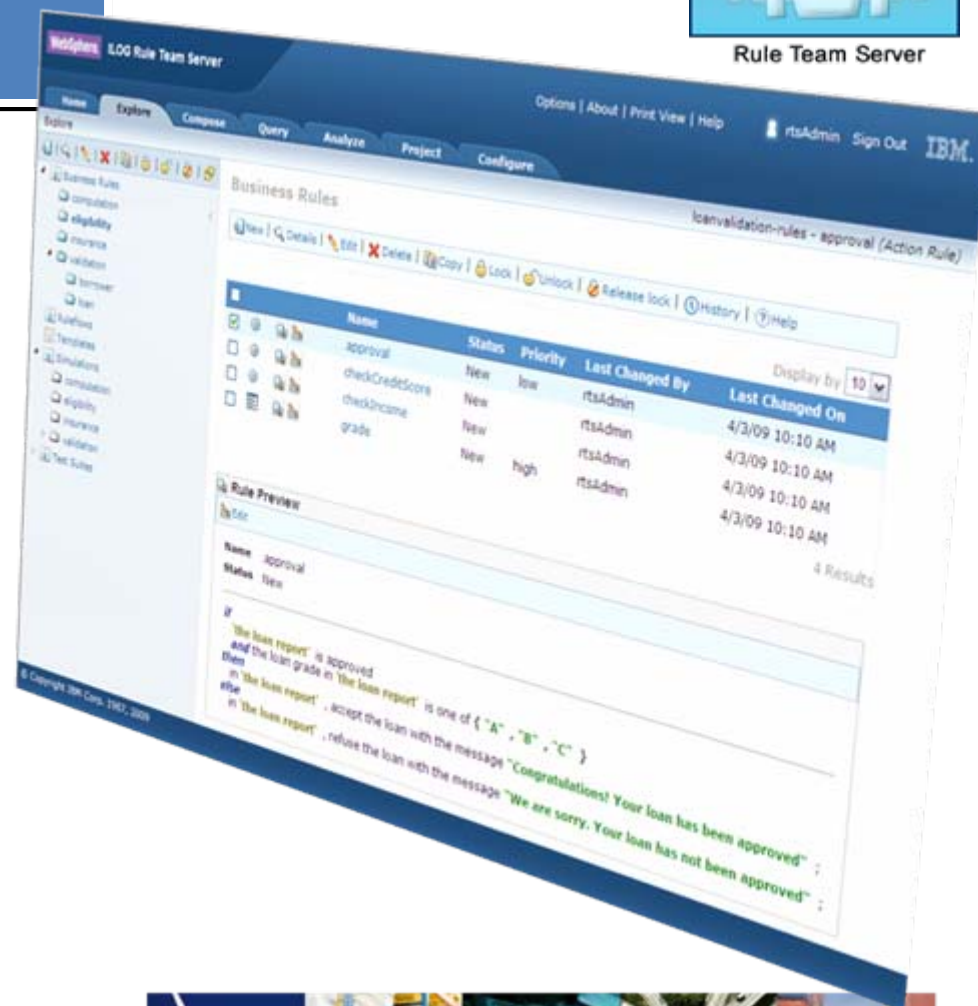


Rule Team Server

- Web-based collaborative environment
- Easy-to-Use, Easy-To-Learn
- Powerful Governance Capabilities

## New in Version 7.0

- Integrated **rule testing and simulation** (*Decision Validation Services – JRules*)
- Integration with **Microsoft Office Word and Excel** for guided, offline rule editing (*Rule Solutions for Office*)
- Ability to manage rule projects for both *JRules* and *Rules for .NET*
- Improved rule analysis and reporting

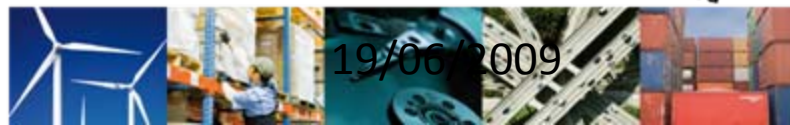
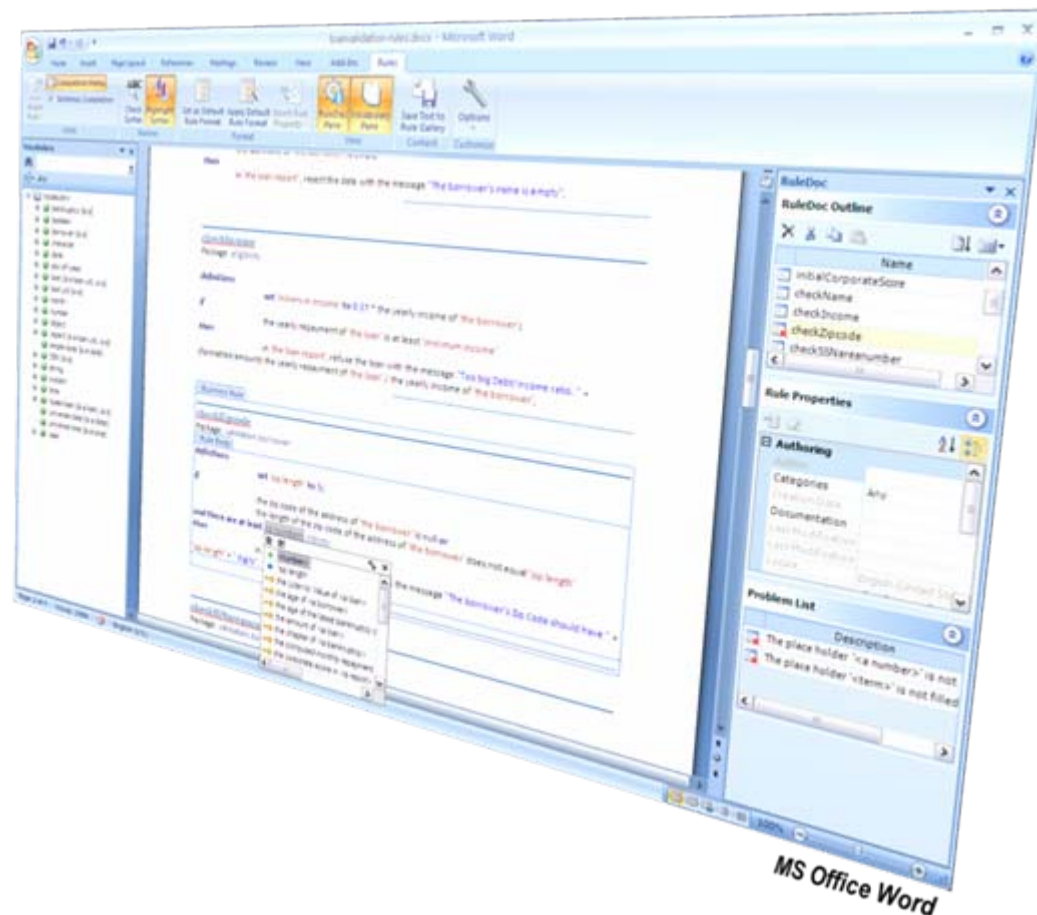
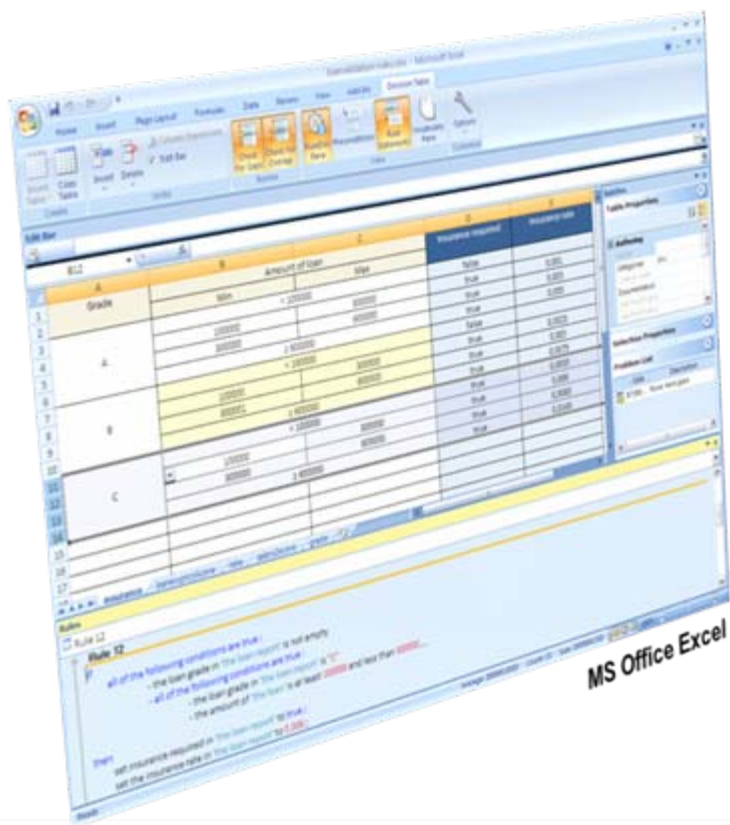






Rule Solutions for Office

- Extend rule maintenance across the organization
- Ruledocs have full understanding of object model and rule syntax
- Integrated with Rule Team Server



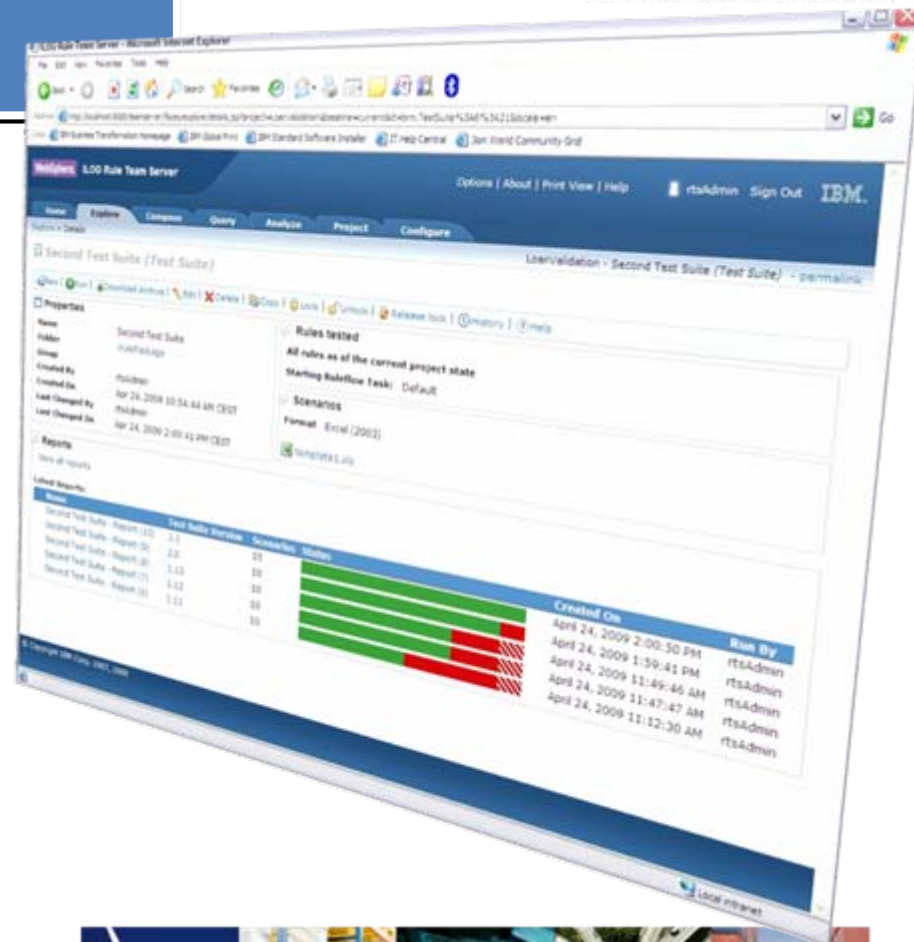


Decision Validation Services

- Meets the needs of business and IT
- Test rules before deploying
- Assess business impact of changes

## New in Version 7.0 (JRules)

- **Work directly within Rule Team Server**
- Ability to use **Microsoft Excel** for data input
- **Configuration/customization wizards and editors in Rule Studio** reduce development time and effort



- Centralized management of deployed rules
- Highly scalable, configurable rule engine
- Run on widest range of platforms



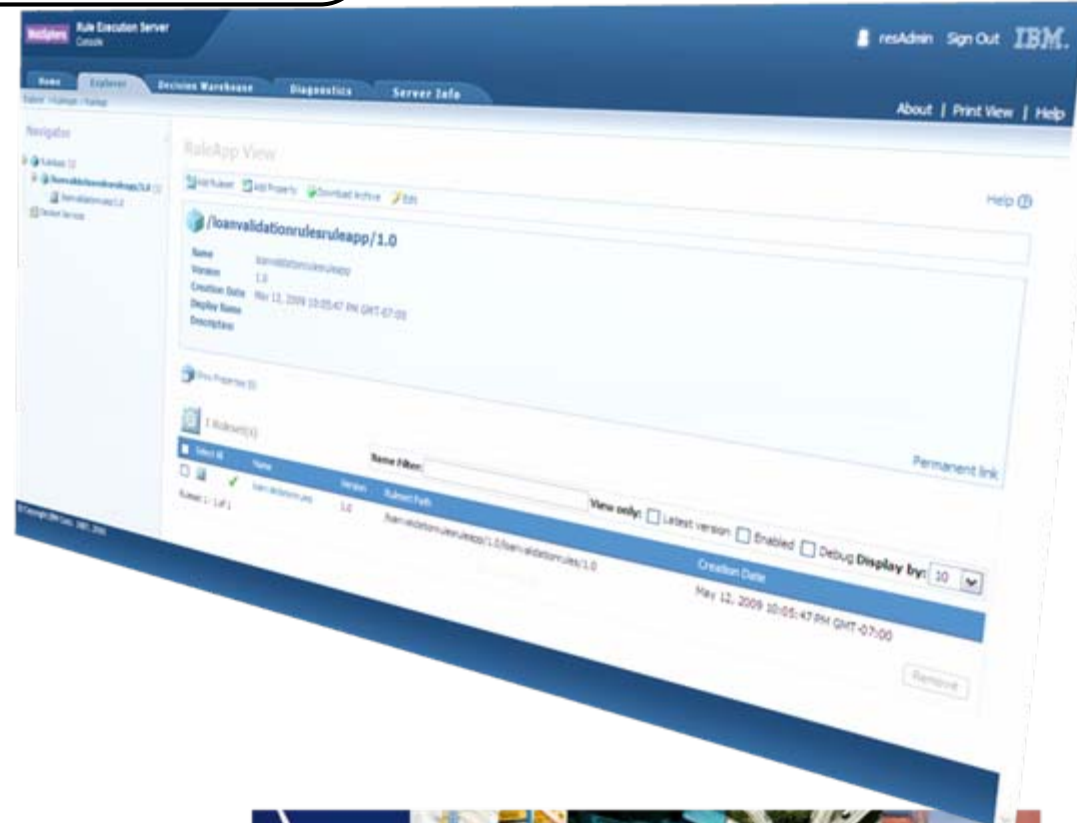
Rule Execution Server for Java



Rule Execution Server for .NET

## New in v7.0

- Decision Warehouse execution audit (JRules)
- Transparent Decision Service deployment now available for .NET





Development

**Design**

## Create with Confidence

- Natural language and graphical rule authoring
- Eclipse or Visual Studio-based IDEs and Web-based rule management environment
- Guided authoring through Microsoft Office Word and Excel.



Line Of Business

**Manage**

## Change with Confidence

- Business user testing and simulation integrated in centralized, governed rule management environment
- Business rules versioning with history management
- Syntax and semantic rule querying

**Share**

## Share with Confidence

- Rule repository provides single source of truth
- Role-based access control of business policies

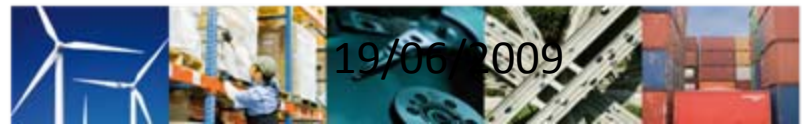


Production

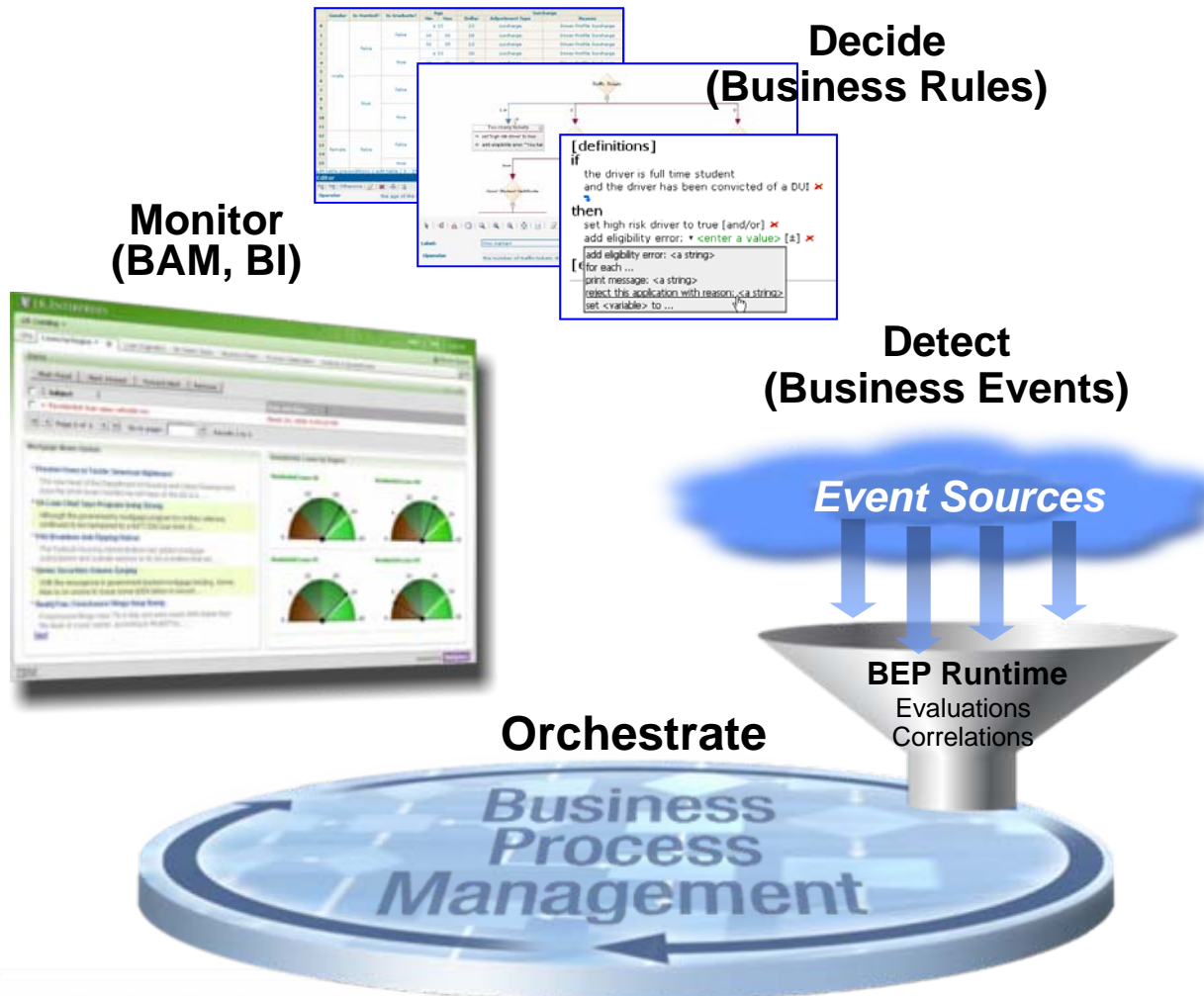
**Deploy**

## Deploy with Confidence

- Integrated monitoring and management of production rule applications
- Cross-platform decision services for SOA deployment
- Decision Warehouse for improved compliance enquiries



# BPM from IBM : Tools for the Agile Business



## Points of Flexibility

### Business Event Processing

- Detect causes of action in complex flow of events and activities and trigger execution.

### Business Process Management

- Tie discrete actions and decisions together to orchestrate effective business execution

### Business Rules Management

- Decide key parameters for action.

### Business Activity Monitoring

- Monitor performance, compliance

### Service Oriented Architecture

- Implement a technical strategy for agility, governance.



# Grazie



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