



# IBM Business Process Management Solutions for Manufacturing

David MacDonald  
IBM – Director, Business Process Management  
November 17, 2011



# The New Normal: Change, Complexity, Uncertainty

**\$488 billion**

Lost in process inefficiencies  
in Fortune 500 companies

**\$534 billion**

In mobile  
transactions by 2015

**85%**

Of enterprises use  
external cloud services

**50%**

Of businesses plan to adopt more  
collaborative sourcing models

**70%**

Of businesses outsource one  
or more strategic activities

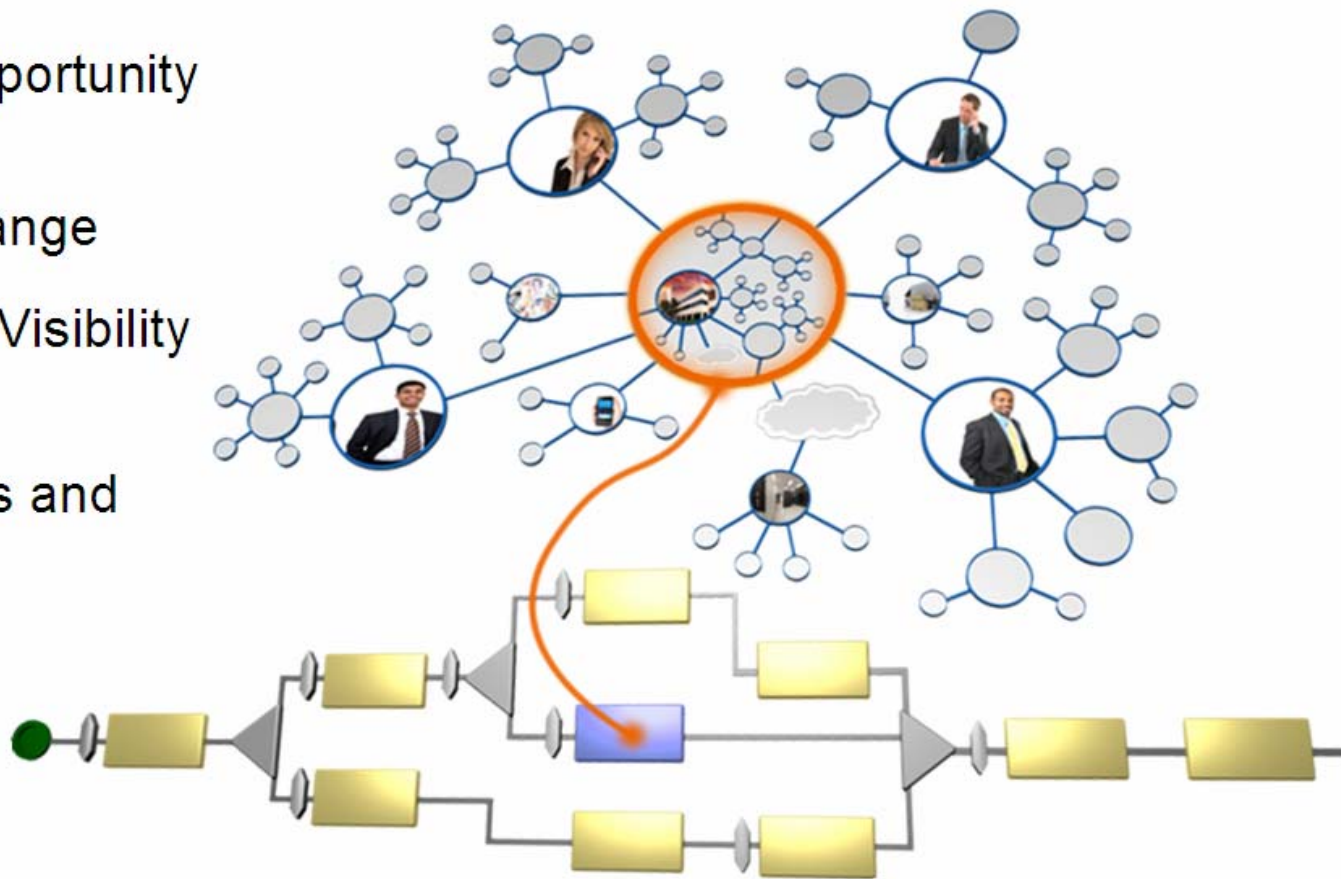
**50 billion**

Devices connected to  
the Internet by 2020

# Can Your Processes Handle Change, Complexity, and Uncertainty?

Turn complexity into opportunity through:

- Business Driven Change
- End to End Process Visibility and Governance
- Optimized Processes and Decisions



***Agile Processes and Decisions***



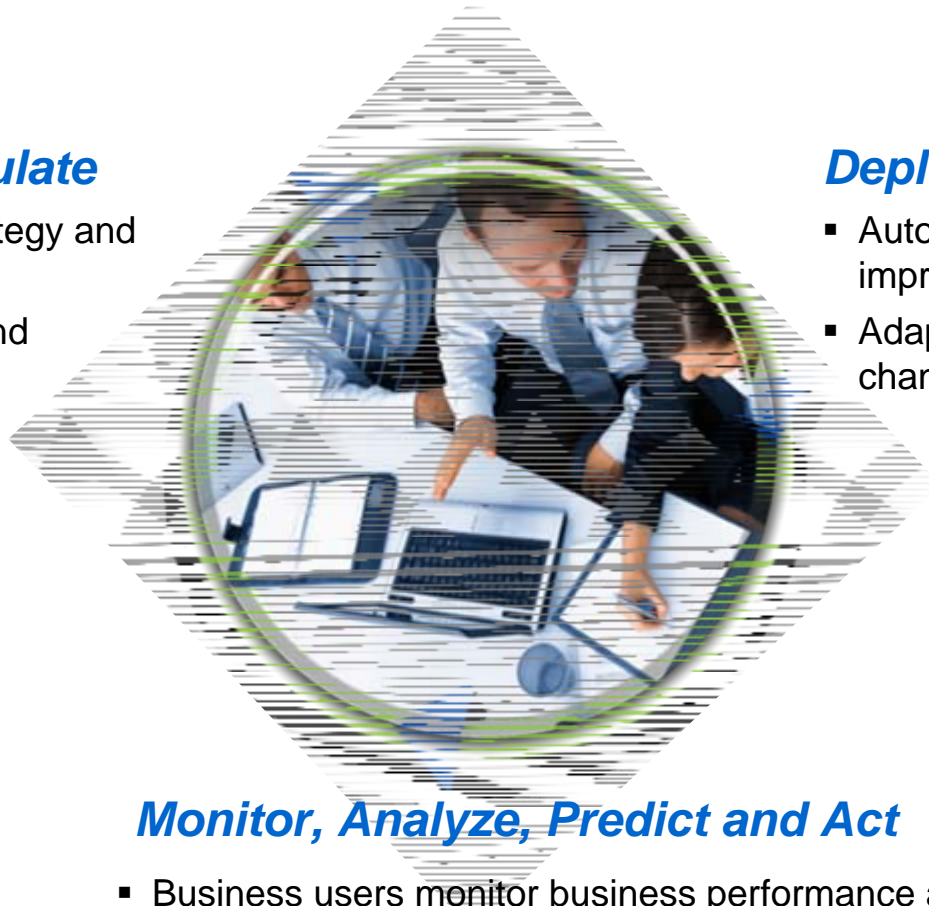
# What is *Business Process Management* ?

## *Optimize processes for better business outcomes*

### ***Model and Simulate***

- Align business strategy and IT execution
- Assess, capture, and analyze core value processes

*Software  
Expertise*



### ***Deploy, Execute, and Change***

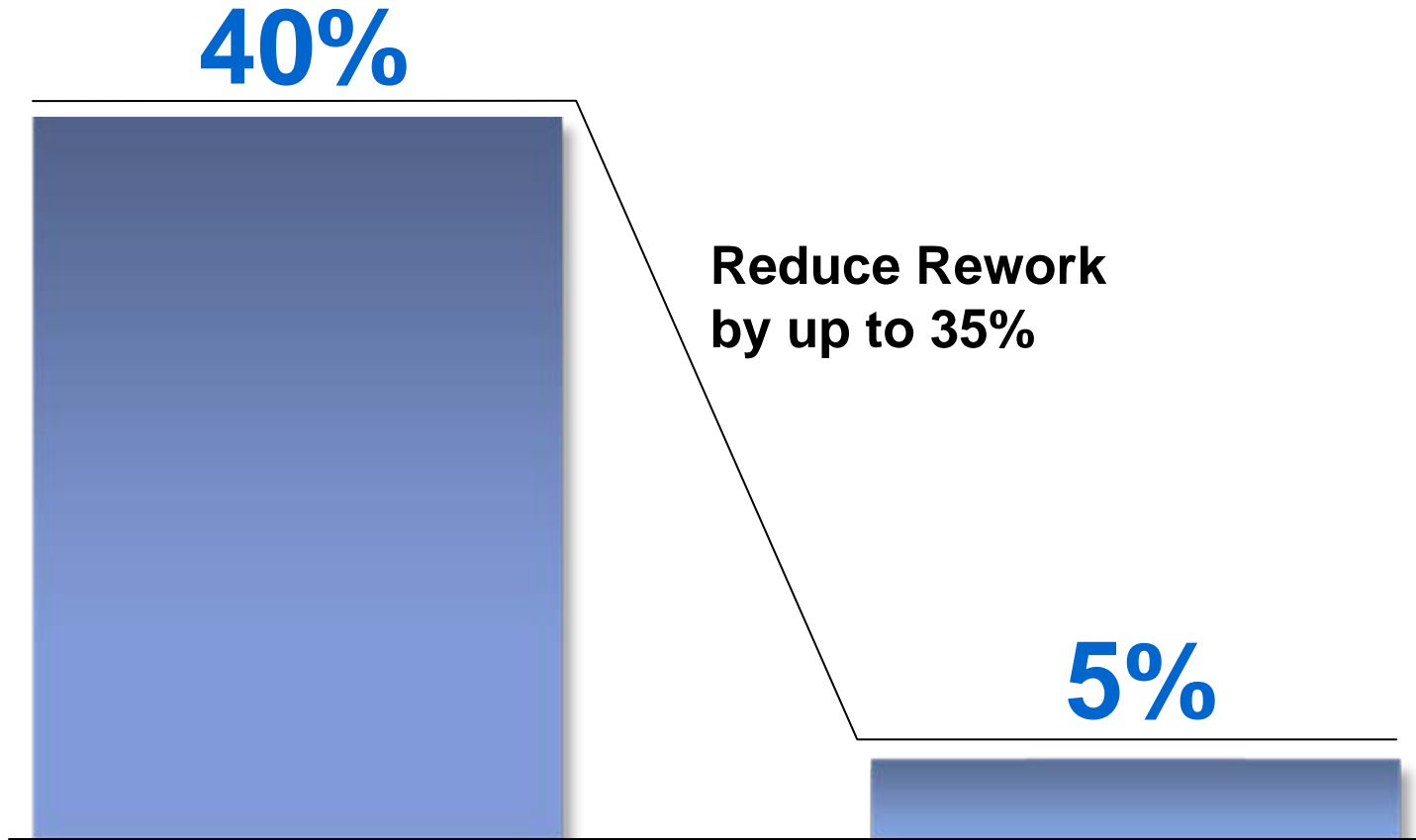
- Automate business processes to improve efficiency and profitability
- Adapt and collaboratively respond to change

Visibility & Collaboration  
Business User Engagement  
Efficiency & Productivity

### ***Monitor, Analyze, Predict and Act***

- Business users monitor business performance and define new alerts based on KPIs

# Business Process Management Increases Productivity to Improve Profit Per Employee



BPM is about **dramatically** increasing productivity of your employees

## Asian Toymaker Streamlines Supply Chain Transactions

### Challenges

- **Processing Inefficiency.** Difficulty coordinating procurement, customer requirements and logistics for getting products to the US.
- **Multiple Systems of Record.** Difficulty managing the trail of paperwork.
- **Time Consuming Vendor Inquiries.** The process of flagging exceptions such as delivery days required significant time and resources.

### Results

- **Tracking the supply chain from order-to-shipment reduced customer delays**
- **135% increase in transaction volume without adding additional resources**
- **Over 80% of vendor inquiries flow without human interaction**

“Many suppliers and logistics providers now manage all their interactions through the Internet, which has improved fulfillment cycles, cut costs, and improved service. SAP was utilized as a transactional engine - we needed to be able to manage the business process that surrounds the transaction.”

David Adams, Business Integration Manager

## Large PC Manufacturer Minimizes Distressed Shipments

### Challenges

- **Increased Production Costs and High Inventory Levels.** Shipments deemed undeliverable were returned.
- **Unmanaged Process.** Real-time shipment status was unavailable or out-of-date, limiting control of the situation.
- **Lack of Monitoring.** No up-to-date reports that show how the processes were being executed.

### Results

- **Enabled collaboration between the customer, call center and shipper.**
- **Percentage of shipments rescued improved from below 5% to nearly 70%**
- **Savings of \$2M per quarter**

One of the world's top suppliers of PCs, ships over 140,000 systems per day and have nearly 2 billion interactions with customers every year.

## Motor Company Increases Engineering Productivity

### Challenges

- **Unproductive Work.** High-value engineering employees spent 70% of their time doing administrative tasks and not engineering activities.
- **Process Inefficiencies.** Too many "workarounds" led to duplication of work and slowing down the process.
- **SLA Violations.** Confusion, inflexibility, and lack of data in their process steps caused deadlines to be missed.

### Results

- **Cut "engineering" time of designers on car systems by 20% in one year**
- **Enhanced productivity through standardized process across vehicle lines**
- **60% reuse across first two projects**

This company is one of the world's largest manufacturers of cars and trucks.

"BPM provides a layer of process to optimize the interaction between people, process and information"

David Knapp, Director of Business Process Management



## Situation

- Order complexity: hard to ensure feasibility of configured vehicles
- Demands for customization: difficult or impossible to handle brand specificities
- Multiple brand management: 3 different systems to maintain

## Goals

- Build flexible order management system capable of handling 500 manufacturing constraints
- System needs to meet requirements not addressed by existing solutions
- Improve customer service with order feasibility check & self service web portal

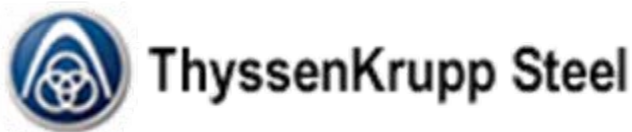
## Solution

- OMS based on IBM Business Rules Management System
- Efficiently managing 18,000 rules per brand to calculate the manufacturing lead times
- 5 simulations per day (max 45 min), take into account late supplier deliveries, damage in production plant, etc.. And re-evaluate new priorities accordingly

## Benefits

- Improved accuracy of car production lead time by 90%
- Users informed of potential delays in real time
- Efficient platform for sharing and exchanging data between sales & production
- Vehicle production can be adapted to demand

# A sampling of IBM Business Process & Decision Management Clients in Manufacturing



# Business Processes and Decisions are everywhere...



We need to add a quality control check to meet new regulatory requirement.

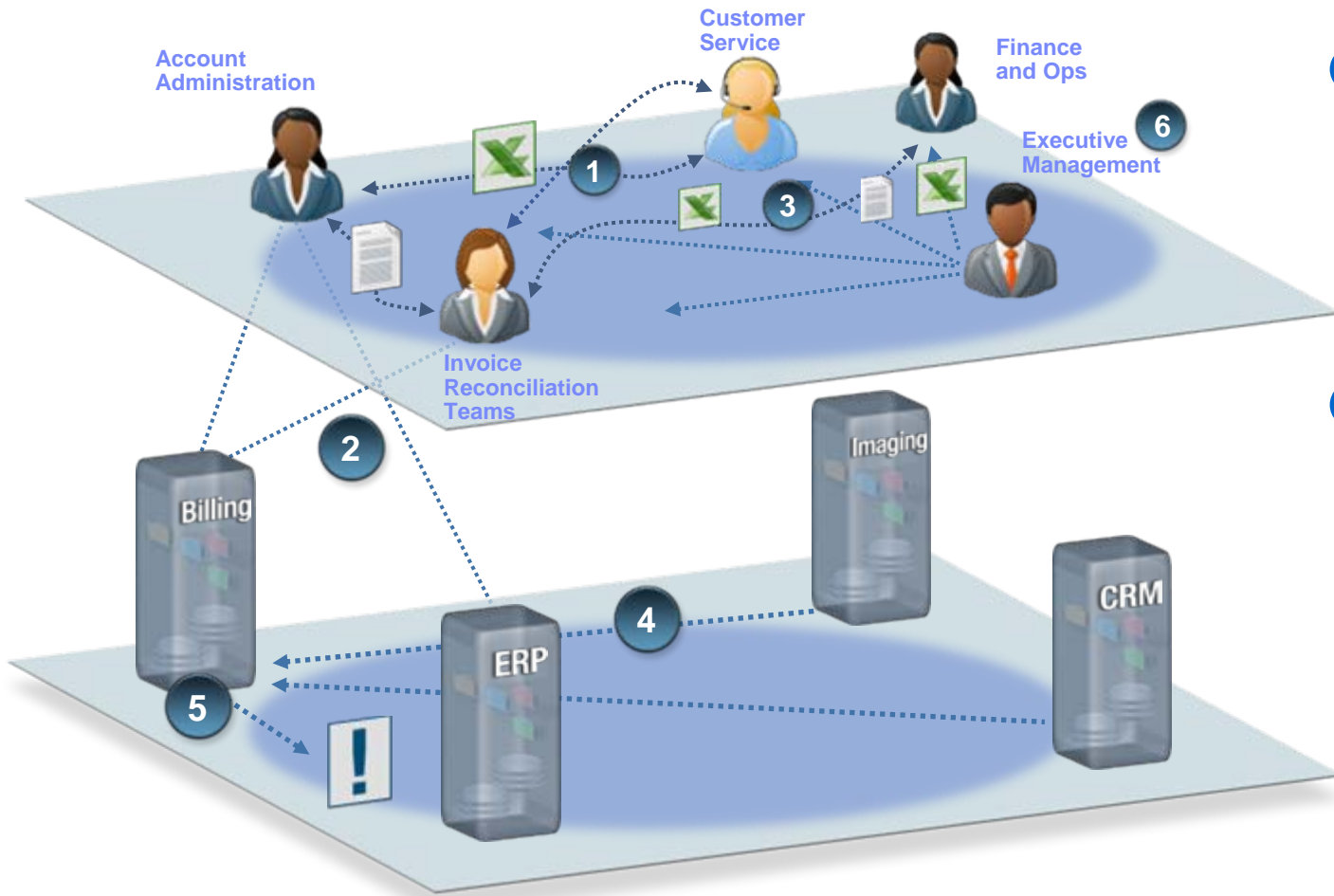
Let's create a special contractual incentive for our best suppliers.



Can we automate approvals for this type of claims?

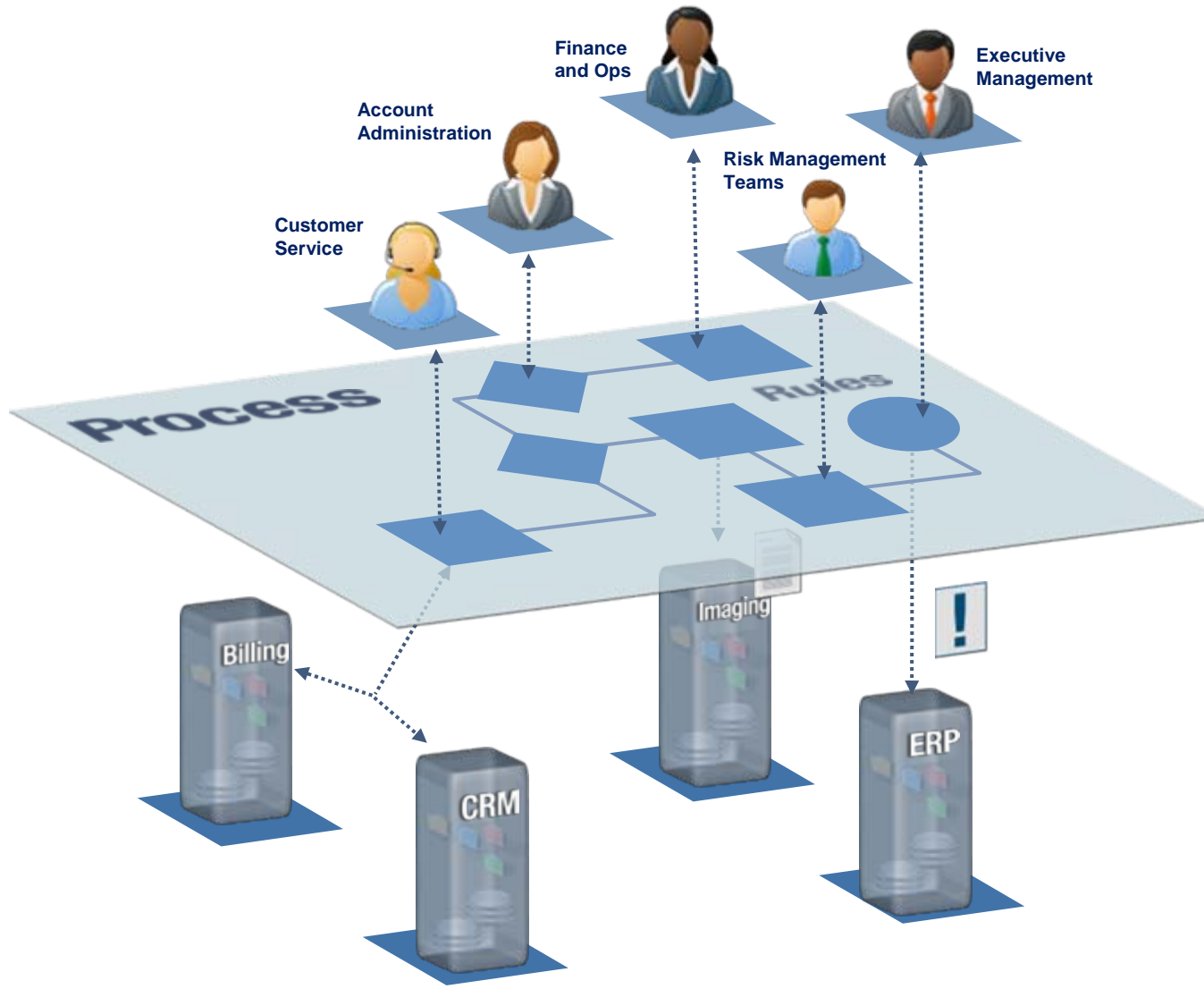
changing frequently & under scrutiny

# Typical process problems



- 1 Unstructured Tasks and Communication (ex Paper or email)
- 2 Inefficient Working Environment Spans Systems
- 3 Inconsistent Prioritization
- 4 Incomplete or Inaccurate Data Flow Between Systems
- 5 Lack of Control Over System and Business Events (Exceptions)
- 6 Poor Visibility Into Process Performance

# BPM brings order to the chaos



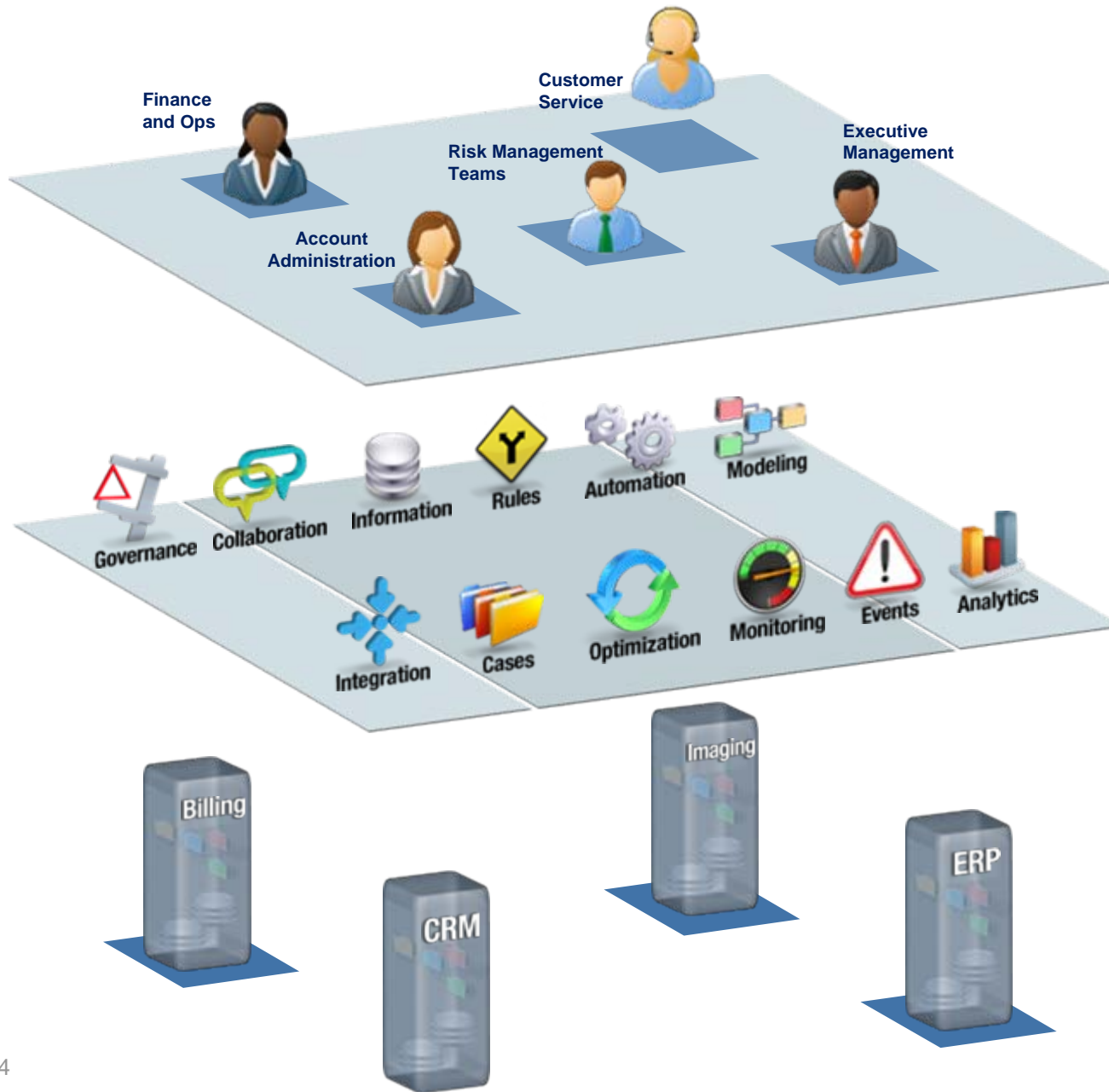
- 1 Automate workflow & decision making
- 2 Reduce errors and improve consistency
- 3 Standardize resolution across geographies
- 4 Leverage existing systems and data
- 5 Monitor for business events and initiate actions
- 6 Real-time visibility and process control

## Customer Benefits:

- Huge Reduction in Manual Work, Errors
- Faster, More Consistent Issue Resolution
- Easier to Manage the Business
- Consistent Case Handling



# The essential capabilities



- Modeling
- Monitoring
- Automation
- Governance
- Optimization
- Rules
- Information
- Cases
- Events
- Integration
- Collaboration
- Analytics

## **Works Together**

- **Tight integration across core technologies**
- **Interoperability with complementary technologies**

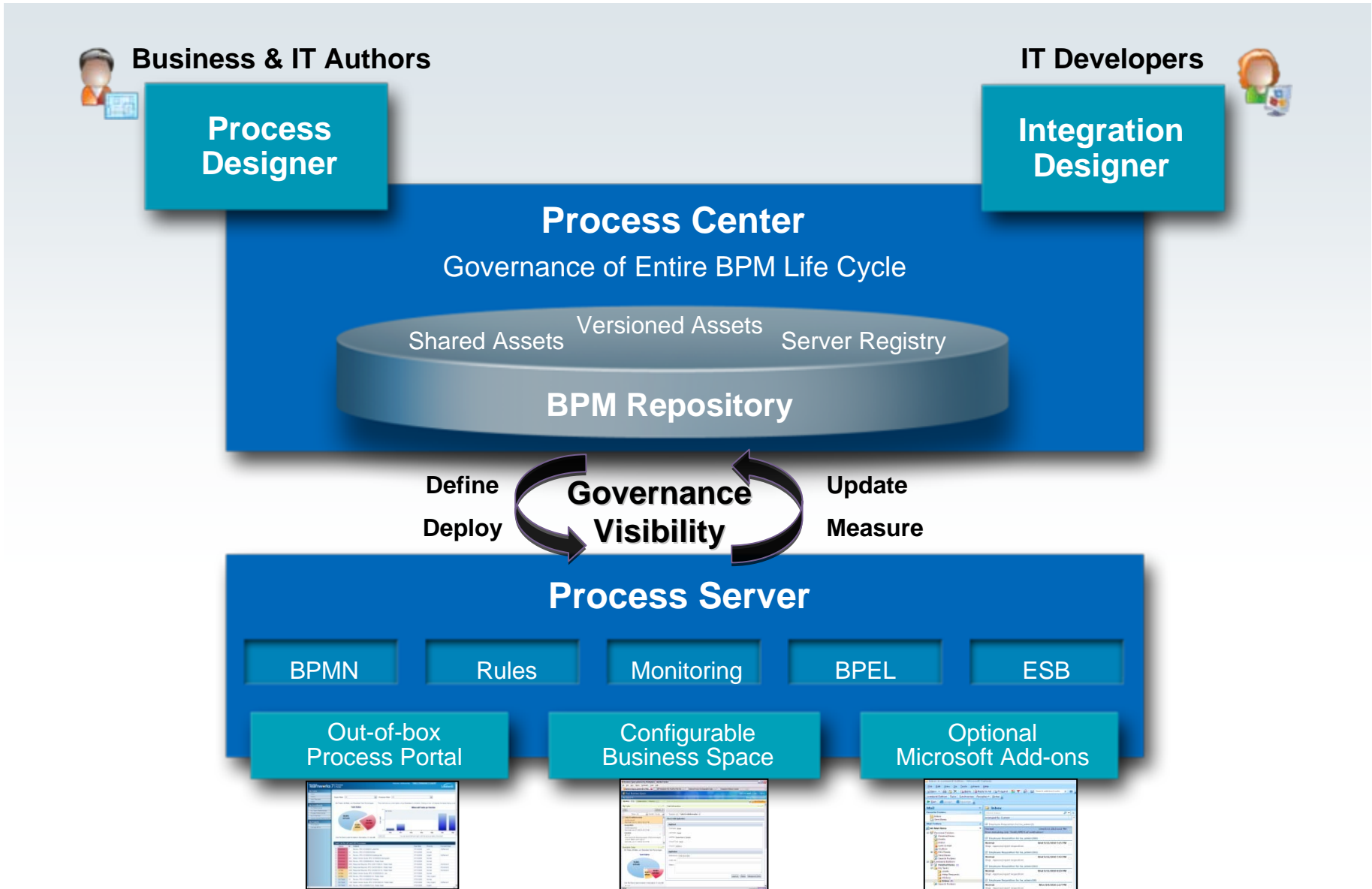
## **Works the Same**

- **Common look and feel**
- **Enables easy skills transfer**

## **Works Reliably**

- **Secure and safe infrastructure**
- **Easily scalable**

# IBM Business Process Manager V7.5





# IBM BPM v7.5 Playback Session

Process Developers

Call Center Managers

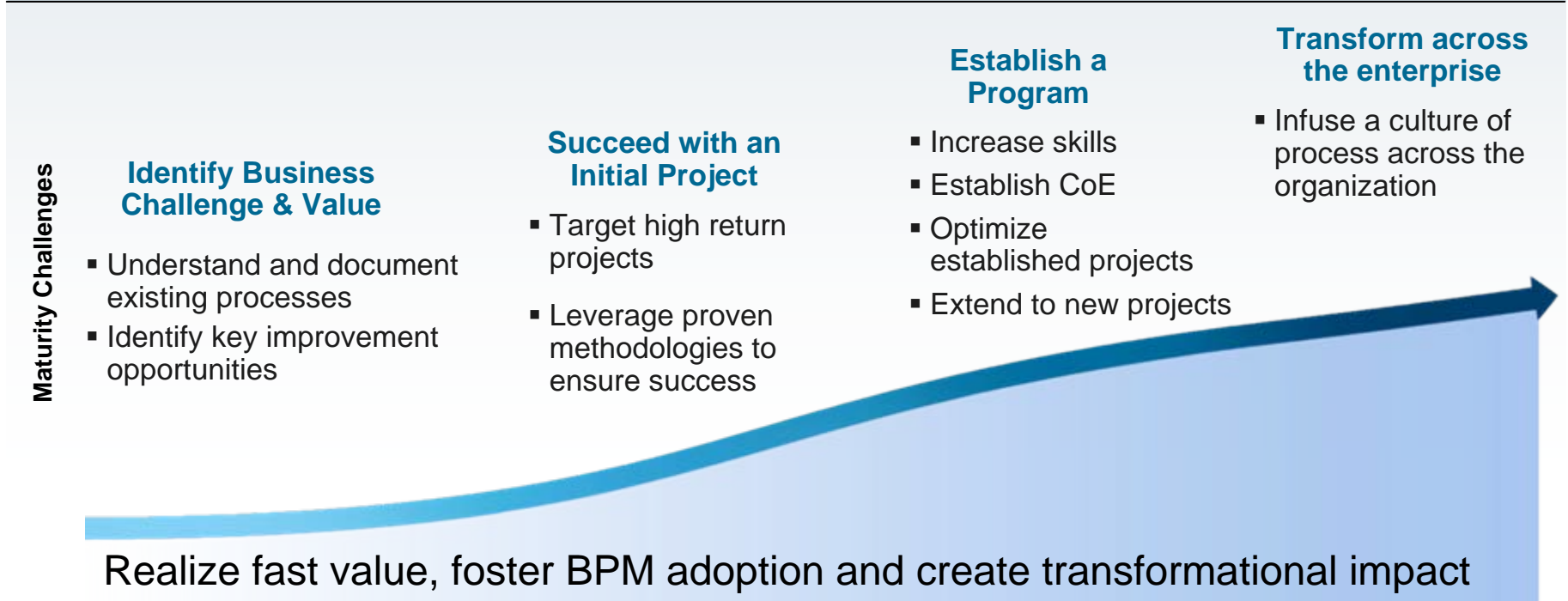
VP, Operations



# Ensure success with a proven approach for adopting Business Process and Decision Management



		Project		Program	Transformation
Technology	Visibility	Rapid time to value	Simplicity to engage business users	Governance	Power to scale as business requires
Expertise	Training	Turnkey Services	Solution Mentoring	On-Demand Consulting Assistance	





# IBM is the proven leader in all aspects of BPM



## Largest BPM Customer Base

- #1 in Market Share according to independent analysts Gartner Group and IDC
- 5,000 + clients

## Strongest Ecosystem

- 1000+ business partners
- Global Users group



## Unparalleled expertise and level of investment

- Over 15 years of industry leadership
- 100's of assets
- Broadest, Deepest solution portfolio & services

## Broadest and Most Differentiated Capabilities

- Simplicity for fast deployment and full business user participation
- Centralized governance for repeatability and consistency
- Visibility and Control to continuously improve business operations
- Power through High Scalability, Integrity & Quality of Service
- Market Leading decision and rules capabilities
- Best in class exceptions handling and case management

**Think big**

**Start small**

**Scale fast**

*“Complexity should not be viewed as a burden to be avoided; we see it as a catalyst and an accelerator to create innovation and new ways of delivering value.”*

**Juan Ramon Alaix, President,  
Pfizer Animal Health**

