IBM 2010 校园"蓝色加油站"之

商业流程分析与优化
- Business Process Management and Optimization

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协作创新 我们与众不同
Collaborate, Innovate, U R Special

Agenda

- **Why BPM**

- **What is BPM**

- **What is BAM**

- **How BAM helps optimization**
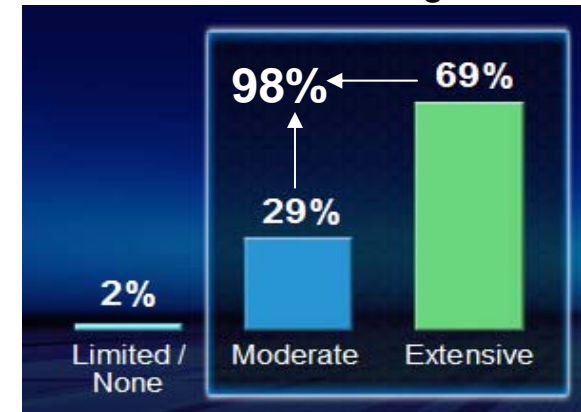
- **Summary and References**

Change is Accelerating . . . Will You Keep Up?

CEOs Worry About Their Business Agility

98% of CEOs expect their business models will need to change

98% ← 69%
29%
2%
Limited / None   Moderate   Extensive

Agile businesses have 29% higher earnings per share.

Source: Business Technology Management Institute

"We have seen more change in the last ten years than in the previous 90." *Ad F. Scheepbouwer, CEO KPN Telecom*

Source: IBM Global CEO Study 2008

Innovation is on every leader's agenda

- Innovation in the 21st century:
  - Open
  - Collaborative
  - Multi-disciplinary
  - Global

- Key factors driving change:
  - Dynamics of a flattening world
  - Emergence of new capabilities
  - Evolution of information technology
  - March of commoditization
  - Massive shift in demographics
  - Unpredictability and impact of change

Related publication: "Enterprise of the Future: The 2008 Global CEO Study" IBM Global Business Services. March 2008.

http://www.ibm.com/services/us/gbs/bus/html/ceostudy2008.html

What do CEOs say about business model innovation?

- Organizations are bombarded by change, and many are struggling to keep up
  - Eight out of ten CEOs see significant change ahead, and yet there is a gap between expected change and the ability to manage

- CEOs view more demanding customers not as a threat, but as an opportunity to differentiate:
  - CEOs are spending more to attract and retain increasingly prosperous, informed, and socially aware customers.

- Nearly all CEOs are adapting their business models:

  two-thirds are implementing extensive innovations.
  - More than 40% are changing their enterprise models to be more collaborative.

  Process management facilitates organizational change supporting innovation

Businesses know the innovation drivers and their barriers to progress

Innovation drivers

Manage change
Modify operational processes and change them again and again and again

Respond quickly
Based on market conditions, adapt processes

Ensure compliance
Identify problems before they get out of control

Enhance business efficiency
Analyze activity to ensure processes meet objectives

Barriers to progress

Processes are inflexible — hard-wired
It is unclear what they do — not consistent
Is business culture or climate supportive?

Integration challenges prevent timely implementation — need open standards, process models, component reuse

Long lag-times and inadequate alerts prevent timely insight or action — *need to intervene while process is executing*

Lack of consensus on the right process to improve paralyzes progress — *where should one begin?*

Businesses want change at the speed of business.

Is yours an innovation-driven business?

Innovation drivers deliver real customer value: Once you break down barriers to progress

Innovation drivers

Customer value

Manage change:
Model and analyze existing or new processes

IBM's customer order and analysis process **reduced time and cost of new process** improvement releases by 25%.

Respond quickly:
Processes are based on a flexible infrastructure

Danish bank realized $2,000,000 ($2 million) savings in the first year through company-wide increase in productivity.

Ensure compliance:
Identify problems before they get out of control

A leading telecommunications operator in the Spanish and Portuguese-speaking world **tripled its clients** by ensuring changes execute correctly.

Enhance business efficiency:
Analyze activity to ensure processes meet objectives

A leading global financial company reduced paper-intensive mortgage process time by 53%, achieved 34% gains in efficiency, and estimated **annual savings of $4,000,000 ($4 million).**

BPM - an approach to breaking down the barriers

- Provide strategic direction and boundaries for the team:
  - Create a culture that embraces risk and eliminates the stigma associated with failure

- Collaborate with your team, partners, suppliers, and customers to speed up time to market, or spark new insights

- Value and leverage diversity

  People of all ages and experiences make up today's enterprises
  - Different demographics, perform different jobs, represent different cultures, and know different people
  - They stand ready to share this information

The needs for business process management

- **Economics:** globalization demands flexibility

- **Business processes:** change quickly and sometimes outsourced

- **Growth:** at the top of the CEO agenda

- **Reusable assets:** can cut costs

- **Information:** greater availability

- **Crucial for flexibility and becoming an On Demand Business**

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What is Business Process Management

- **Business process management** combines **business processes**, **information**, and **people**, aligning your organization's core **assets**, to create a single **integrated** view, with **real-time intelligence**, of both its business measurements and IT system performance.

- **This integration of resources allows your organization to:**

  – Obtain business information faster

  – Respond more quickly to market trends and competitive threats

  – Improve operational efficiencies and business results

- **These are all attributes of an on-demand enterprise**

Five Facets of BPM

Business Process Management
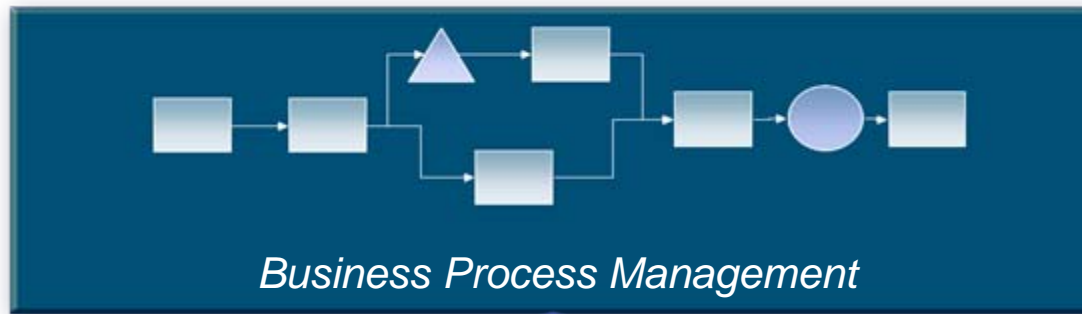
Modeling & Simulation	Business Activity Monitoring	Process Choreography	Rules and Pre-built Frameworks	Content Centric Processing
Design and simulate business processes	*Track performance, processes and operational activity using key performance indicators*	*Choreograph processes across applications and systems*	*Manage process rules and accelerate design and implementation time*	*Manage processes where content is used as input for a decision or produced as the output*

IT tools and technologies

- **IT tools and technologies are used in business process improvement efforts**
  - Process modeling
  - Process simulation
  - Requirements definition
  - Workflow systems
  - Integration development tools
  - Process monitoring
- **Service Oriented Architectures (SOA) is a driving technology behind the increased interest in process improvement.**

What is Service Oriented Architecture

... a service?

A **repeatable business task** – such as: check customer credit; open new account

... service orientation?

A way of integrating a **business as linked services** and the outcomes that they bring
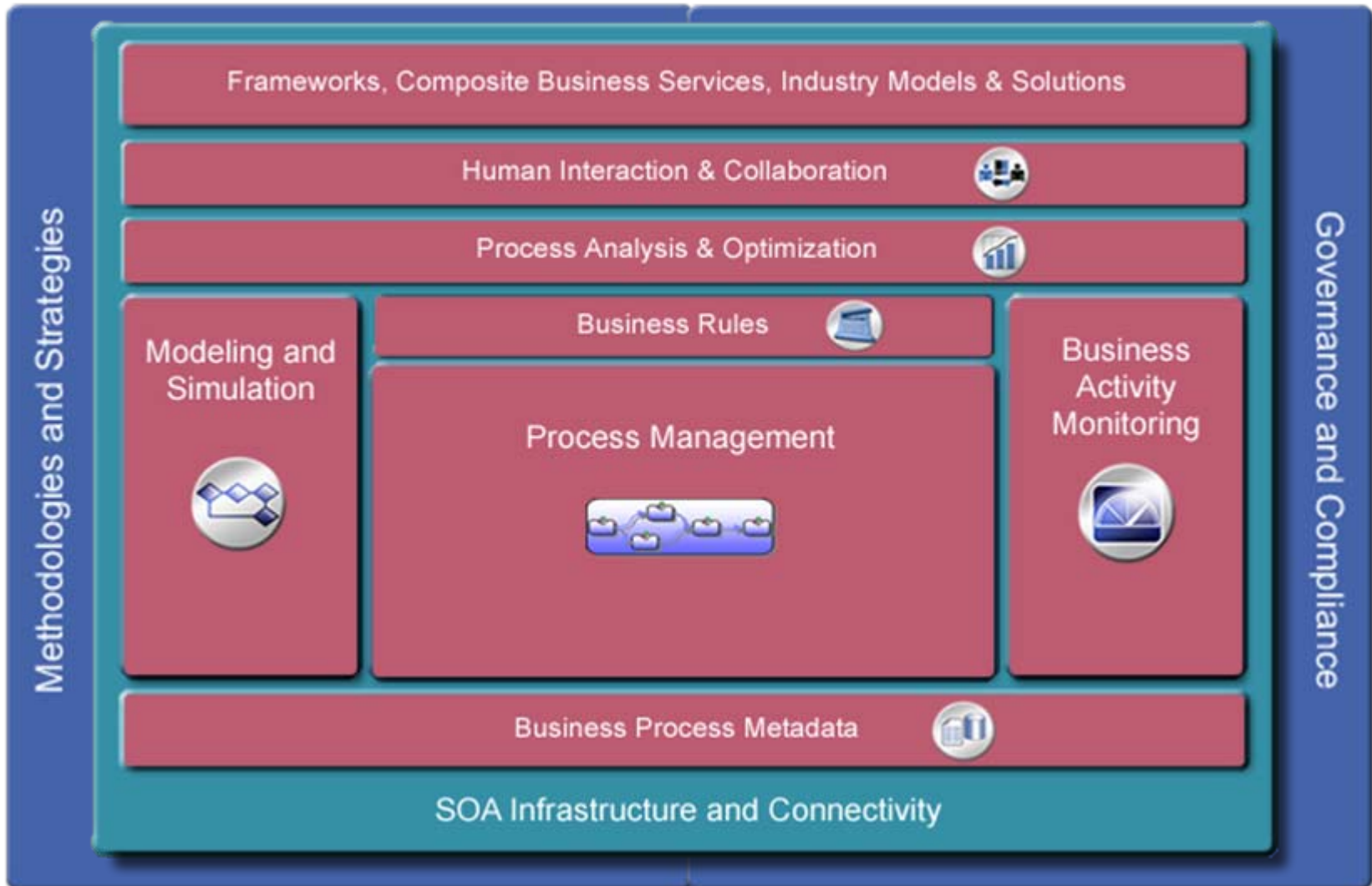
... service-oriented architecture (SOA)?

An IT **architectural style** that supports service orientation

... a composite application?

A set of **related and integrated** services that support a business process built on an SOA
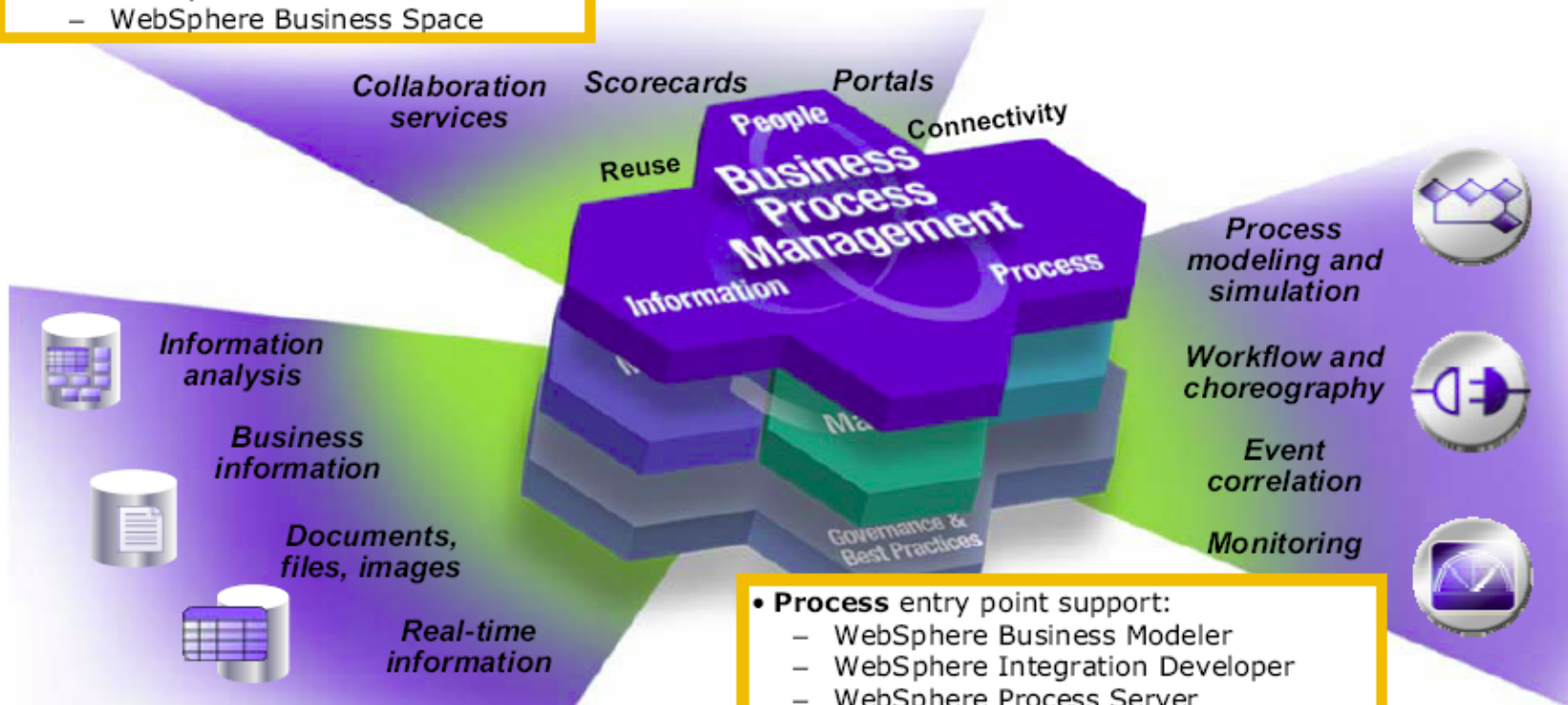
BPM Architecture Enabled by SOA

BPM and the SOA business-centric entry points: People, process, and information

- SOA helps improve productivity by enabling collection and consolidation of information into views that facilitate interaction in a business process.
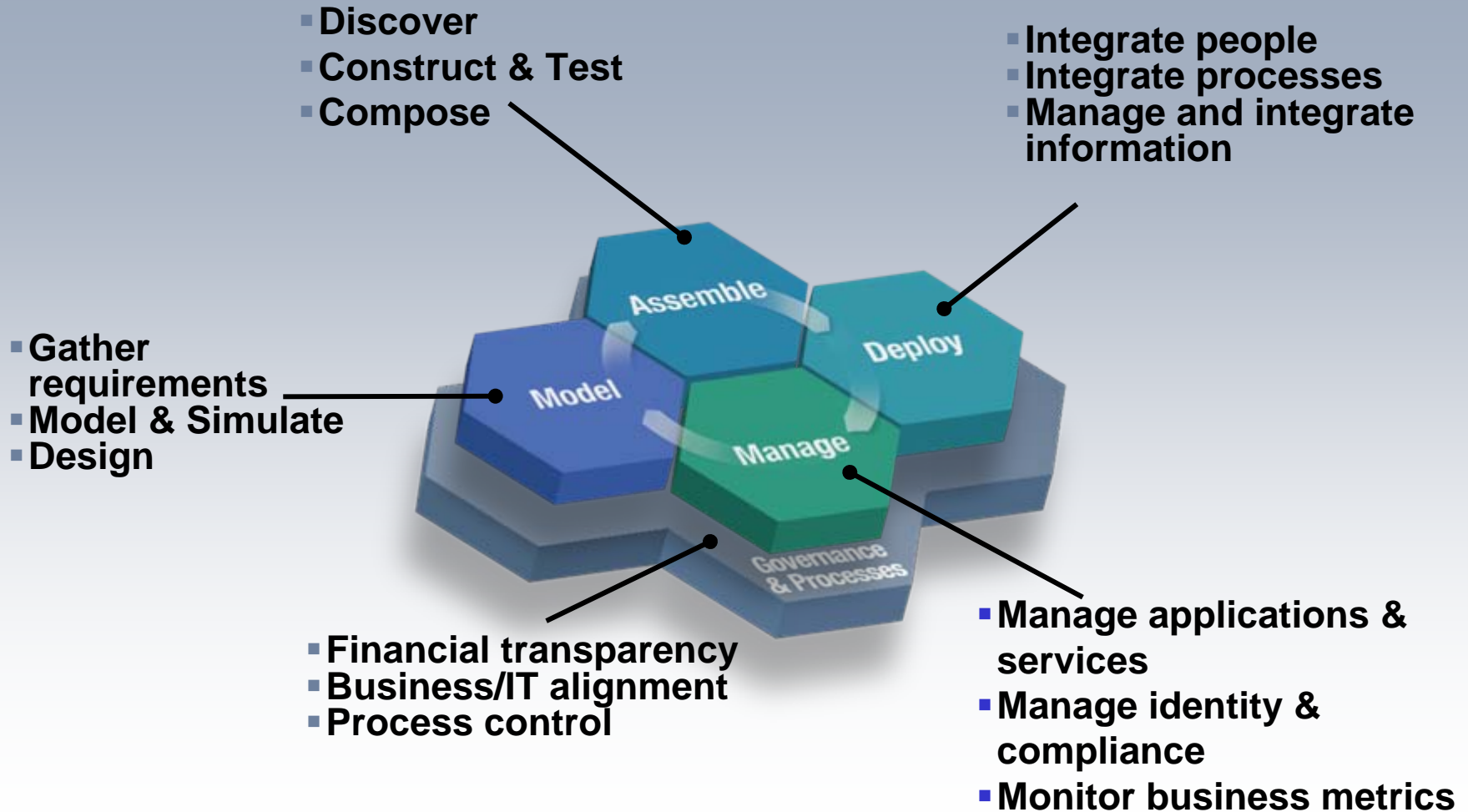
- **People** entry point support:
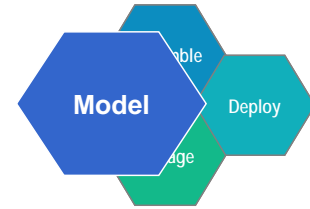 - WebSphere Portal
  - WebSphere Business Space

Collaboration services   Scorecards   Portals

People   Connectivity

Reuse

Business Process Management

Information   Process

Process modeling and simulation

Information analysis

Workflow and choreography

Business information

Event correlation

Documents, files, images

Governance & Best Practices   Monitoring

Real-time information

- **Process** entry point support:
  - WebSphere Business Modeler
  - WebSphere Integration Developer
  - WebSphere Process Server
  - WebSphere Business Monitor
  - WebSphere Business Services Fabric

- **Information** entry point support:
 - WebSphere Information Server

BPM Lifecycle Enabled by SOA

- **Discover**
- **Construct & Test**
- **Compose**

- **Integrate people**
- **Integrate processes**
- **Manage and integrate information**

- **Gather requirements**
- **Model & Simulate**
- **Design**

- **Financial transparency**
- **Business/IT alignment**
- **Process control**

- **Manage applications & services**
- **Manage identity & compliance**
- **Monitor business metrics**

Assemble

Deploy

Model

Manage

Governance & Processes

Stage 1: Model

- **Documented, auditable process models**
  - Achieve regulatory compliance
    - In less time and at lower expense
    - Create new business process models with Modeler and document in one tool

- **Simulation and analysis of processes**
  - Assess impact of model changes on costs, resource utilization, and cycle times
  - Reduce risk by simulating market changes against current process models
  - Predict risks before promoting to production
    - Save cost of production deployment
    - Build reliable solutions

- **Define Key Performance Indicators**
  - Measurement is the key to management
  - Effectively utilize valuable skilled resources

- **Update process models from real-time instances running in production**

Stage 2: Assemble
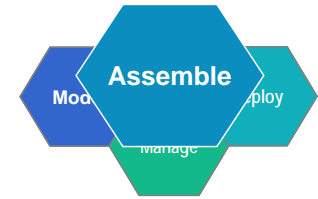
- **Business control extends into IT development through transformation of process models and rules into IT artifacts**

- **The business measures defined by business analysts during process design are refined by IT developers**

- **IT developers integrate BPM and business rules with existing core systems**

- **Ultimately, BPM invokes the Rules engine to execute the business rules defined during in the Model stage**

Stage 3: Deploy
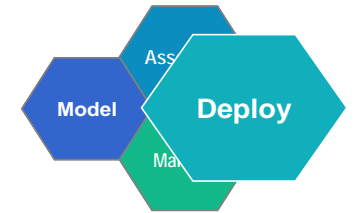
- **Critical characteristics of high-performing, operational business processes**
  - – Scalability & Performance
  - – Support business growth

- **Availability**
  - – Sustained business value to key stakeholders through continuously available business processes

- **Flexibility**
  - – Support all process styles and requirements (people, integration) within a single, unified platform

# Stage 4: Manage

Manage
Assemble
Model
Deploy
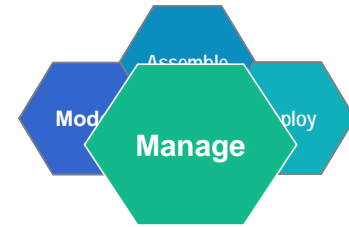
- **Continuous process improvement**
  - Monitor real-time business process instances
  - Real-time data exports back into Modeler

- **Make process modifications based on simulation results**
  - View real-time performance
  - Key Performance Indicator scorecards
  - Track cost, time and resources–Identify bottlenecks
  - Balance workloads

- **Intervene in deployed processes**
  - Set situational triggers and notifications
  - Dynamically respond to these alert

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What is Business Activity Monitoring

Manage
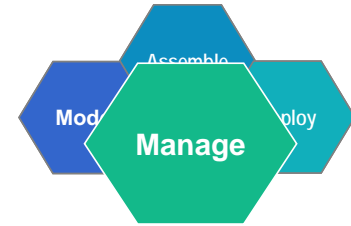
- **Business Activity Monitoring** refers to the **aggregation**, **analysis**, and **presentation** of **real time information** about **activities** inside organizations and involving customers and partners.

- The goals of BAM are to provide **real time information** about the **status** and **results** of various **operations**, **processes**, and **transactions** so **business decisions** can be **informed**, quickly **address** problem areas, and **re-position** organizations to take full advantage of emerging opportunities.

- BAM systems are driven by **business events**, fed directly from integration software or from **Business Process Management** software

Source: www.wikipedia.org

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How can BAM help – Current Business Challenges

- **Your business needs *instant answers* about the state of the business.**
    - Process health
    - Customer Service
    - Sales Orders

- **Information is required at *different levels* by different business owners**
    - Operations manager
    - Sales Executives
   - Chief Financial Officers

- **Current methods are *offline reporting based*, with little or no online real time capability.**
    - Reporting
    - Business Intelligence/Data Warehousing

How BAM help optimization

- **Business Activity Monitoring is the presentation of *real time* information of activities inside organizations and the relationships with external partners and customers.**

- **This information is *role-based*, *targeted* and *focused* to the *status* and *results* of various *operations, processes*, and *transactions***

- **This information is used to make *informed, quick, business decisions* that address problem areas**
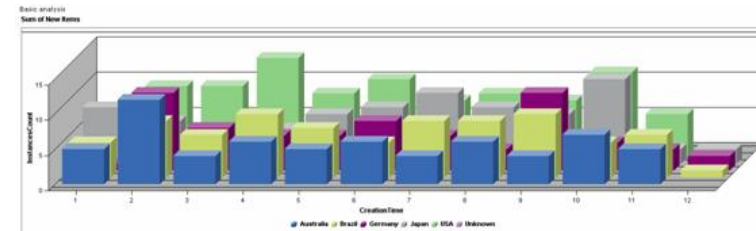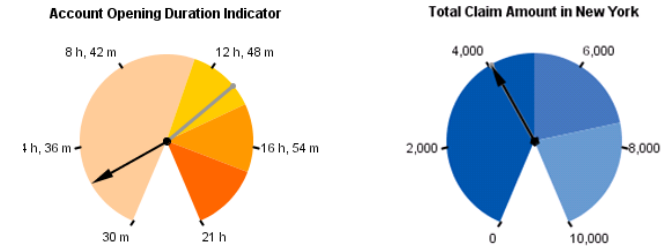
WebSphere Business Monitor value position
Empowering business people with actionable insight in dashboards

- **Offers actionable; role-based; contextual visibility into Performance**

- **Take proactive and corrective actions directly from the dashboard**

- **Analyze activity with decision making assistance**

- **Dynamically create new views with Web 2.0 functionality**

- **Automated alerts provide warning to preempt bigger problems**

- **KPI history trend and prediction**

Strategy View of Business Optimization
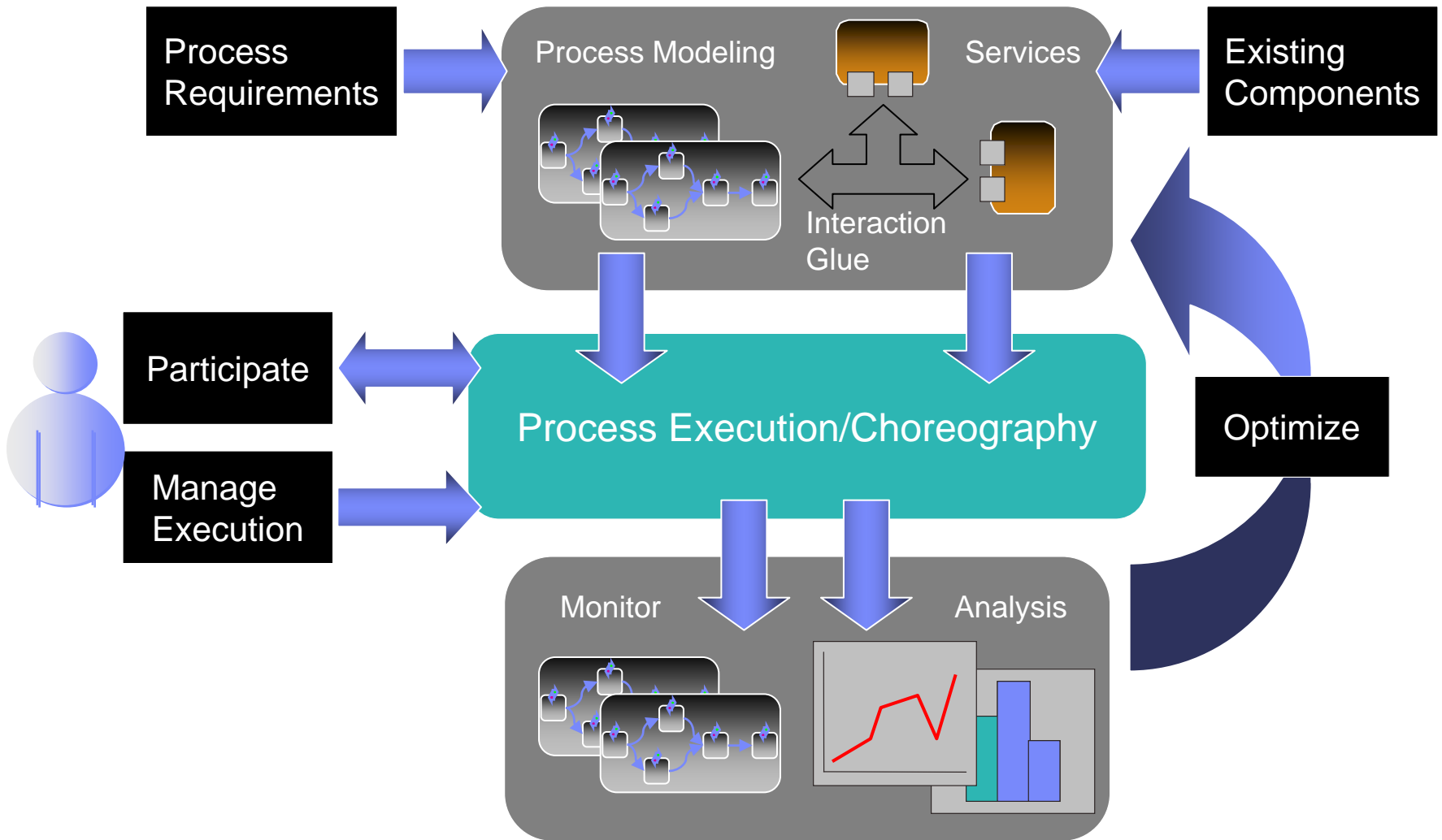
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Summary

- **Defined business process management and describe its value**

- **Describe barriers to progress within business**

- **Describe the business process management life cycle stages**
  - Model, Assemble, Deploy, Manage

- **The WebSphere products that support each stage**
  - WebSphere Business Modeler, WebSphere Integration Developer, WebSphere Process Server, WebSphere Business Monitor

- **Explain BAM (Business Activity Monitor) and describe its value**

- **Show how BAM helps optimization**

References

- **BPM Info Center**
  http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r0mx/index.jsp

- **IBM Education Assistant**
  http://publib.boulder.ibm.com/infocenter/ieduasst/v1r1m0/index.jsp

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