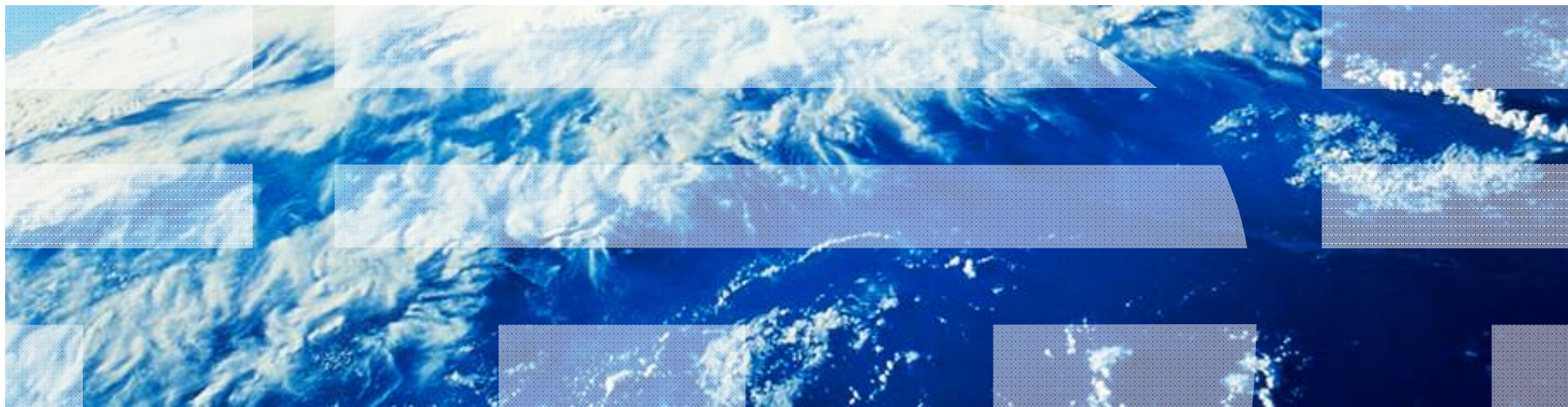




Enterprise IT Architectures

BPM (Business Process Management)





Introduction



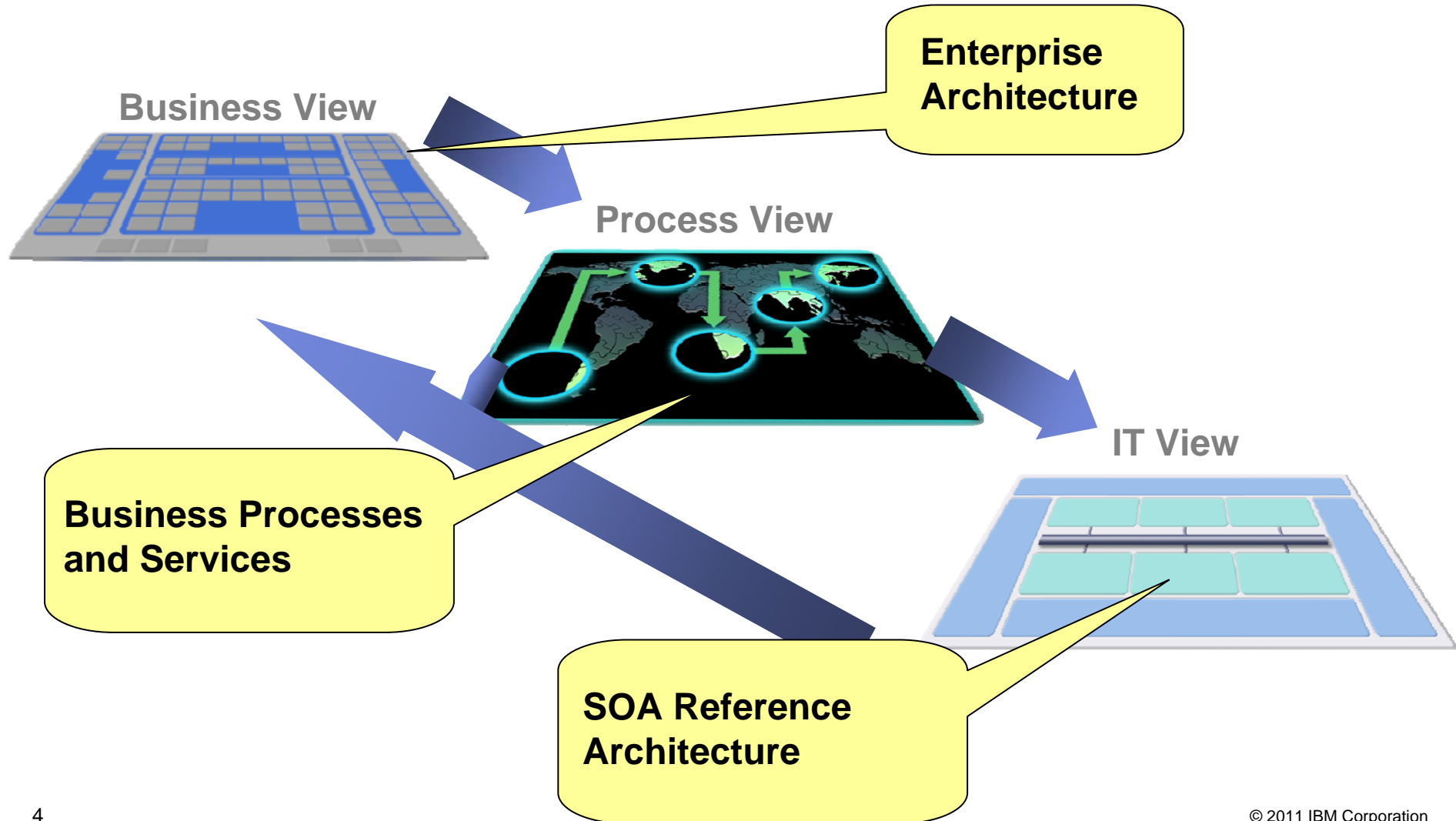
Agenda of this Part

- **Business Process Management (BPM),
a relatively new approach in IT**

- **Key elements:**
 - **Capturing processes in Business Terms
(Activity, Task, Participant)**
 - **Modeling processes**
 - **Models can be used for execution, thus business processes can
be automated**
 - **Control of business process through monitoring**



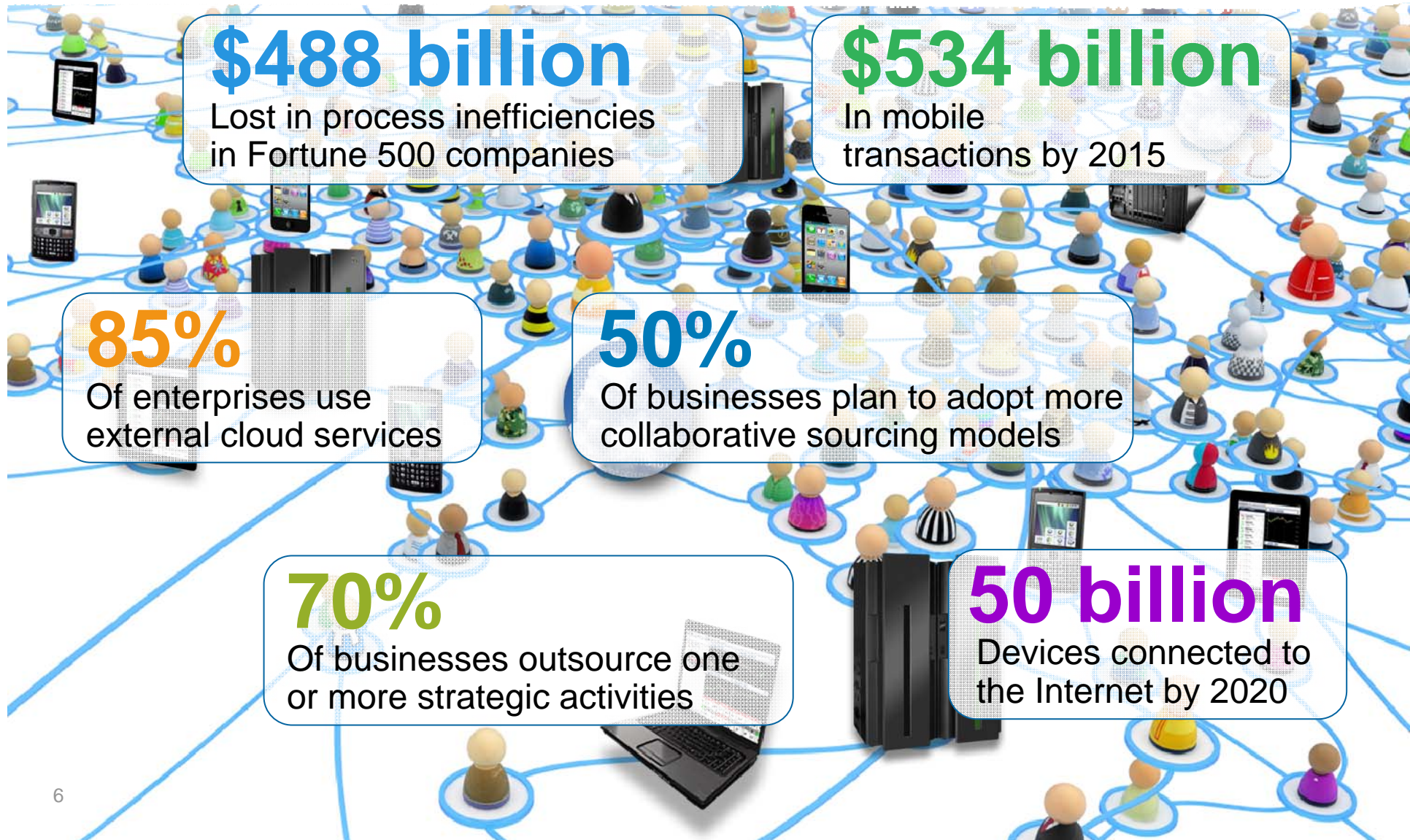
Different views for a Holistic Approach Aligning Strategy with Business and IT Execution





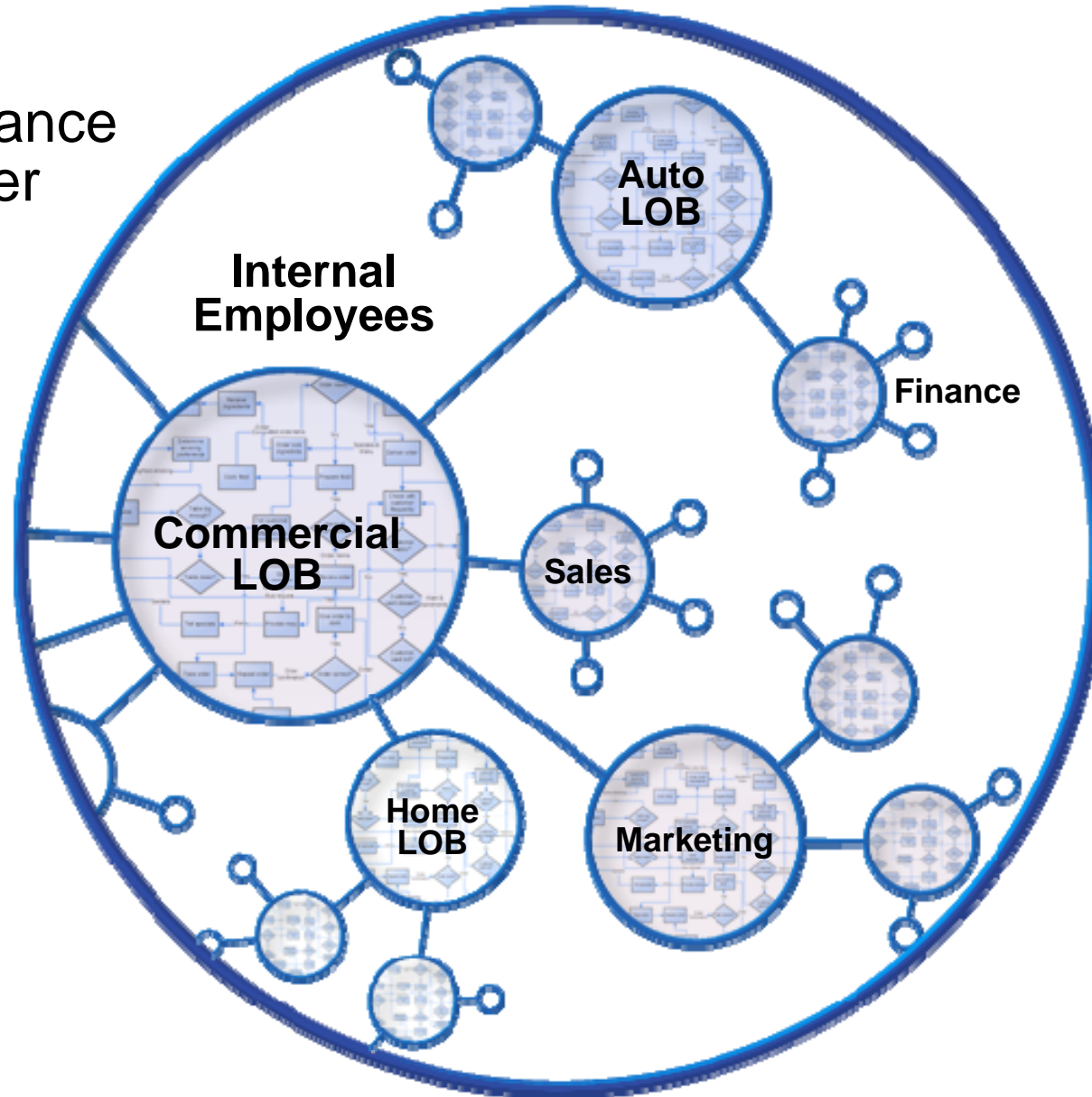
BPM Introduction

The New Normal: Change, Complexity, Uncertainty



Complexity exists internally within organizations.....

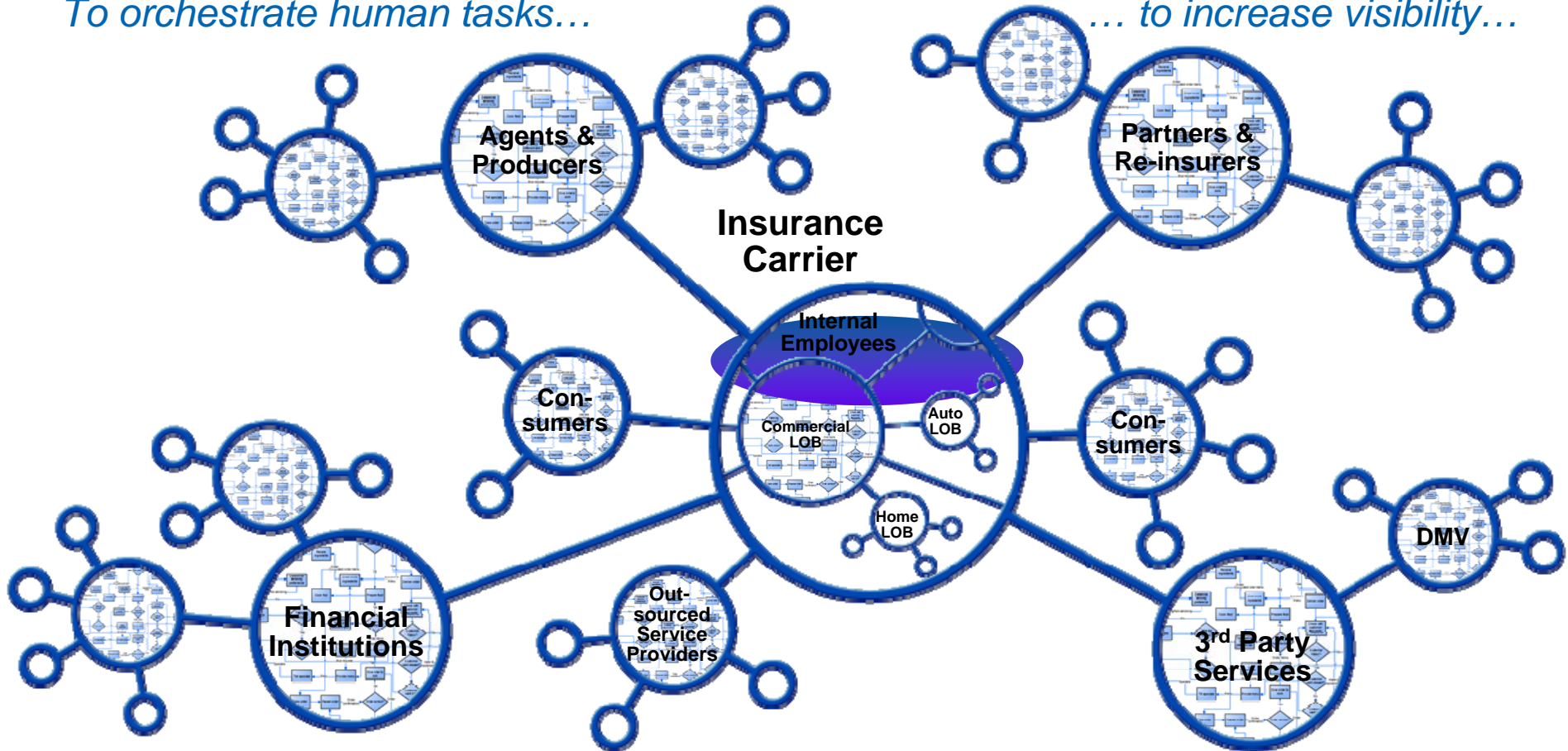
Insurance
Carrier



....and externally within the broader business network Companies need end-to-end process management

To orchestrate human tasks...

... to increase visibility...



... to manage exceptions and cases...

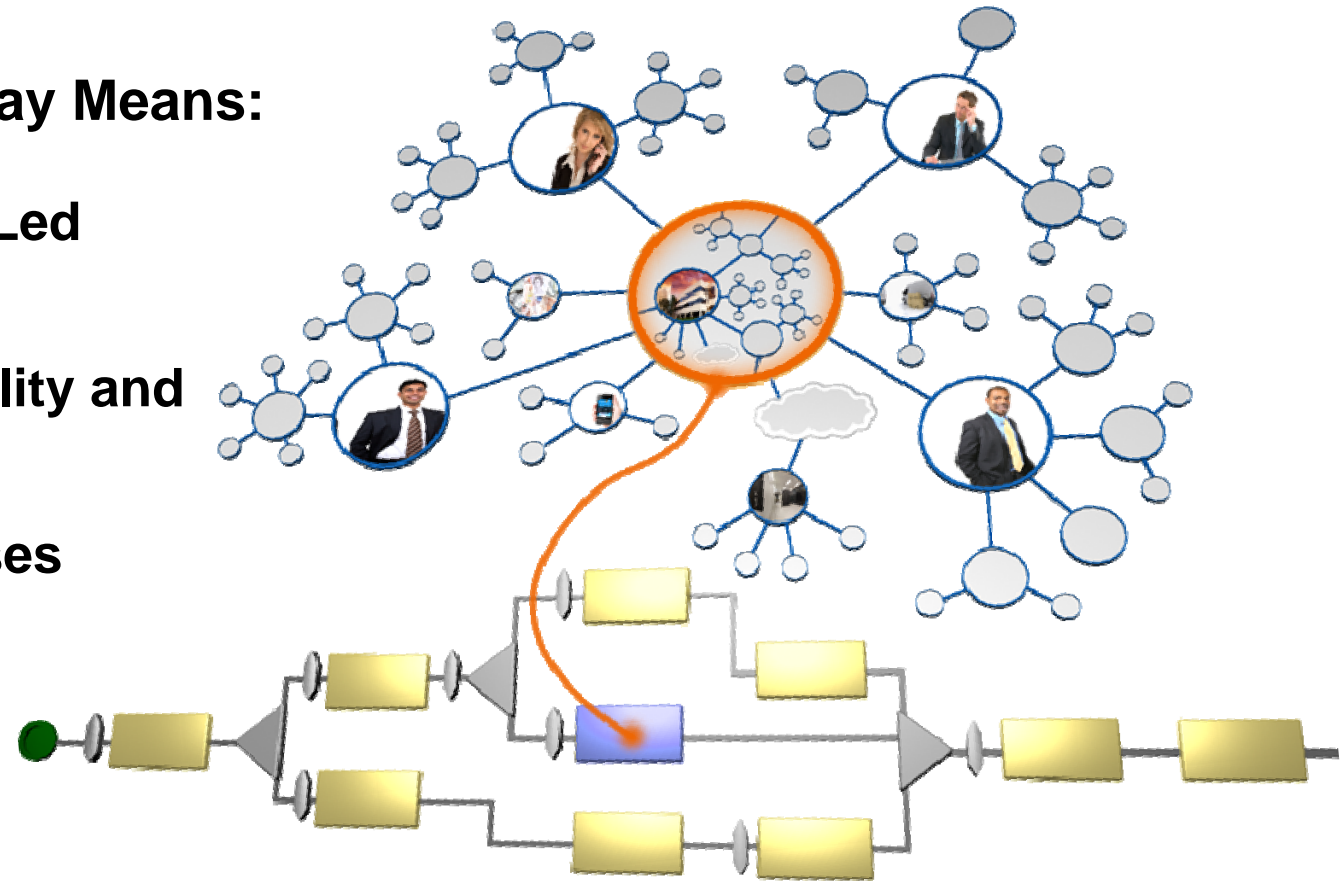
... and for scalable transactions...

... everything you need to manage end-to-end business networks

Can Your Processes Handle Change, Uncertainty and Complexity?

Transformation Today Means:

- **Simpler Business Led Change**
- **Full Process Visibility and Governance**
- **Optimized Processes and Decisions**

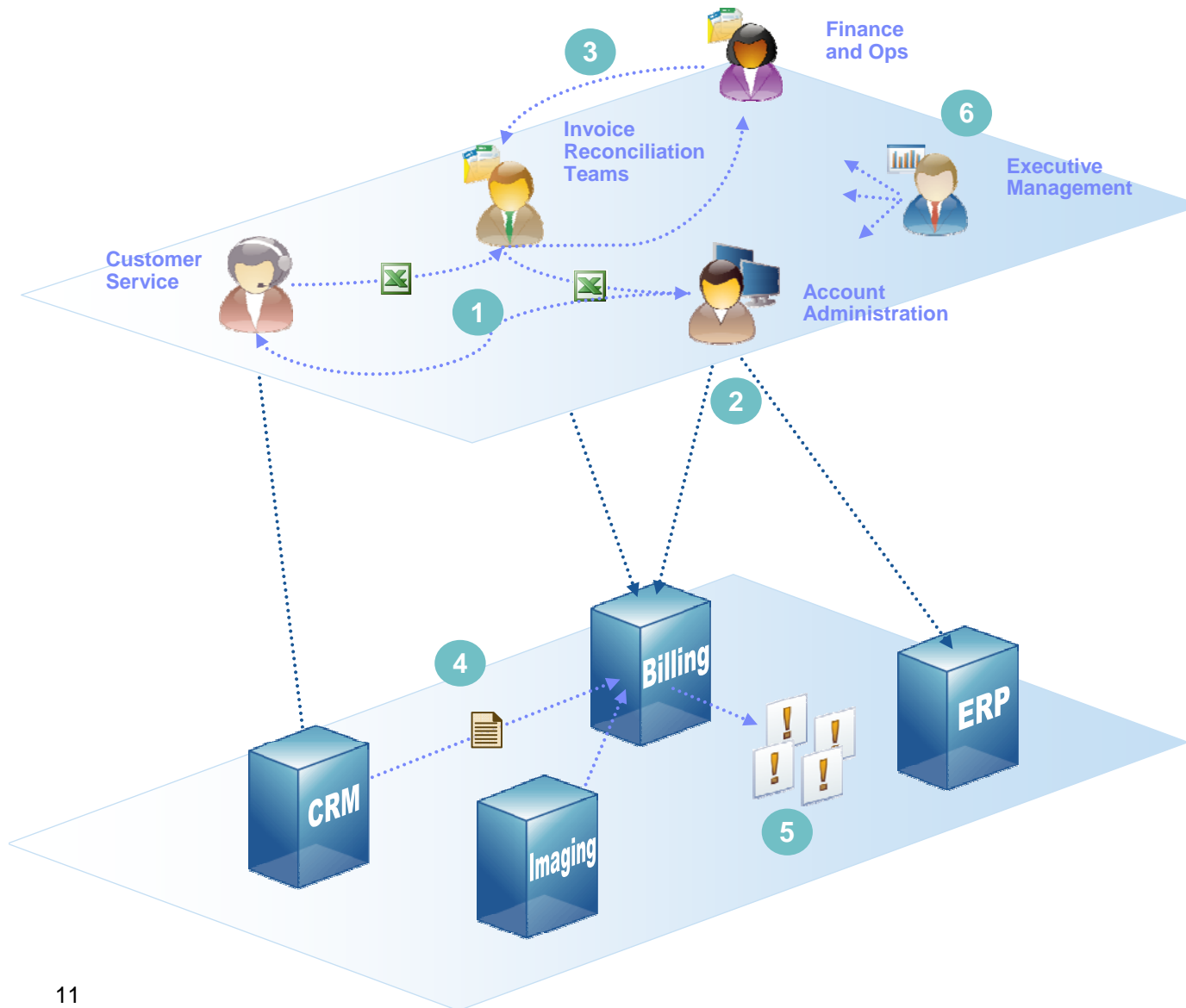


Agile Processes and Decisions with Business Process Management



BPM Architecture

Root Causes of Business-Driven Processes Problems



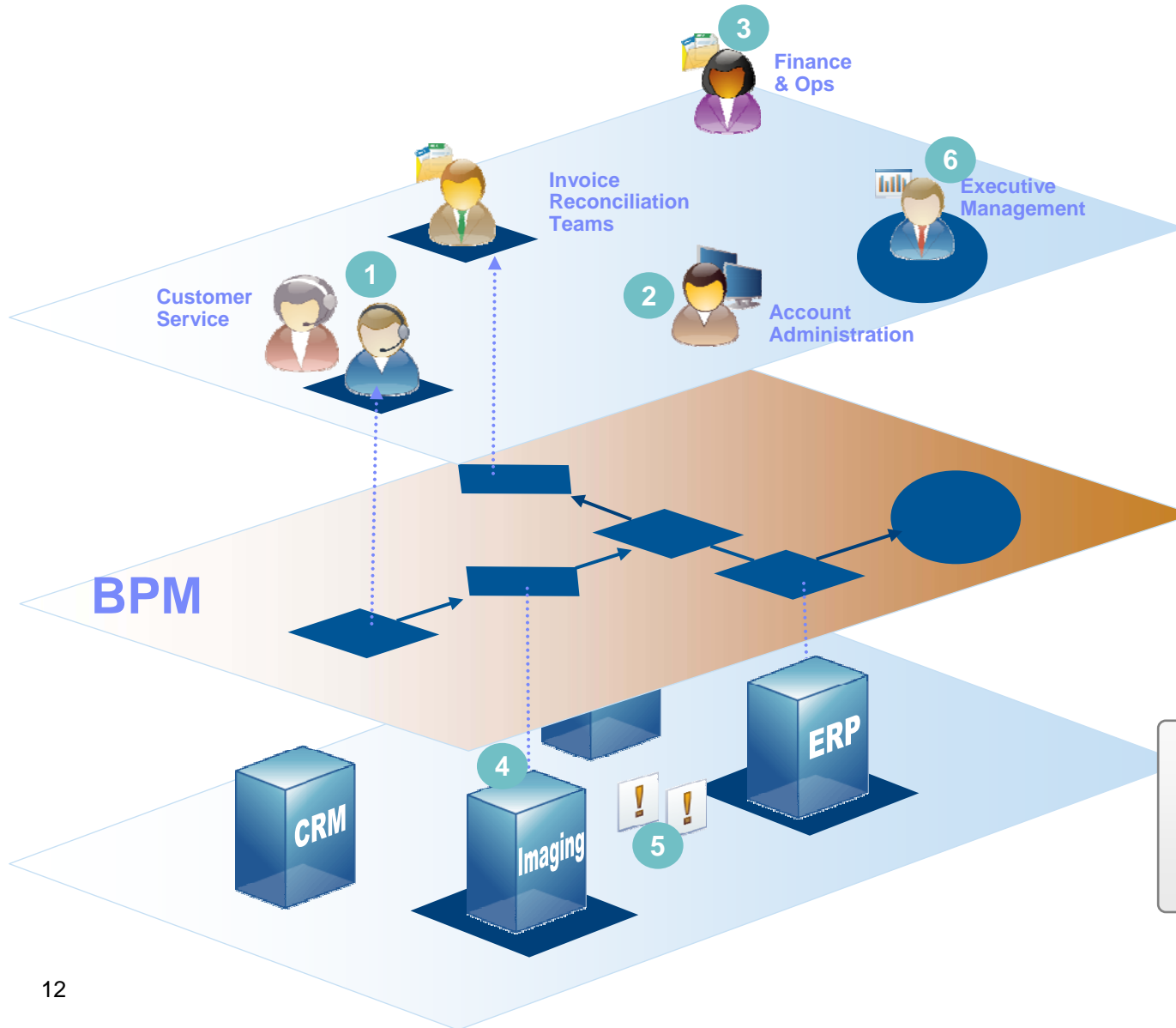
1. Informal Tasks and Communication (ex Paper or email)
2. Inefficient Working Environment Spans Systems
3. Inconsistent Prioritization
4. Incomplete or Inaccurate Data Flow Between Systems
5. Lack of Control Over System and Business Events (Exceptions)
6. Poor Visibility Into Process Performance

Business Pains:

- Cannot Grow Efficiently
- Customer Satisfaction



BPM Delivers a Layer for Control and Visibility

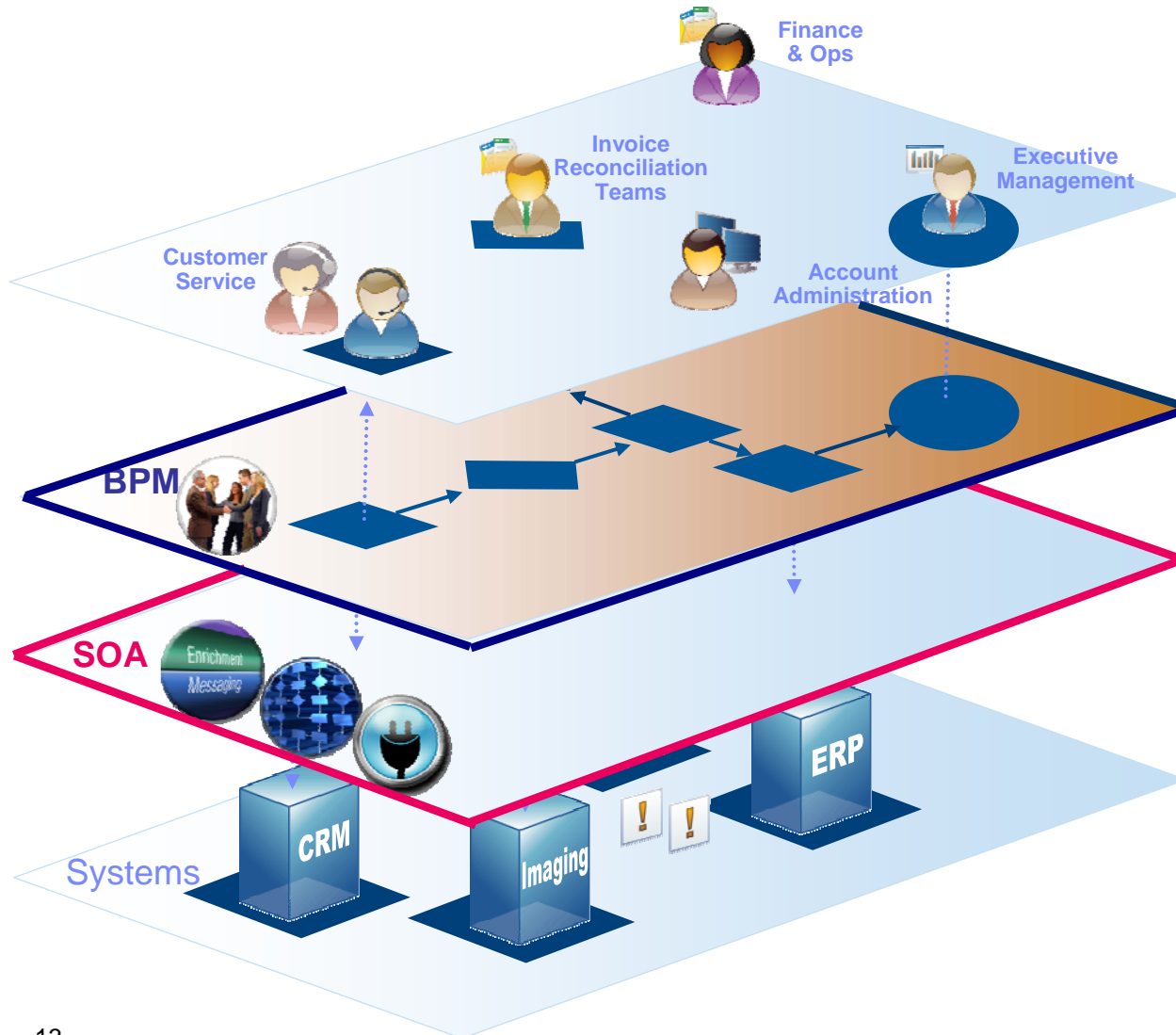


1. Automatically prioritizes and routes work
2. Guides users through decisions
3. Standard and consistent work prioritization
4. Leverages exiting system data Systems
5. Reacts to business events and generates actions
6. Real-time visibility and process control

Benefits:

- 80% Reduction in Manual Interactions
- Faster Issue Resolution

BPM Leverages SOA Infrastructure



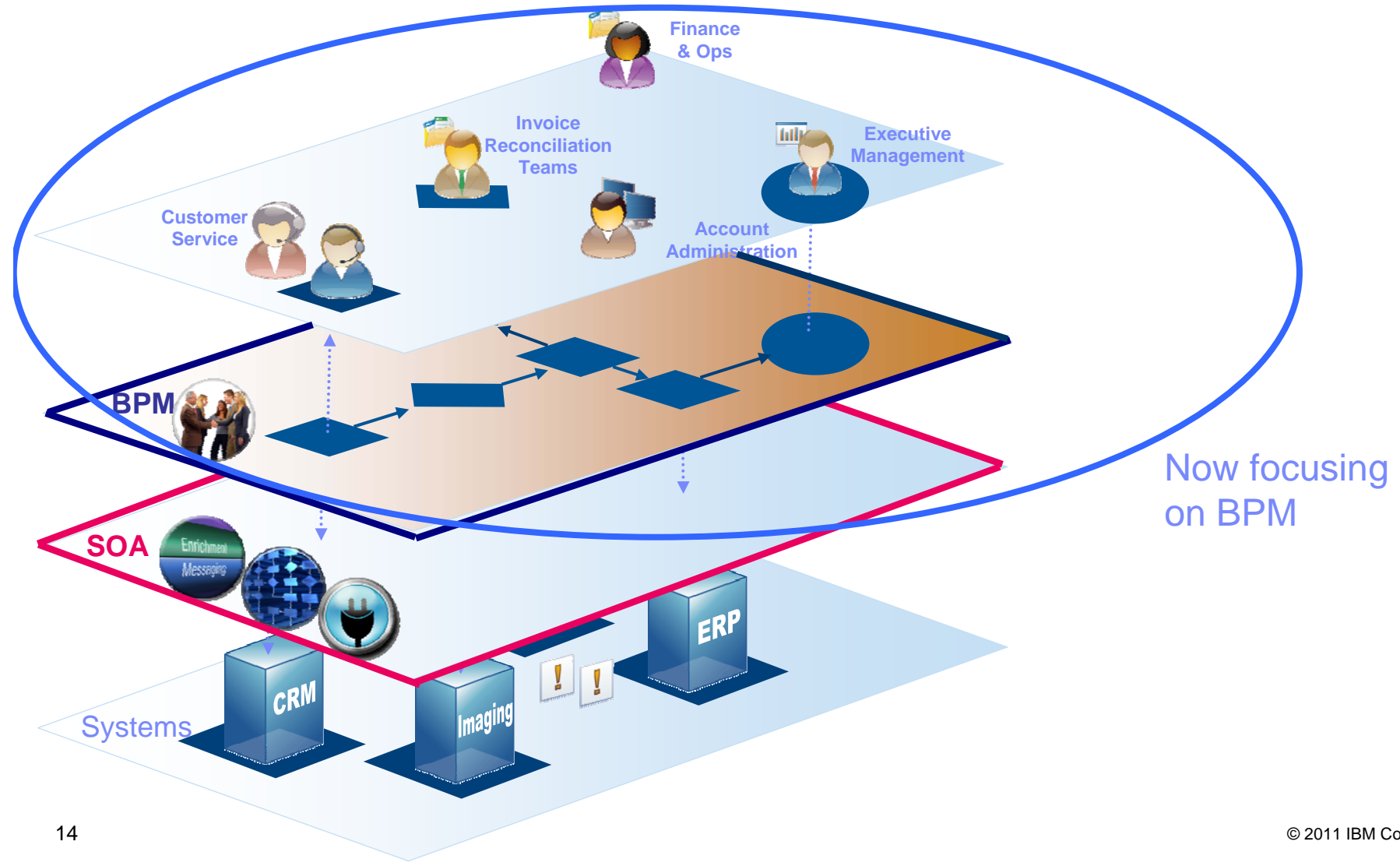
– BPM can abstract the “business process” from underlying systems and services.

– Over time, IT can consolidate those services into a common set of services within one SOA layer.

– Users of the process are not affected as services and systems are merged, replaced, or updated.



BPM



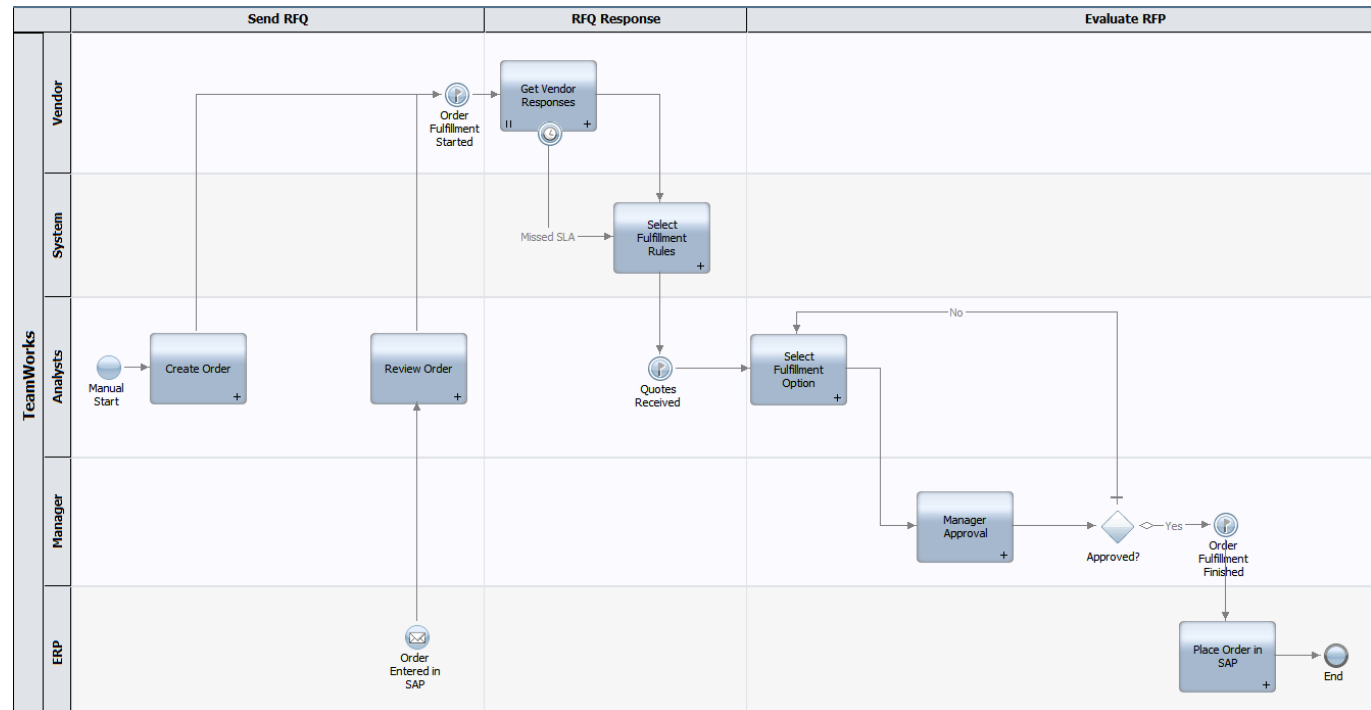


**Terms for BP Modelling based on BPMN
(Business Process Model and Notation)**

Definition of Terms

(see also Standard BPMN – Business Process Model and Notation)

- Business Process Definition (BPD)
- Pool
- Swim Lane
- Milestone
- Participant
- Step/Activity
- Flow Line
- Business Event
- User Story



Business Process Definition (BPD)

A diagram that illustrates a business process

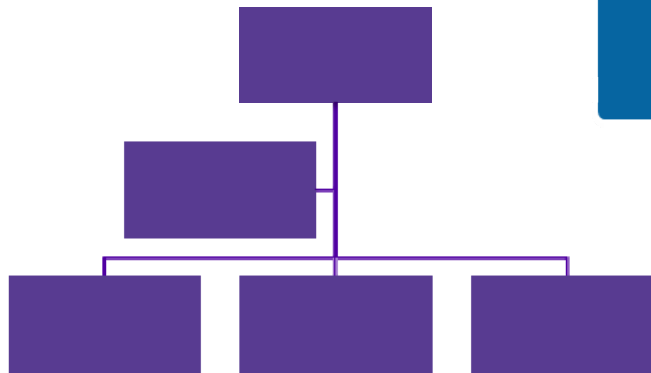
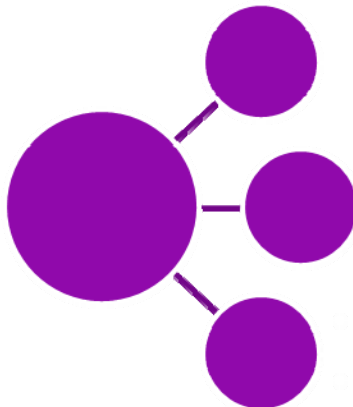
includes participants, steps, activities, and sub-processes

Business Process Definition objectives:

- **Universally understood** by both business and technologists
- **Clearly and easily communicated in 5 minutes or less**
 - at any level of granularity
- **Executable** in a **Business Process Management System**

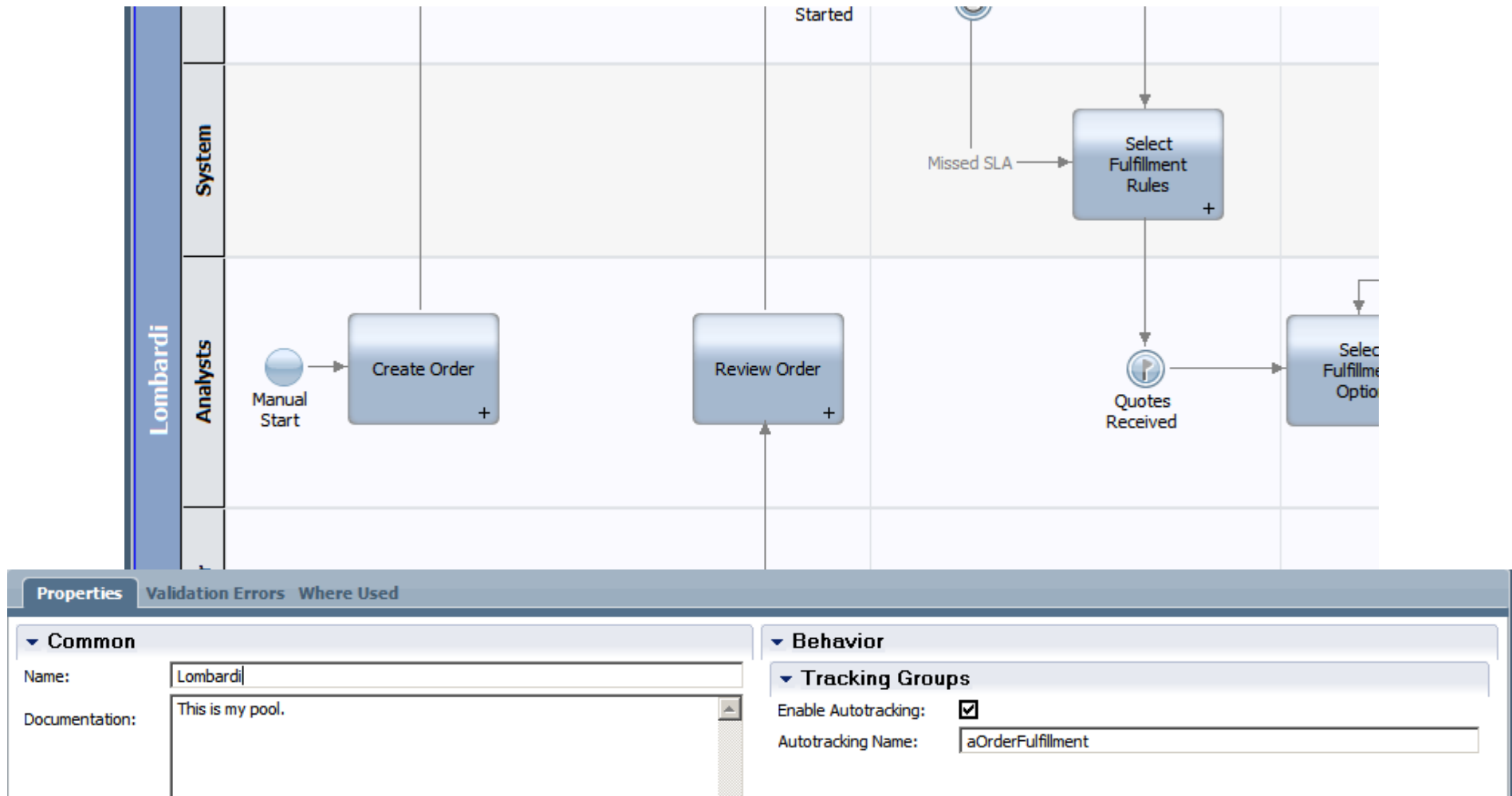
What is **not** a Business Process Definition?

- Entity State Diagrams
- Use Cases, Use Case Relationship Diagrams
- System Relationship Diagram
- Architectural Diagram
- Workflow Model (Application Development), Screen Flow



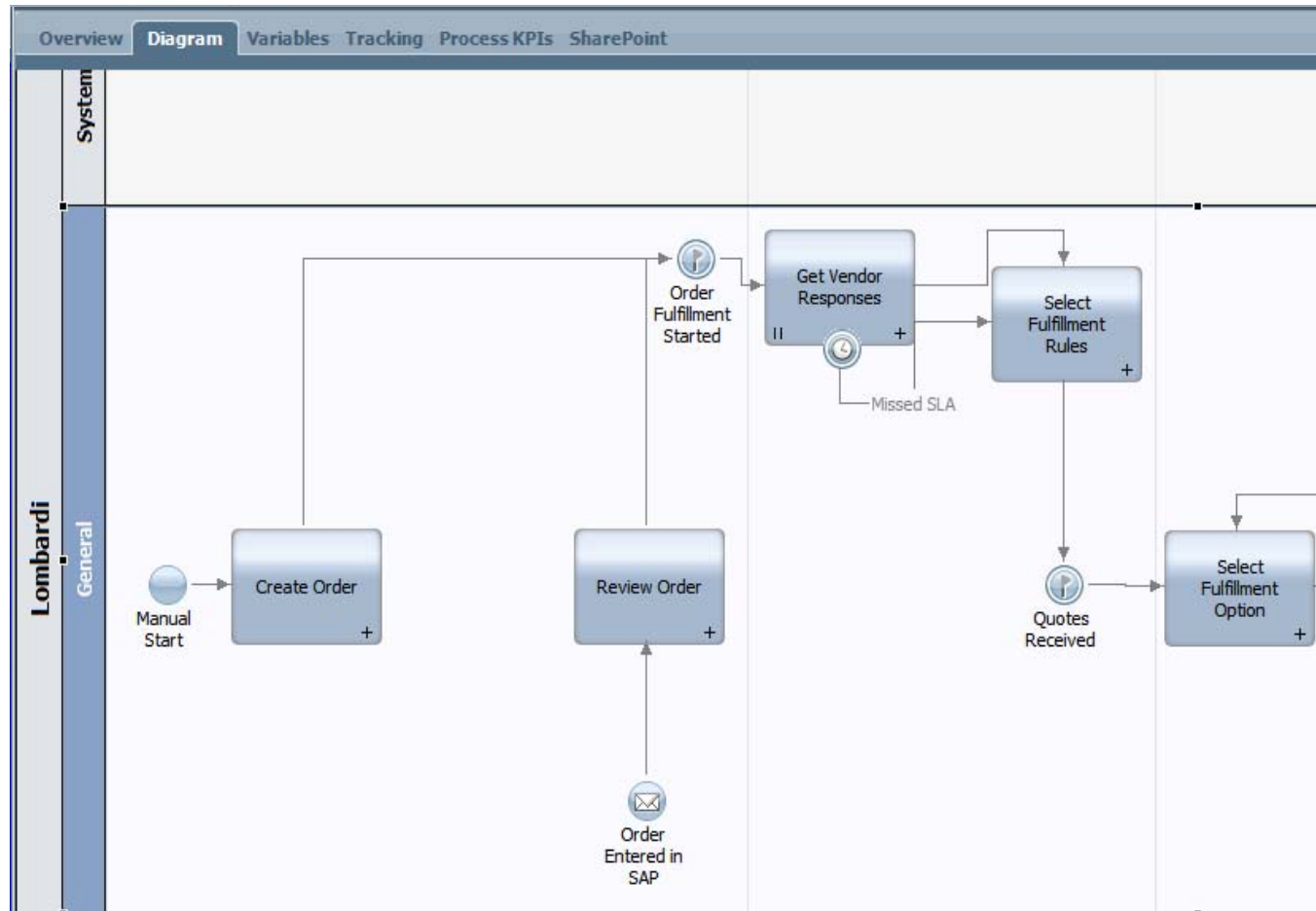


Pool



A container for all lanes within the BPD

(Swim) Lane

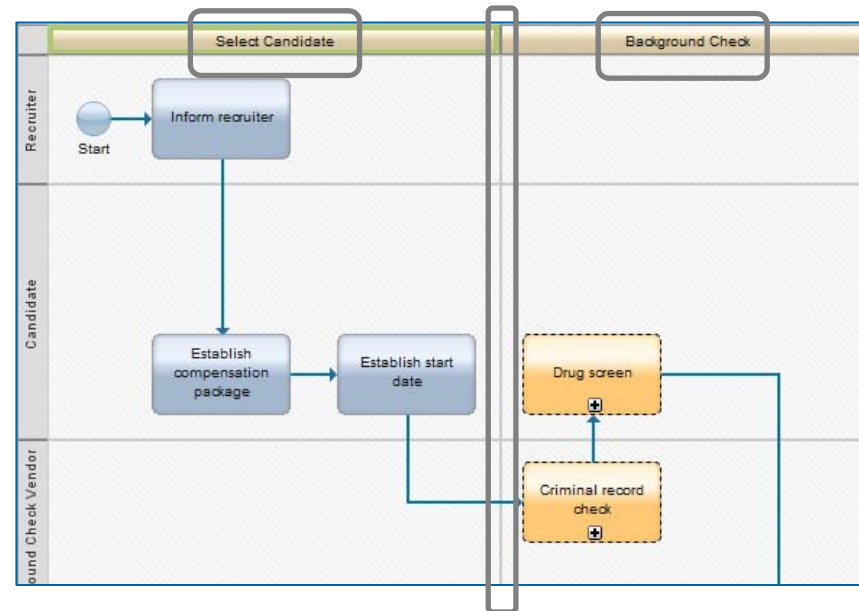


- Highlights role oriented activities versus the flow oriented activities
- A lane has a default set of participants

Milestones

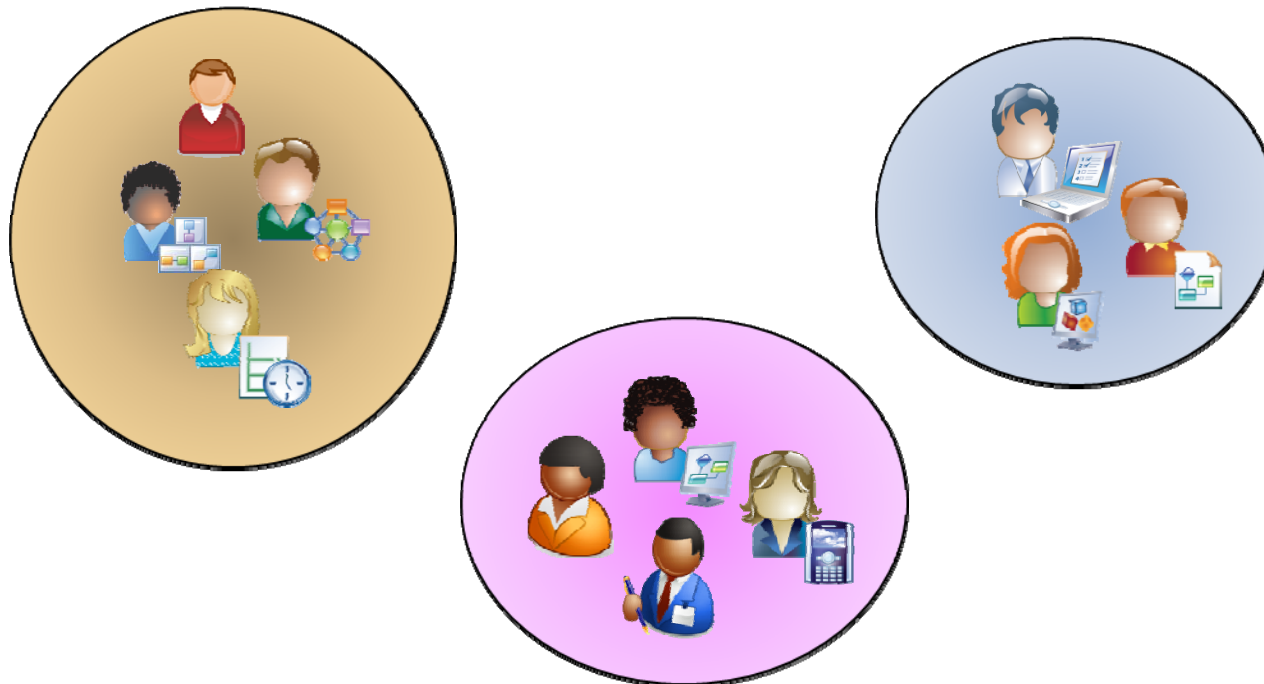
A milestone in a process...

- **Represents**
 - A period of time
 - Goal/transition in the process
- **May be expressed as a single moment in time**
 - e.g. graduation
 - A milestone end-marker



Participant

A *participant* is a user of a BPM environment
Sets of users are *Participant Groups*



Activity/Step

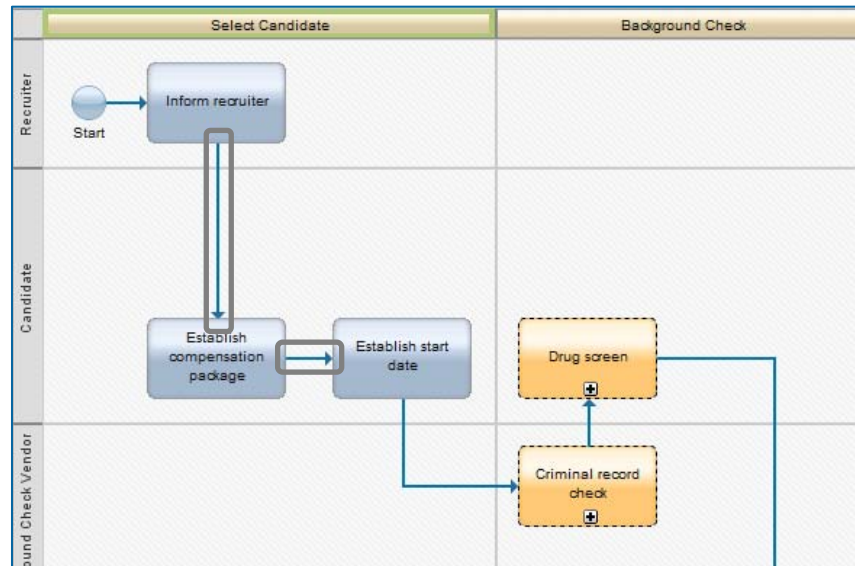
A unit of granularity in a process that...

- Has a **goal** that can be expressed as a singular **outcome**
- Implemented as
 - **Task** (human or system)
 - **Sub-process**
- Can be a human task
 - **Single participant** begins the activity
- Can contain multiple steps, (e.g. screens in a screen flow)
 - These steps are not *process* steps
- Can be a **sub-process**
 - Implemented as another BPD

Sequence Flow Lines

A sequence flow line...

- Defines the **transition** from one step or event to another



Events

A business event...

- Is the occurrence of a **condition** that triggers an activity.
- Can **listen to catch** a condition to trigger an activity or...
- **...throw** a result upon occurrence.



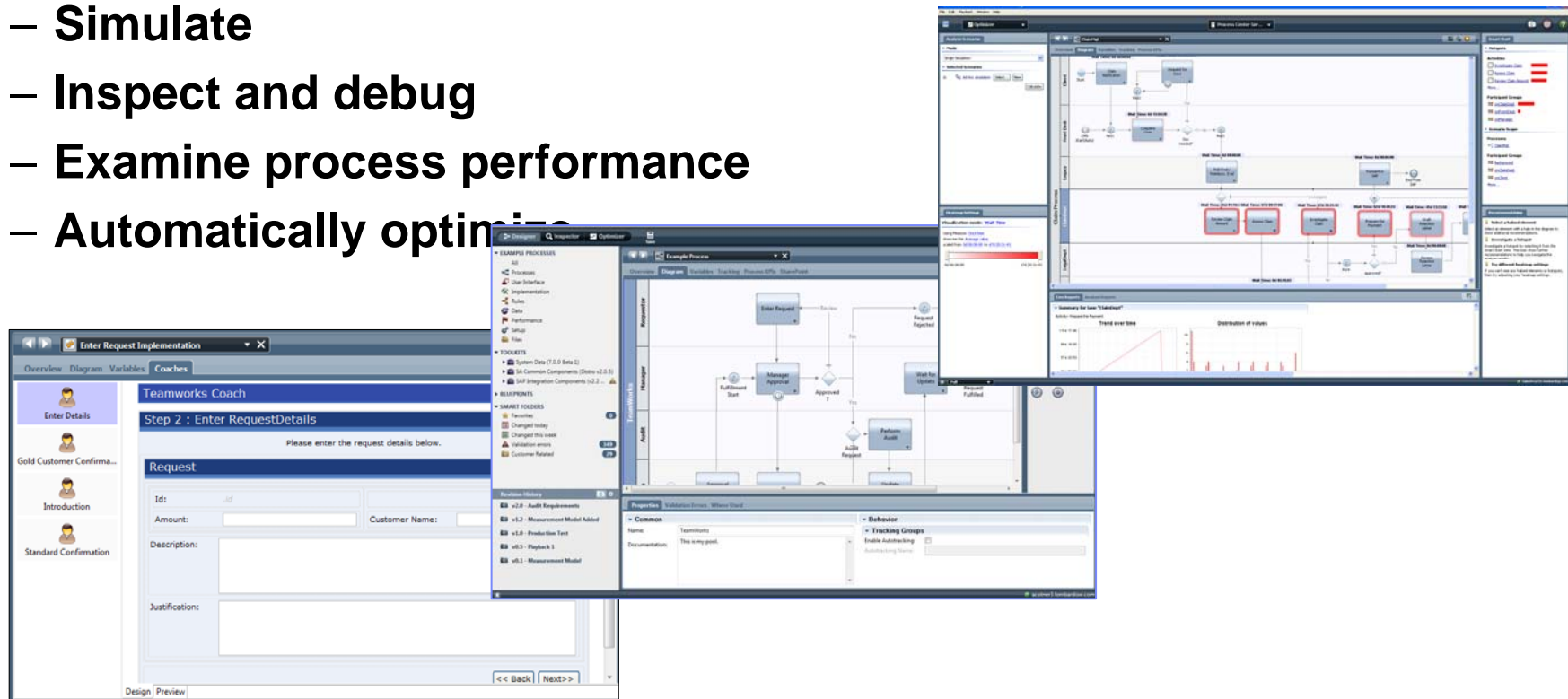
- **Types of events include the following:**

- **Start /End**
- **Timer**
- **Message**
- **Exception**

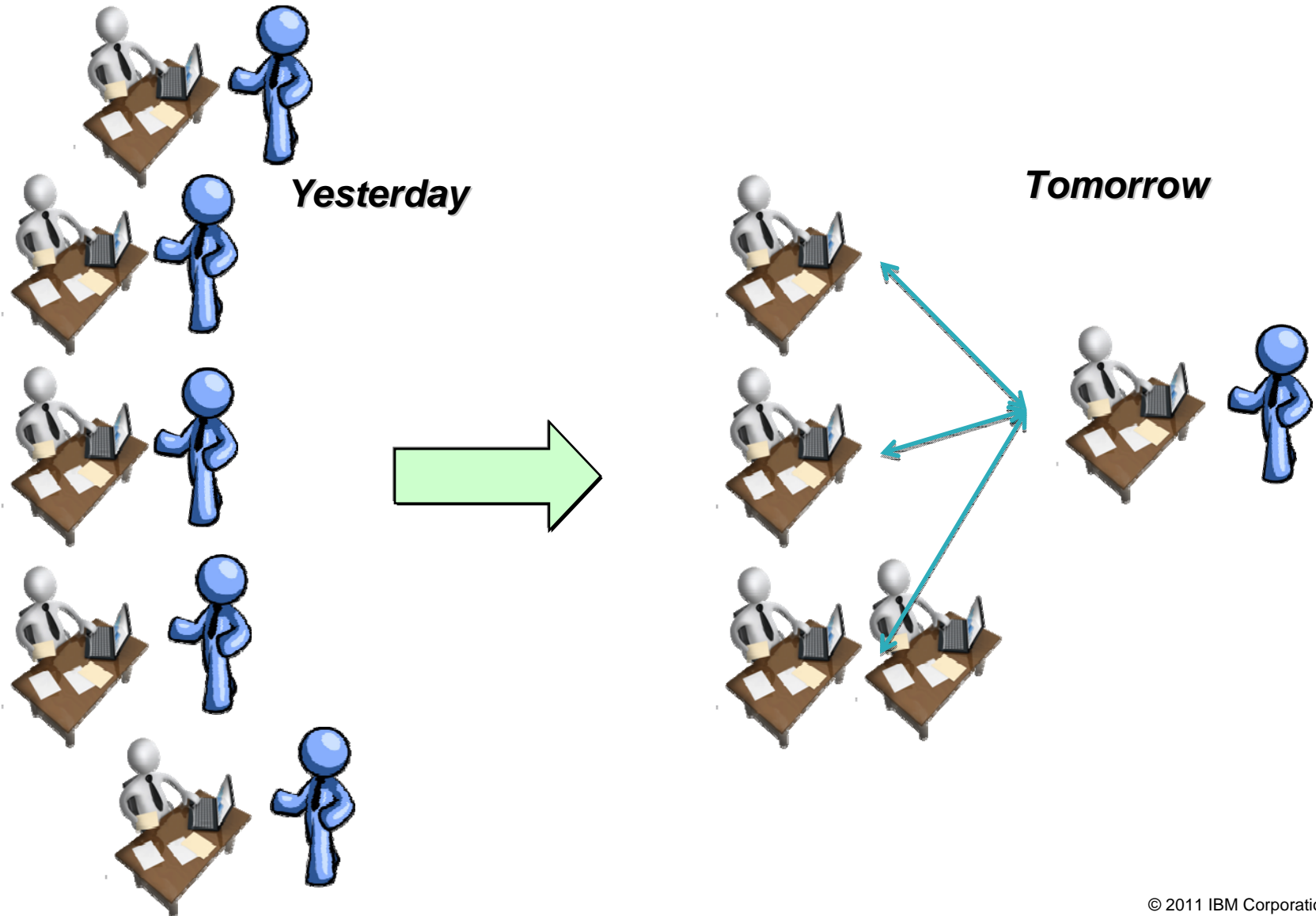


Modeling with BPMN (Business Process Modeling Notation)

- **Single Interface that enable business process authors and analysts to**
 - **Model and implement**
 - **Simulate**
 - **Inspect and debug**
 - **Examine process performance**
 - **Automatically optimize**



The Business Problem – one process instead of many actions





Check it out with www.blueworkslive.com

- Go to www.blueworkslive.com
- Register with your private email address (30 day trial)
- Go through tutorials
- Do first *Discovery Maps* – just entering milestones and activities
- Use *Process Maps* – modeling the business process

Blueworkslive “Discovery” Maps

- Milestones represent phases, Activities are within milestones

The screenshot displays the BlueworksLive interface for a process titled "Neue Kredit Karte". The interface includes a navigation bar with "Work", "Community", and "Library" options. Below the navigation bar, the process name "TicketCounter4Events > Neue Kredit Karte" is shown, along with a star icon and a timestamp: "Last modified by Dirk Budke on Jan 21, 2011 at 6:33 PM".

The main area is divided into two sections. On the left, the "Process Outline" is visible, showing a tree structure of milestones and activities:

- Neue Kredit Karte
 - Erfassung
 - Kunde verschickt Antragsformular
 - Dokument Scannen
 - Archivierung
 - Daten Erfassen
 - Validierung
 - Daten Valdierung
 - Compliance Pruefung
 - ZEK
 - Berechne Score Wert
 - Genehmigung
 - Ausstellung
 - Account Eroeffnung in CMS
 - Karte Erstellen und Ausliefern

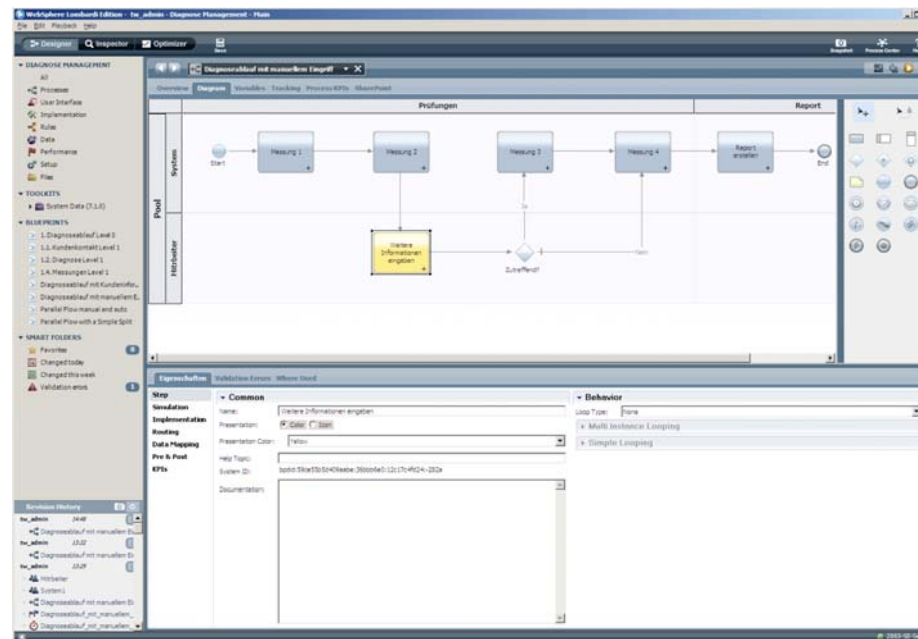
On the right, the "Discovery Map" for "Neue Kredit Karte" is displayed. It shows a flow of milestones: "Erfassung" (highlighted in green), "Validierung", and "Ausstellung". Each milestone is represented by a box containing a list of activities:

- Erfassung:** Kunde verschickt Antragsformular, Dokument Scannen, Archivierung, Daten Erfassen.
- Validierung:** Daten Valdierung, Compliance Pruefung, ZEK.
- Ausstellung:** Account Eroeffnung in CMS, Karte Erstellen und Ausliefern.

Additional activities are shown below the milestones, including "Berechne Score Wert" and "Genehmigung".

Blueworkslive “Process” Maps

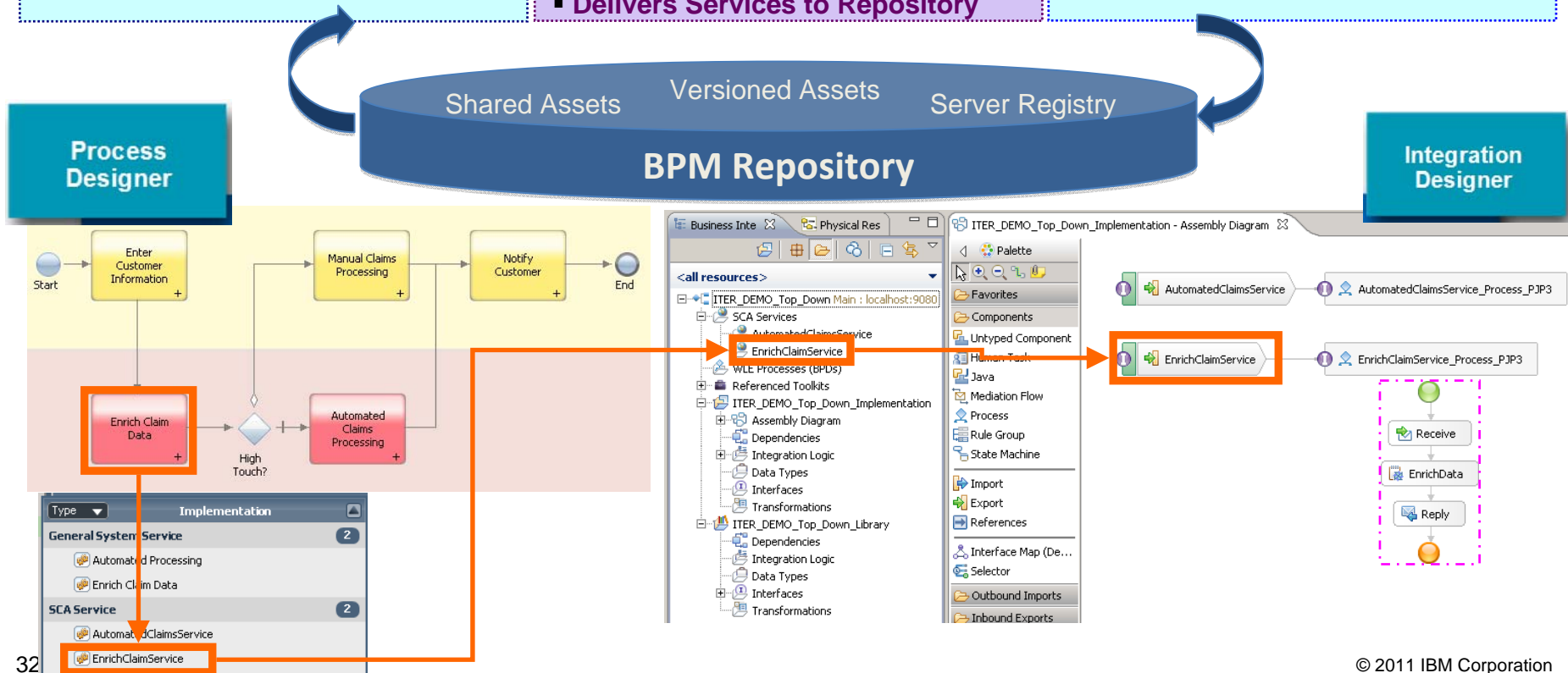
- Common ground for Business as well as IT
 - Business is specifying and defining activities and provides conditions / rules to be used in control flow
 - IT specifies services



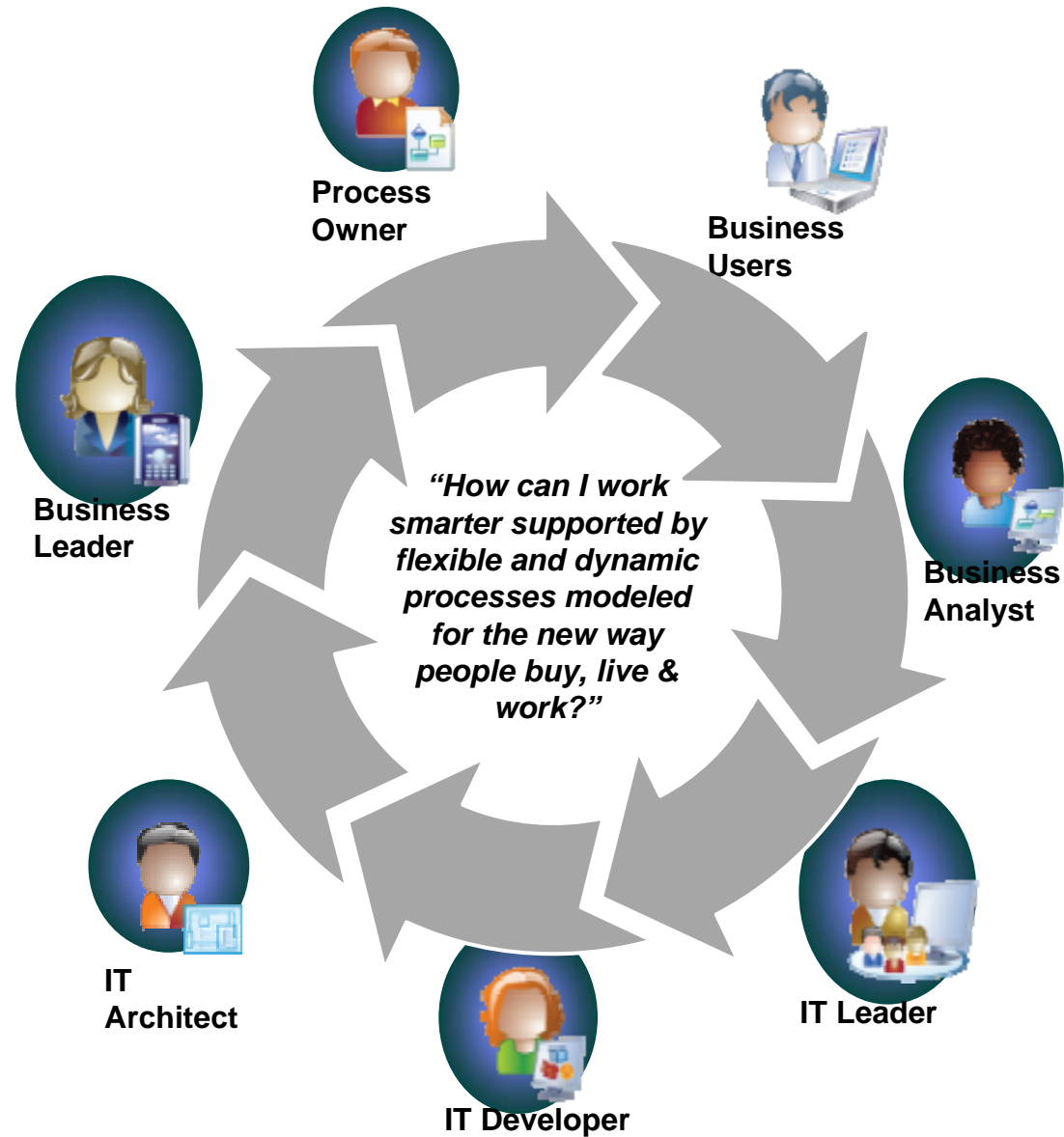


BPM in Action

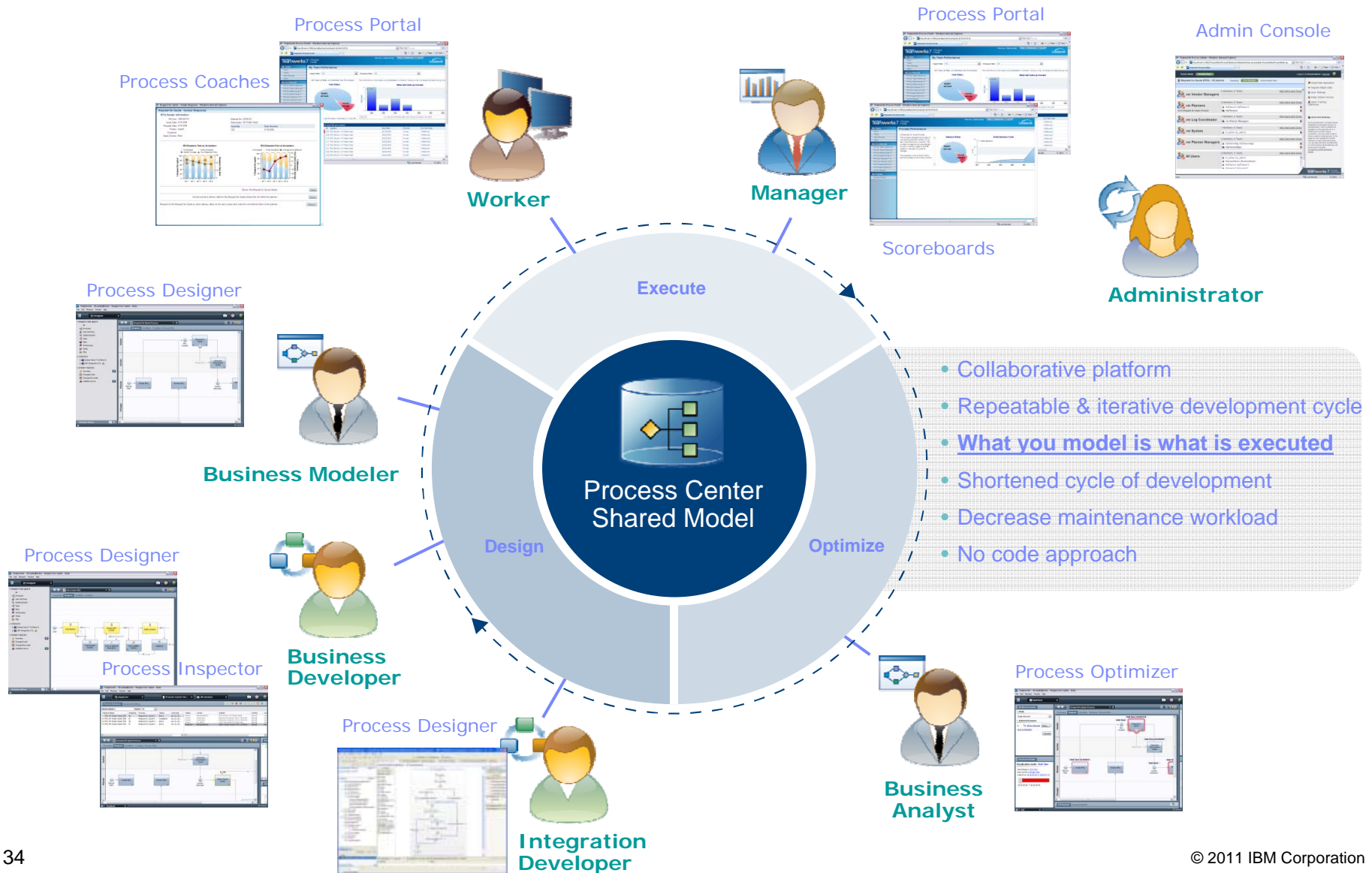
Seamless Collaboration Across Roles



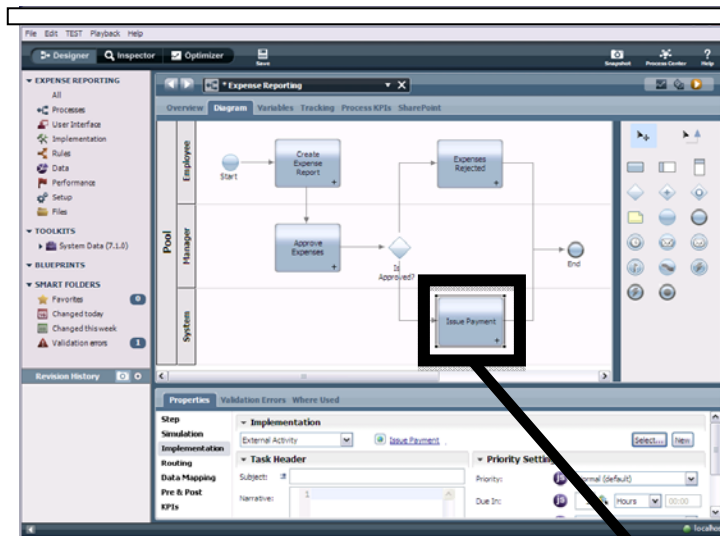
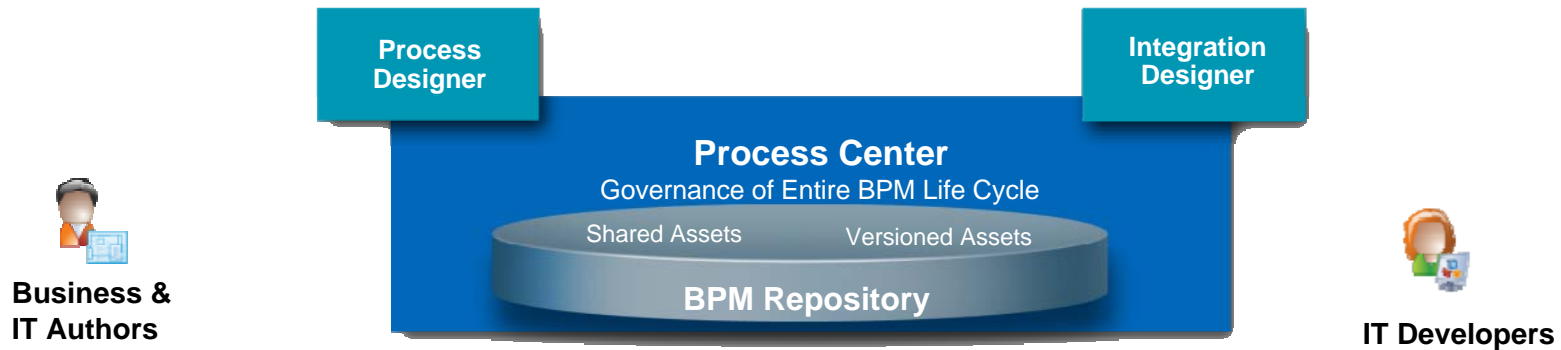
Business Process Management is a Team Sport ...



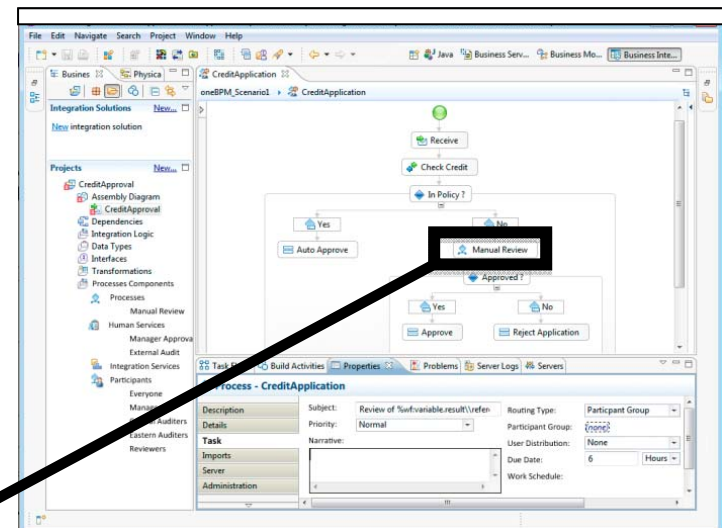
Shared Model within a BPM Architecture



Development Collaboration Business – IT (Based on IBM BPM 7.5)

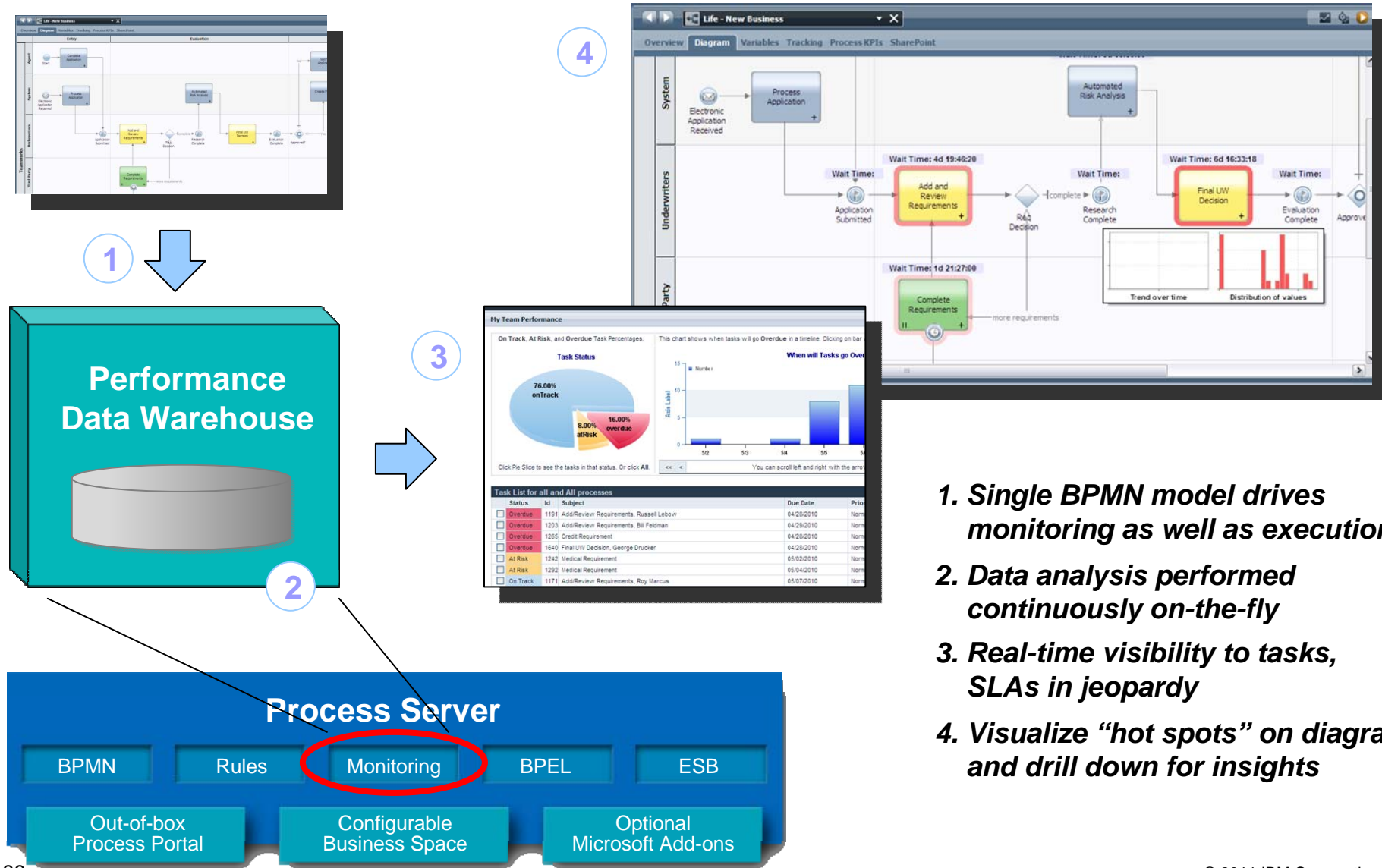


Business Author requires a back-end integration for an Expense Reporting process that he is building



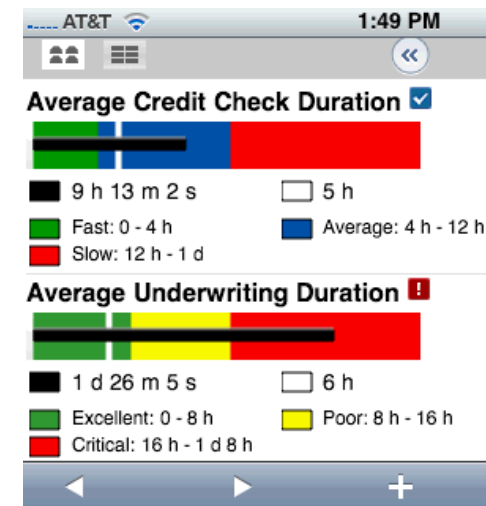
Integration Developer is building a straight-through Credit Check process that has a business exception path requiring human interaction

Built-in Monitoring for Visibility



1. Single BPMN model drives monitoring as well as execution
2. Data analysis performed continuously on-the-fly
3. Real-time visibility to tasks, SLAs in jeopardy
4. Visualize “hot spots” on diagram and drill down for insights

Experience Monitor through your iPhone – Process Control





Questions

