Business Event Processing and Monitoring:
Gaining insight into your CICS Transactions

IBM Software Group

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The Business Landscape is Changing Faster than Ever

Growing Need for Real-time Process Visibility and Performance Monitoring

How can I respond rapidly to change if I find out about problems too late?

How can I improve performance if I don't understand where we are now?

How can I grow my business if I can't manage resources effectively?

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Business Leaders Need Role-based, Real-time Visibility

Into Operational Performance to Make Smart Decisions on the Fly

Visibility Must:

- Provide a real-time operational view on key performance indicators (KPIs)
- Display role-based metrics and alerts on easily customized dashboards
- Let business users respond rapidly to work-in-progress
- Allow users to improve operational & strategic planning with better forecasts

…But Falters Because:

- Making smart decisions is difficult when you can't access real-time, tailored information
- Managing performance is impossible when you find out about problems too late
- Beating the competition is challenging if you can’t manage resources effectively
- Strategic planning is impossible if you can’t make realistic forecasts

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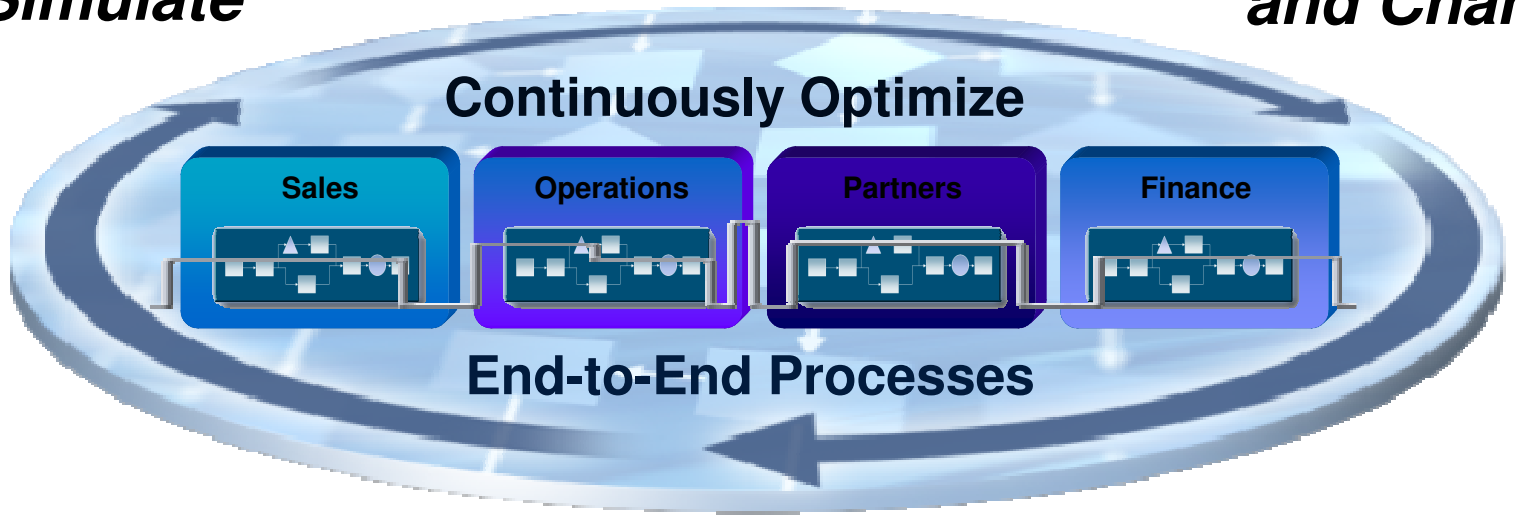
BPM from IBM Empowers You To Embrace Change and Continuously Optimize Your Business

Model and Simulate

Rapidly Deploy and Change



Monitor, Predict and Act

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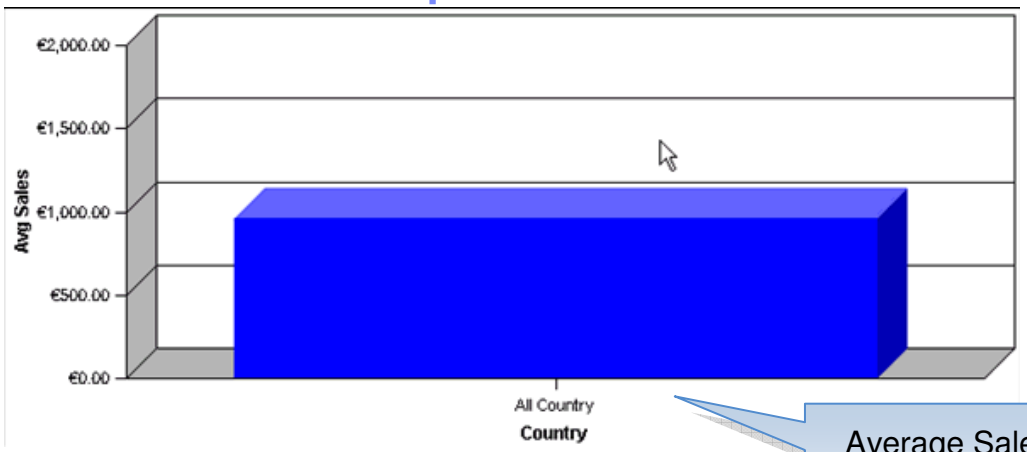
Achieve and exceed business expectations

You want to …

- Meet and exceed business expectations
  - Know how the business is performing at the moment
  - Be alerted when expectations are not being met
  - See how the business is trending



Average Sales broken out by country

IBM Solution

- WebSphere Business Monitor can track the health of your business and provide real time data in an easy to use dashboard
- Monitor, using the Action Manager, can alert you to business situations that require your attention via
  - Email
  - SMS
  - Other options

Dashboard Alert

- Monitor can provide historical and trend data in graphical dashboards
  - Able to aggregate and disaggregate data for advanced analysis
  - Many charting options exist
- Monitor accomplishes this by capturing information sent from applications or by interacting with an application to obtain information

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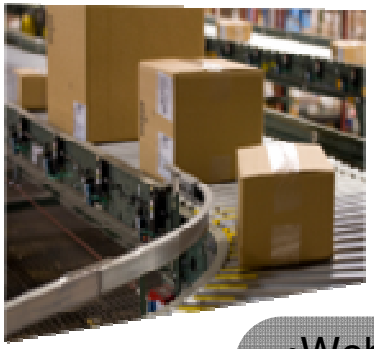
Business Event Processing

Tame The Flood of Business Events for Knowledge and Insight

What is a Business Event? *An action that has occurred, or the absence of it occurring, which has relevance to the business*

Large companies can experience up to **800 Billion** business events daily

Nearly **4 Trillion** RFID events are emitted each day



Over **190 Billion** emails are sent daily

- WebSphere Business Events & eXtreme Scale
  - Exploits WebSphere eXtreme Scale capability for high event volume customers
  - Trial code and marketing kits for Business Partners
- CICS Transaction Server Support Pac
  - Brings Business Event Processing to the mainframe

Turn a flood of seemingly unrelated events into actionable business context

Source: zdNet; idtechex , didyouknow.com

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Capture actionable insights from real-time business events with Business Event Processing

Complex Event Processing

Causality Aggregation

Complex Queries

Event emitters and sources

Event pattern detection Correlation analysis

+

Actionable Business Context

Real-time business event visibility

Patterns and correlations elevated to business users

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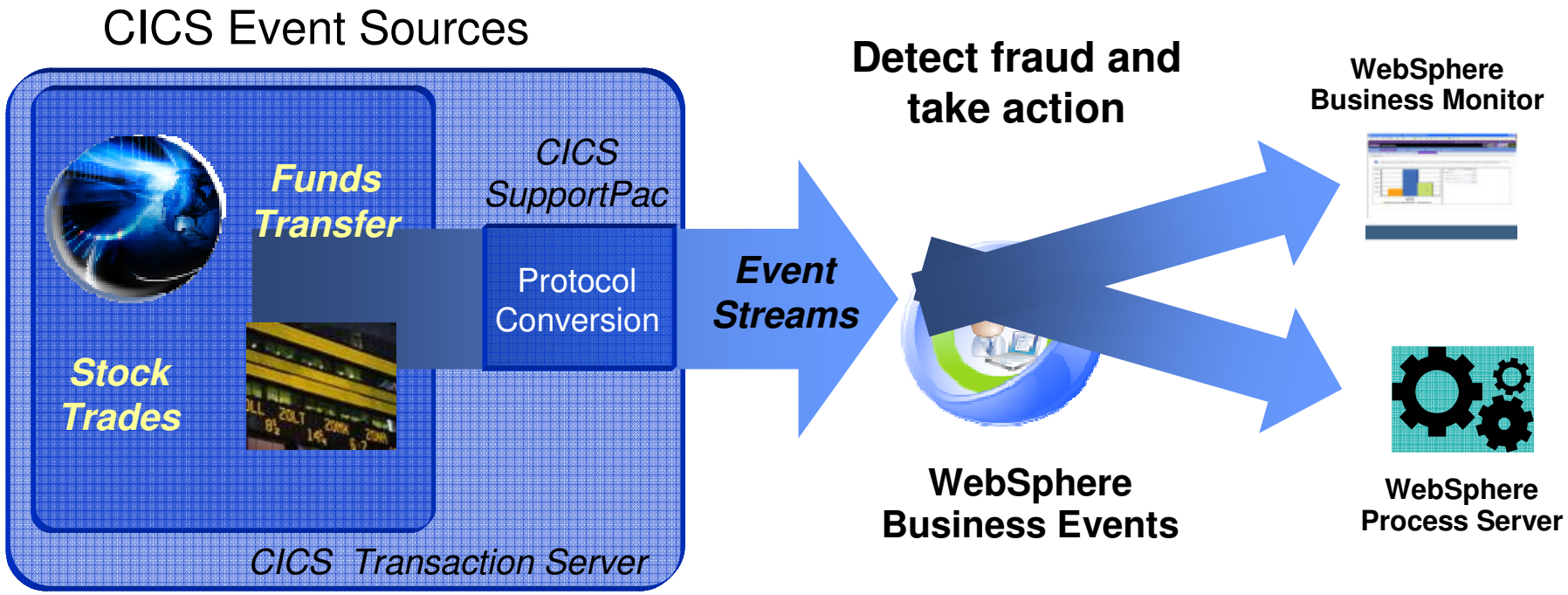
Capture mainframe event sources for greater insights and action



New and Enhanced!

WebSphere Business Events integration with WebSphere Business Monitor, Tivoli NetCool and CICS Transaction Server

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WebSphere Business Monitor at a glance

Understand, monitor, and explore the state of business operations

Know the state of your business via

Scorecards

Key Performance Indicators for business units

Take action via

Collaboration

Work with teams to resolve situations

Take more action via

Business Alerts

Notification of situations that require response

Evaluate data via

Reports & Analyses

Understanding trends by combining real-time performance and historical information

Have any available information via

External Information

Monitor can access external information affecting performance

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Capturing information from all sources

Issue

- Heterogeneous systems contain your business data
  - Do you have all the information you need?
  - How can you get at all of the information?
  - Can you see it all in one place?

IBM Solution

- WebSphere Business Monitor can capture information from any source
- Monitor can interact with any other system to obtain information via User Defined Functions
  - Databases
  - Third party vendors
  - Existing applications
- Monitor provides numerous options to view information in a dashboard

Diagram View – data fed from multiple data centers are aggregated into one view

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Viewing business information in one place

You want to …

- Be able to see all of your important business data in one place
- Be able to assess the health of your business at a glance

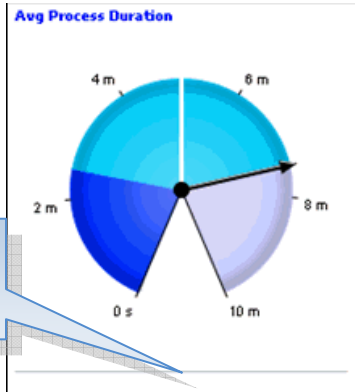
Sales	Sales Process Cost	Customer Name	Country	Sales Process Duration
€425.00	€22.61	NLK Ltd	Austria	7 m, 32.169 s
€1,998.00	€10.37	ITC	Slovenia	3 m, 27.459 s
€912.00	€17.82	K Enterprises	Austria	5 m, 56.426 s
€1,590.00	€27.83	JK Enterprises	Croatia	9 m, 16.58 s
€1,615.00	€18.97	ABC Partners	Latvia	6 m, 19.357 s

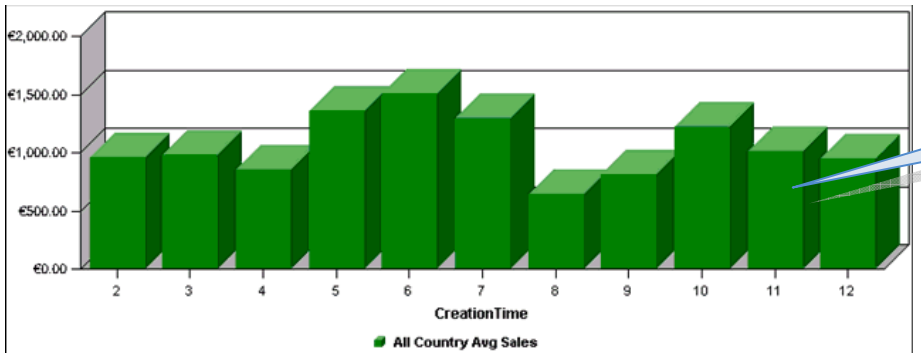
Tabular view of individual process instances

IBM Solution

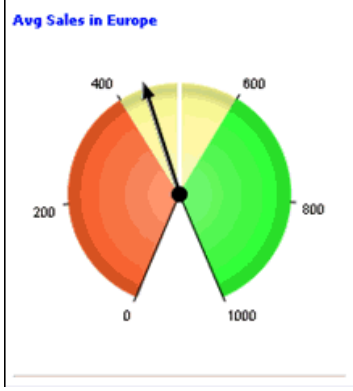
- WebSphere Business Monitor can display your business information in a number of ways
  - Tabular
  - Graphical

Graphical view of key performance indicators





Average Sales broken out by month. Drill down to view by country



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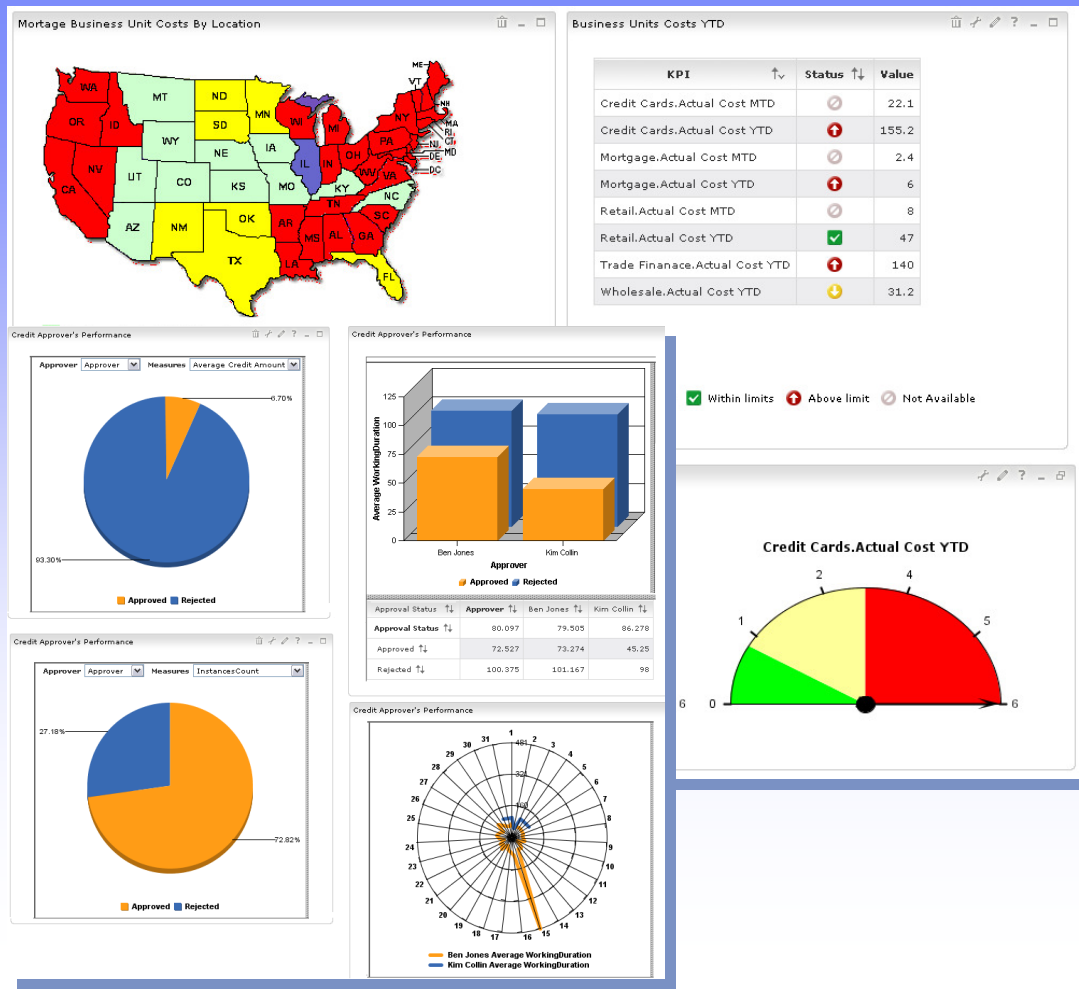
Creating Role-based Dashboards

Assemble dashboards from different views

- Instances view
- Report view
- Dimensional view
- KPI view
- Gauge view
- Diagram view
- Alert view
- Organizational view

Combine standard & custom views to meet any business need



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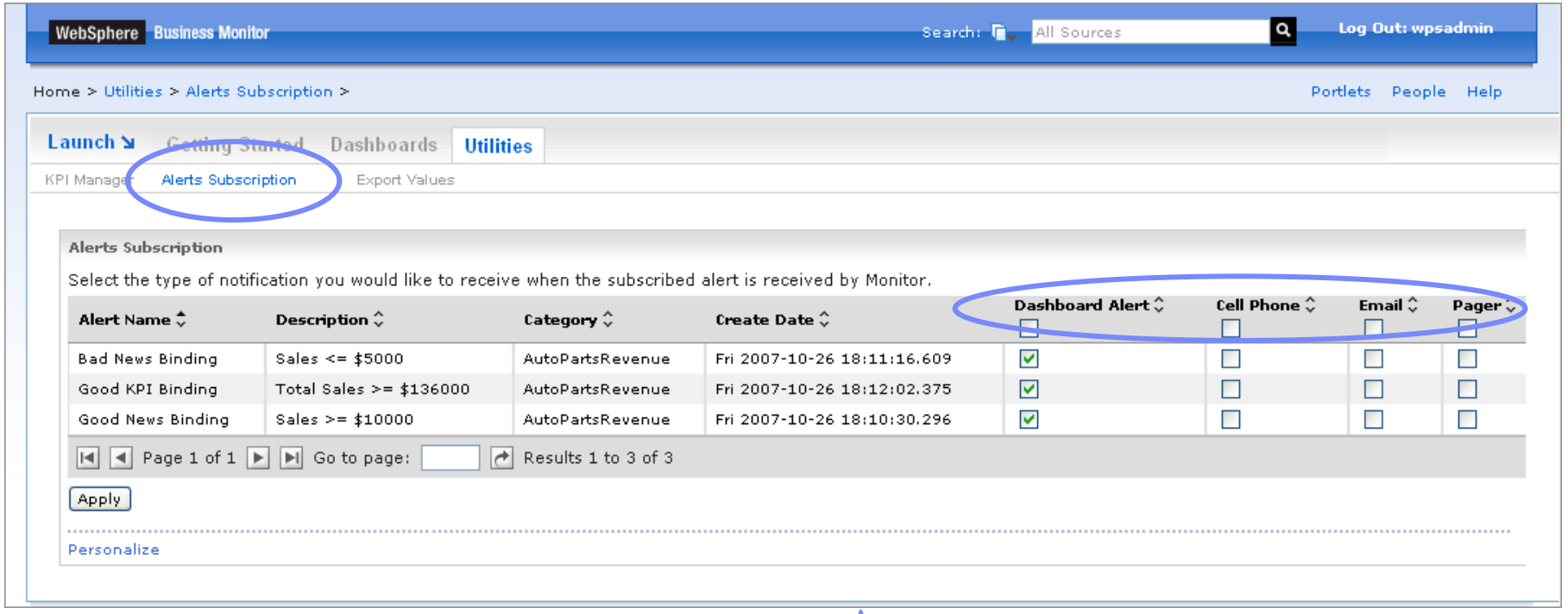
Multiple Delivery Channels for Alerts

Easy to manage alert subscriptions and personalization



Business users can customize alert subscriptions

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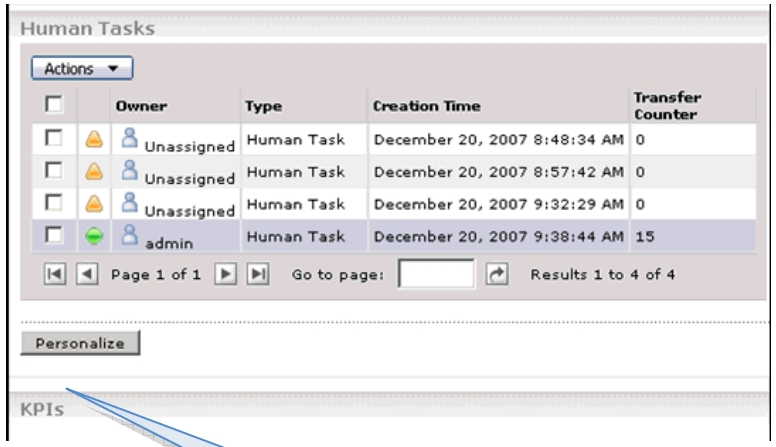
Taking action based on business information

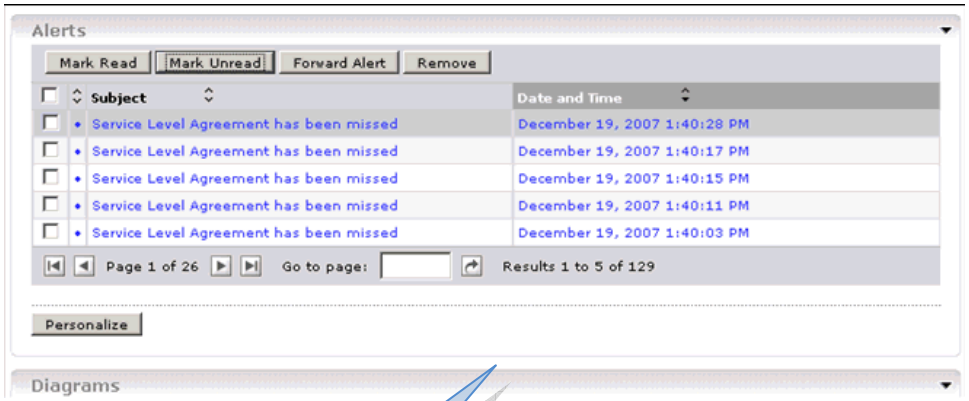
You want to …

- Transfer work
- Forward Alerts from situations that arise



Human Task View – reassigning work

- You can transfer work done by you and your colleagues
  - Human Tasks in WebSphere Process Server
- Forward alerts to colleagues
- Once information has been gathered you can begin thinking about optimization



Forwarding Alert

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Measure Process Performance through Key Indicators

Business Expert

IT Expert

WebSphere Business Monitor

BPM Expert

Process Users

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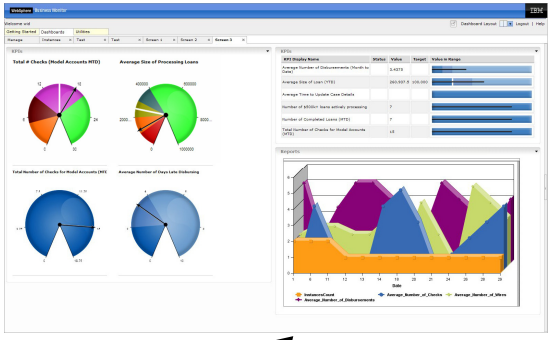
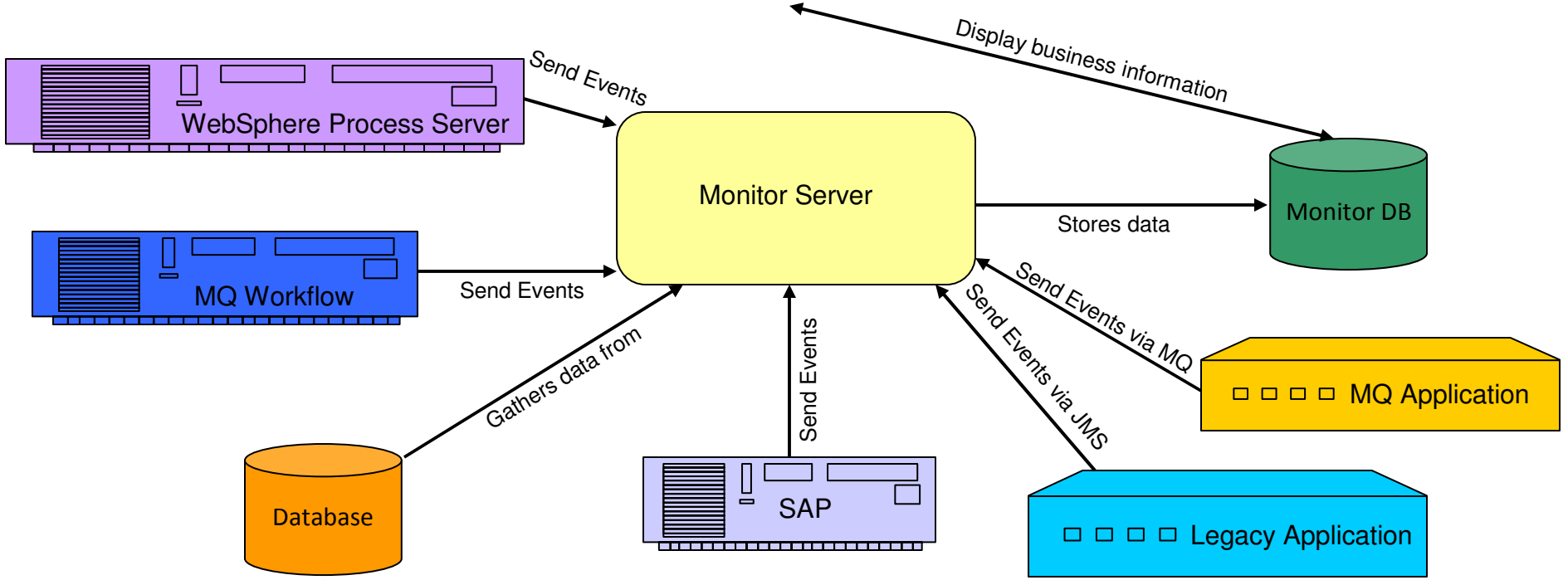
How does Monitor accomplish all this?





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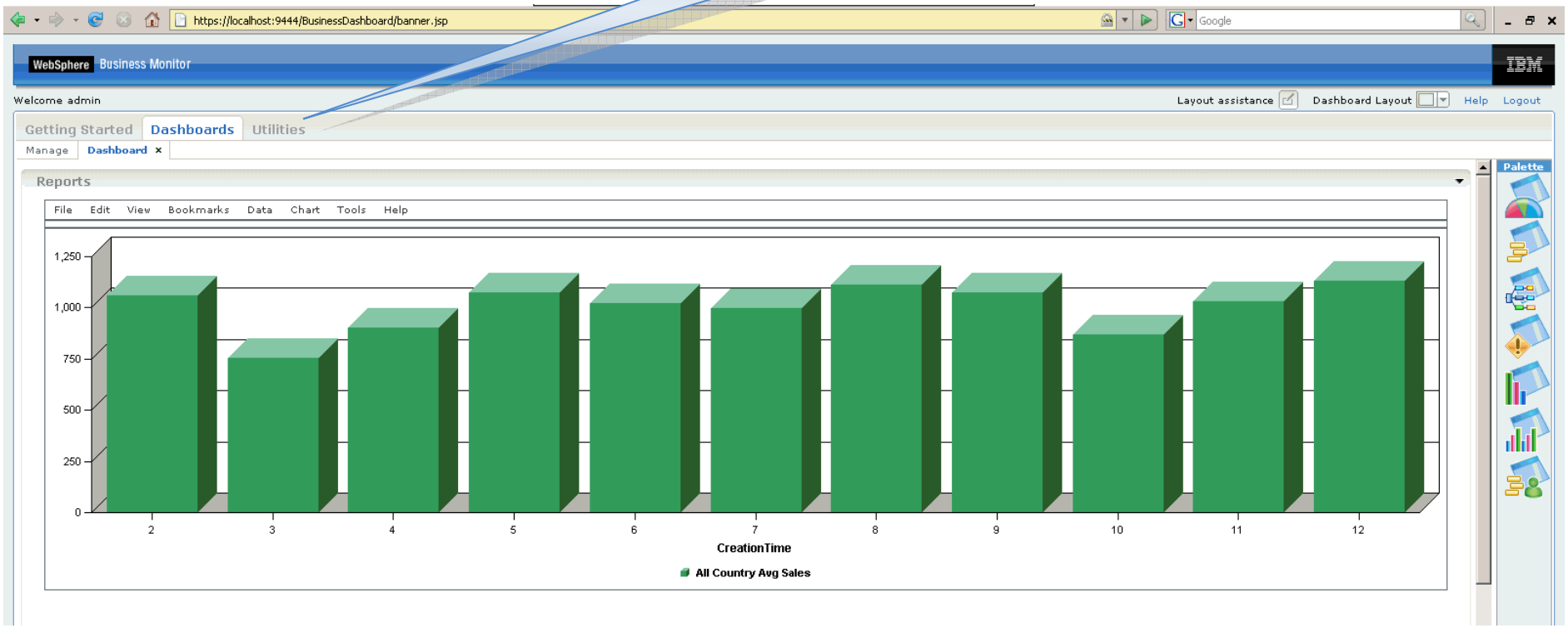
Optimizing business processes

IBM Solution

- WebSphere Business Monitor can export information in a number of ways for use with other applications
  - Into Excel format for WebSphere Business Modeler import
  - Into PDF format

Export report data into Excel format



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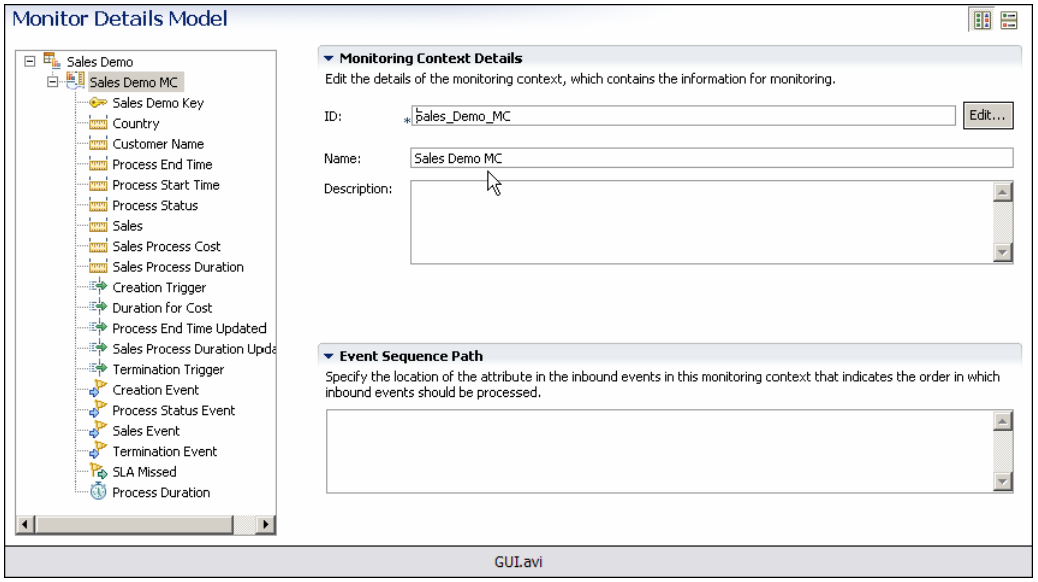
Develop and deploy monitoring solutions quickly

You want to …

- Create and implement monitor solutions at the speed of business
- Fully test a solution in development environment



IBM Solution

- WebSphere Business Monitor Toolkit is a versatile GUI where you can create monitor models in an intuitive manner
  - A 'Getting Started' will guide you through some basic steps in creating monitor models
  - Monitor model itself is an easily readable XML file – not a proprietary binary file
- Deploying a monitor model is as easy as adding it to a test server
  - Similar to other IBM test environment applications
  - Does everything needed to install and deploy monitor model
- Integrated Test Client allows you to emit events to monitor model
  - No need to create and deploy emitting applications
- Scalable Vector Graphic (SVG) annotator allows you to add actions to SVG diagrams
  - Adds dynamicity to your diagrams
  - Can test actions without need of monitor model deployment

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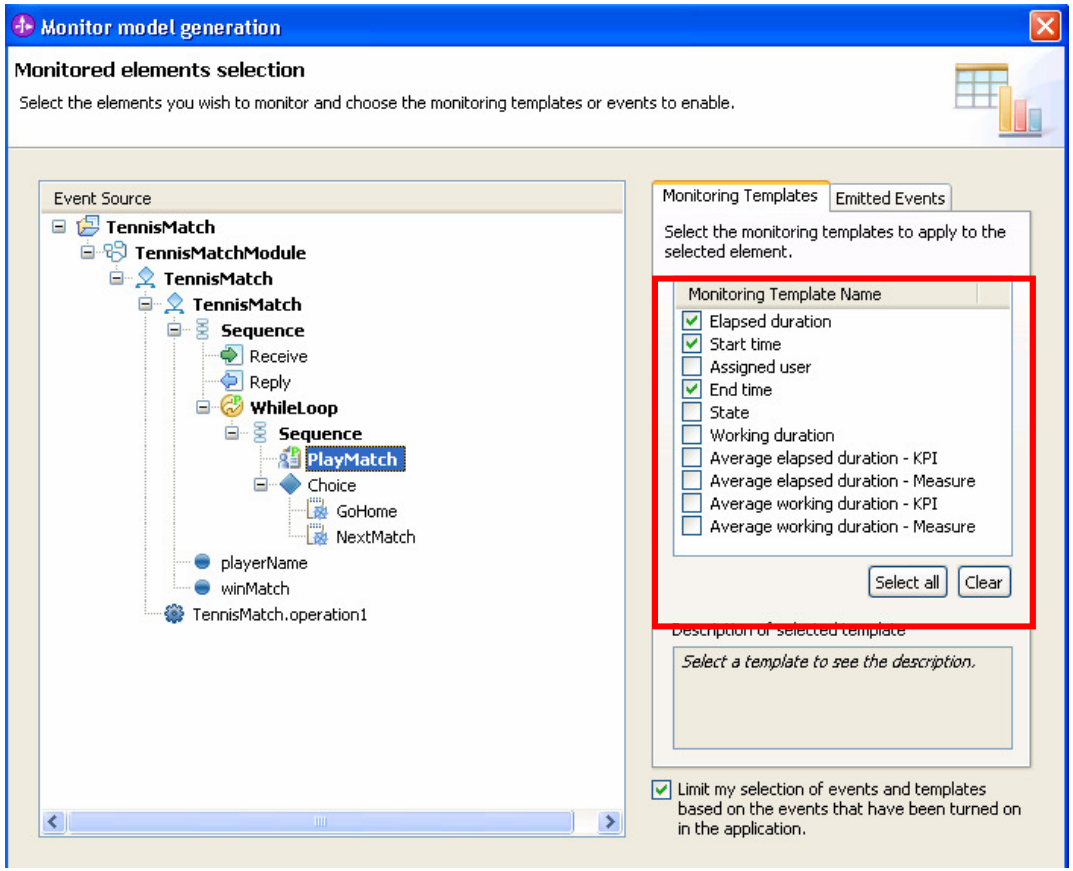
Develop and deploy monitoring solutions quickly

- Monitor models can be created using templates
  - Creates often used metrics automatically



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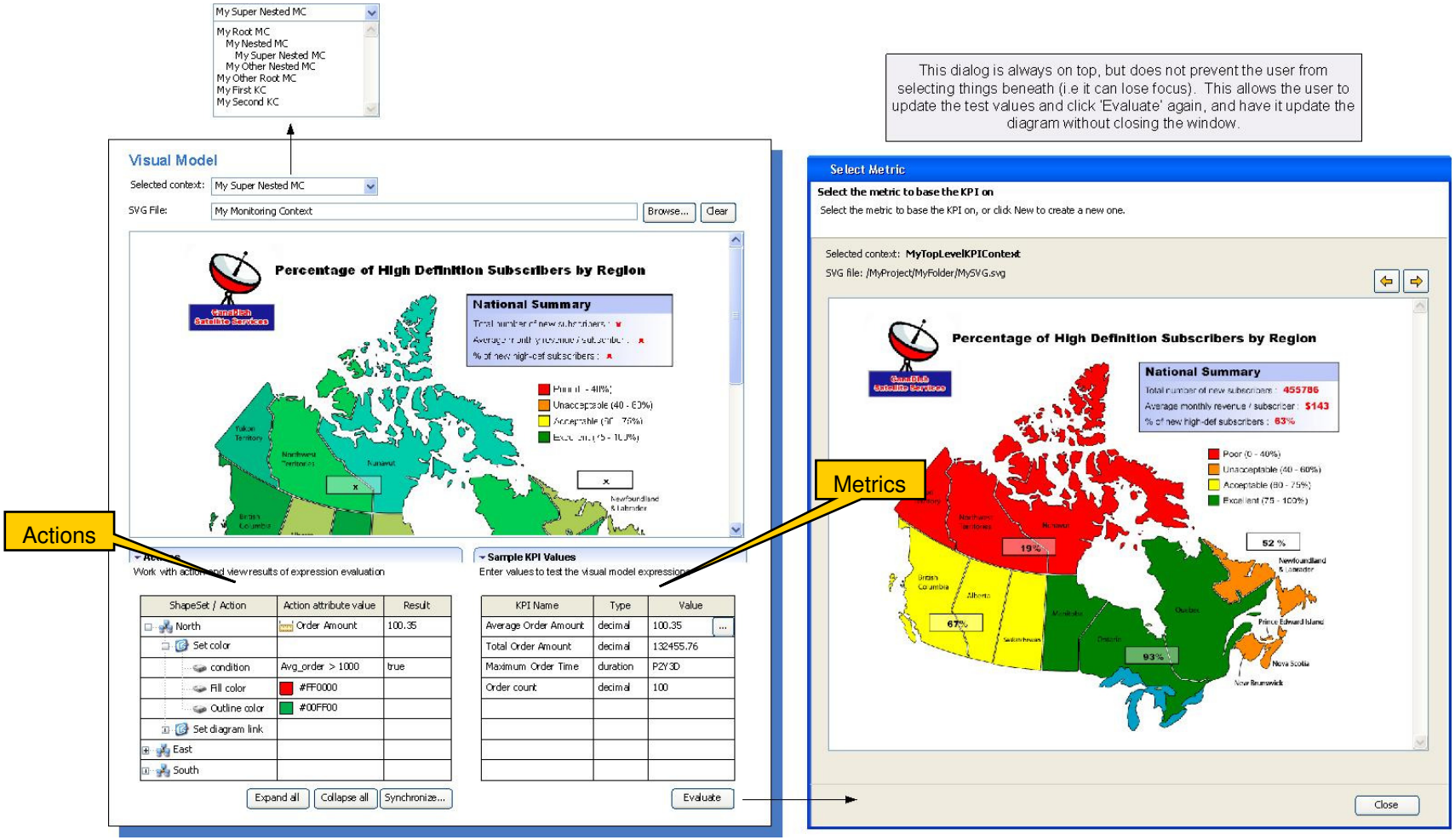
Develop and deploy monitoring solutions quickly

Graphical User Interface for visual diagram (SVG) annotation and testing



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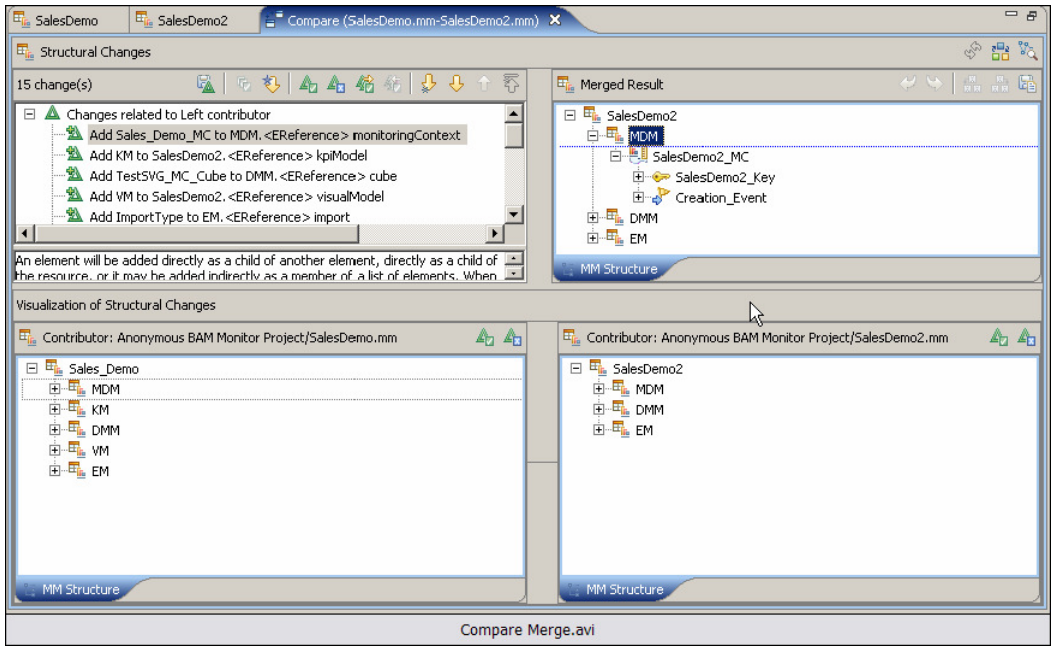
Update monitor solutions

Issue

- Business processes change and applications change. How can we adapt those changes at the speed of business?
- What if monitor models were developed separately. How can we combine efforts?



IBM Solution

- WebSphere Business Monitor Toolkit can synchronize changes with emitting applications
  - BPEL processes
- Monitor Toolkit can merge and combine monitor models from different sources
  - Other developers
  - Monitor models created in WebSphere Business Modeler
  - Combine 'mashes' models together – ideal for monitor models where developers worked on disparate contexts
  - Merge examines and displays deltas and you choose how to merge deltas
- In test environment changes can automatically be published to server
  - No need to undeploy/redeploy
- In production environment you have some options
  - Deploy a new version leaving the existing version to continue to monitor in-flight processes – most common scenario
  - Undeploy the existing monitor model and redeploy the monitor model
  - Maintain historical data
  - Delete historical data

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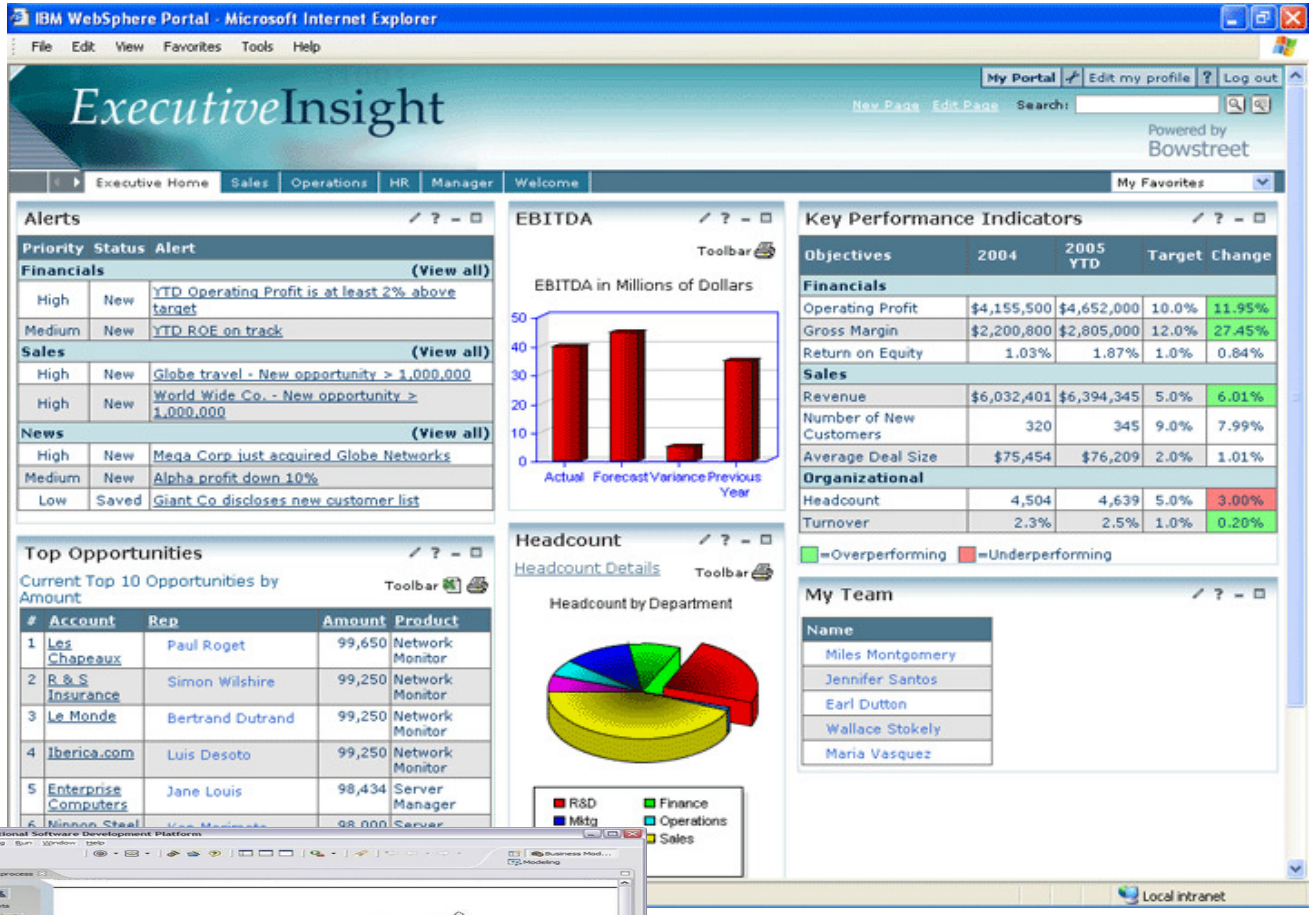
Learn From Your Data

Modeler and Monitor Together:

- Feed your real data back into your modeling tool for real life simulations
- Using real business facts as the basis for analysis



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IBM offers intuitive solutions for BPM and BAM

"WebSphere Business Modeler and Business Monitor are intuitive for business users and analysts, facilitating their involvement in the design, monitoring and analysis phases of process improvement life cycles."

Gartner, Inc., "Magic Quadrant for Business Process Management Suites, 2007", by Janelle B. Hill, Michele Cantara, Eric Deitert, Marc Kerremans,14 December 2007

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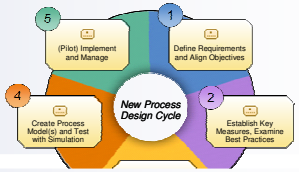
ACT NOW! Take the next step to get started

- http://demos.dfw.ibm.com/solutions/integration/
  - *Watch and listen to our BPM product demos*

- **Take the Assessment:**
  - *BPM Enabled by SOA Readiness Assessment*

- **Attend a Workshop:**
  - *Customized Process Improvement Workshop*
  - *Process Improvement Workshop*



- **Talk to Other Customers:**
  - *Peers offer great insight and lessons learned*

www.ibm.com/software/integration/wbimonitor

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Process Improvement Workshop

What is it?

- 2 day no-charge workshop that examines a current business process needing improvement, defines a high-level technology-enabled alternative process, and compares and evaluates the business value of improvements

Key Objectives

- Analyze to discover areas for business process improvement
- Document both the current- and future-state business processes and compare to validate enhancements and ROI calculation before committing resources

Deliverables

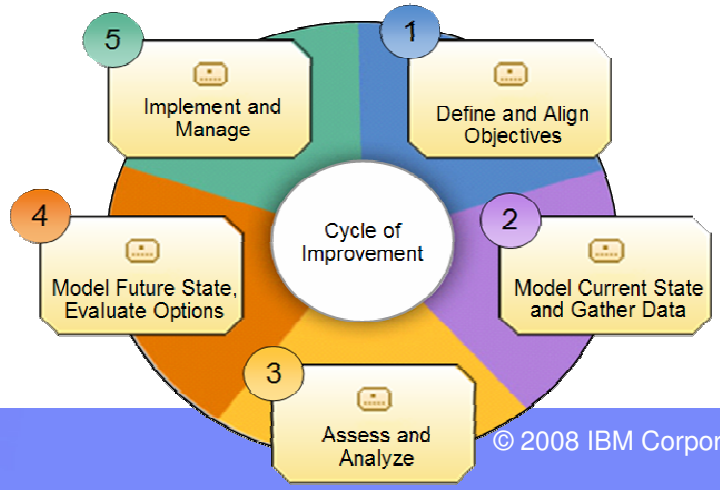
- Current- and future-state process models, simulation results and comparative reports

Participants

- Customer: LOB executive sponsor, business analysts, LOB experts, IT architects
- IBM: Integration Solution Architects, Process Improvement experts

<u>Workshop Qualification</u>

- Identified Business Need / Process Improvement
- Potential Significant Business Value
- Participation and Support of Business Unit



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