IBM Software Group

Process Integration
Sales Technical Enablement Workshop (STEW)

End to End Demo

e business on demand software

World Wide WebSphere Business Integration Technical Sales

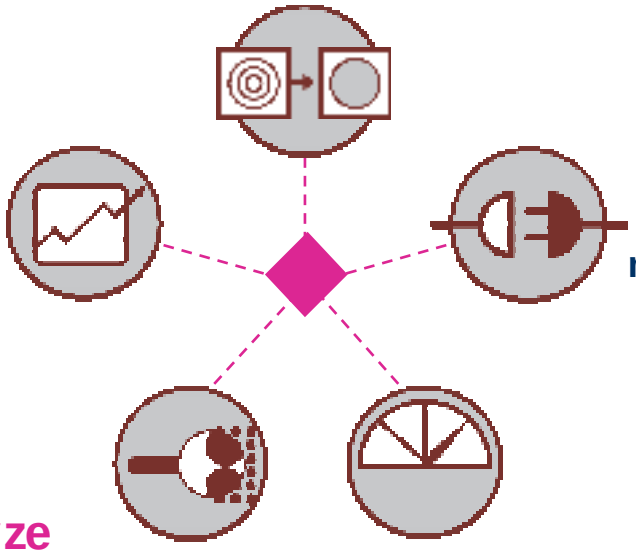
Business Context

- Project Enterprise
- Process Improvement Initiative
  - Optimize the New Account Open process
- Power of Language
  - Use WebSphere Business Modeler => Model your business
  - Log on to Collaboration Server => Collaborate on strategy
  - View the Swimlane Editor => Visualize processes by roles
- Themes
  - IT and Business Collaborate – Business ⇔ IT
  - Linking the PI features directly to business benefit (Closed Loop and Business Rules empower the business)
  - Sense and Respond
  - Raising the bar - higher level solutions - composite applications (SOA) enable higher level strategy faster
- Demo of:
  - WebSphere Business Modeler
  - WebSphere Integration Developer
  - WebSphere Business Monitor

Process Integration delivers continuous improvement and innovation

Model

Capture, simulate, analyze, and optimize business models to reduce risk and increase flexibility



Act

Respond at the right time to insights through collaboration, optimization, and automation to excel

Deploy

Direct deployment of models and policies within SOA to realize business intent

Analyze

Gaining insight into business metrics and information for contextual based decision making

Monitor

Correlate metrics and alerts in real-time from internal and external sources to gain visibility into the business performance

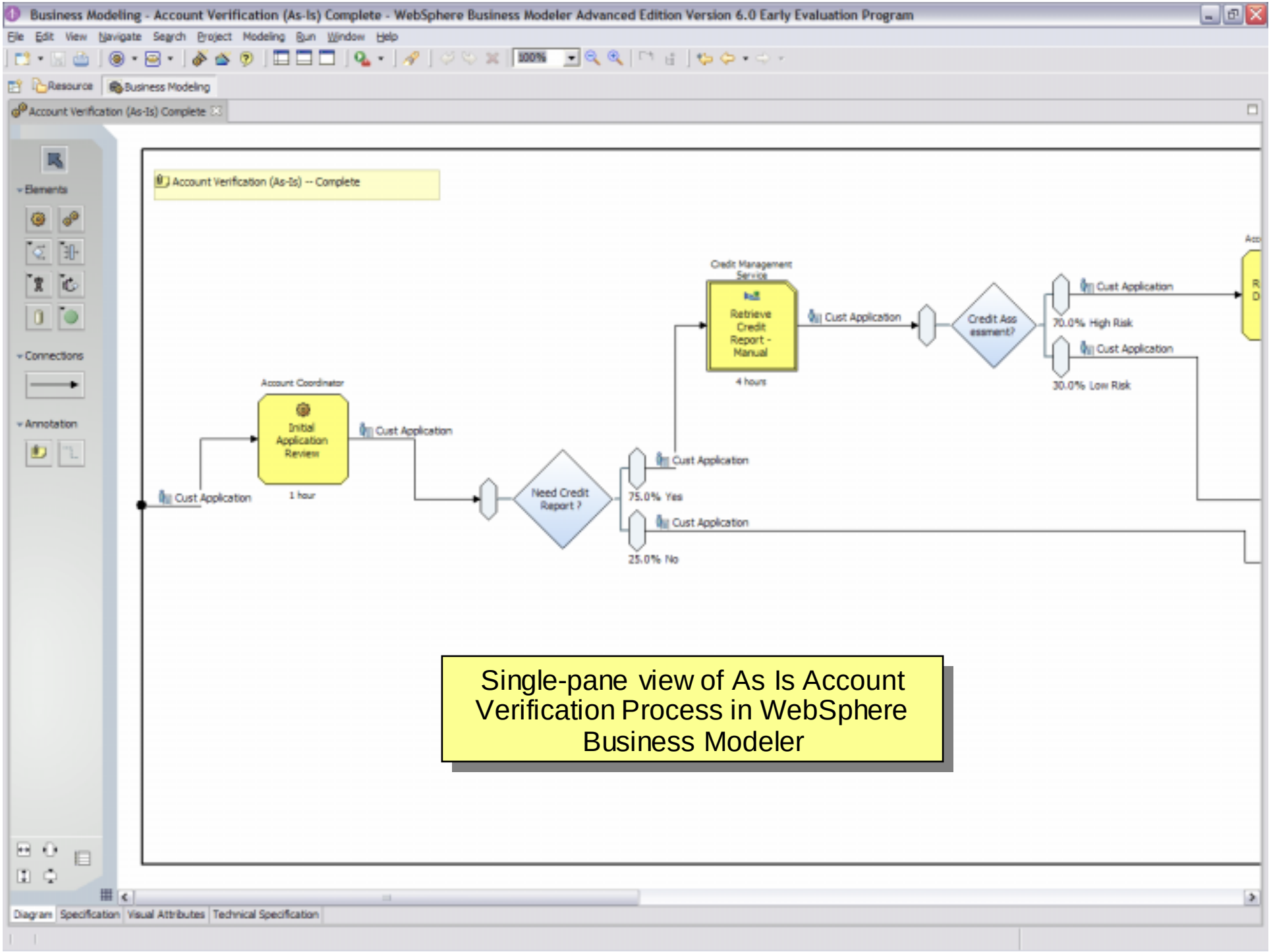
Brings together the value of process orientation with outcome orientation

Start with Modeling the Business

JK Enterprises launches their Business Process Improvement project. After carefully reviewing the business requirements and goals in IBM Rational Requisite Pro, Monica, a Business Analyst, is ready to begin her work on the new Account Opening Process Integration project.

As part of other work last year, JK Enterprises documented some of their processes in Visio. Monica leverages that work by importing the drawings into IBM WebSphere Business Modeler V6. She imports an existing Visio drawing of the As Is "Account Verification" process. This is gives her a basic drawing of the As Is process, but it does not contain important business metrics, such as costs, durations, roles, resources, organization, etc.

Monica uses WebSphere Business Modeler to complete the As Is process by adding business metrics, which she in turn uses to perform some preliminary static analysis, simulations and dynamic analysis.



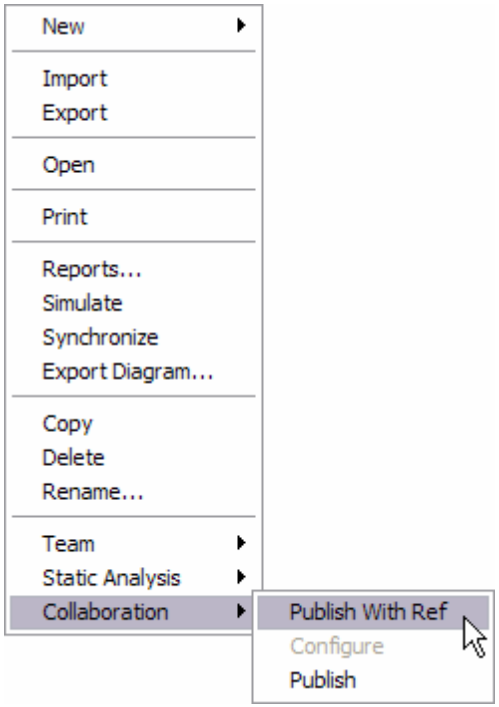
Single-pane view of As Is Account Verification Process in WebSphere Business Modeler

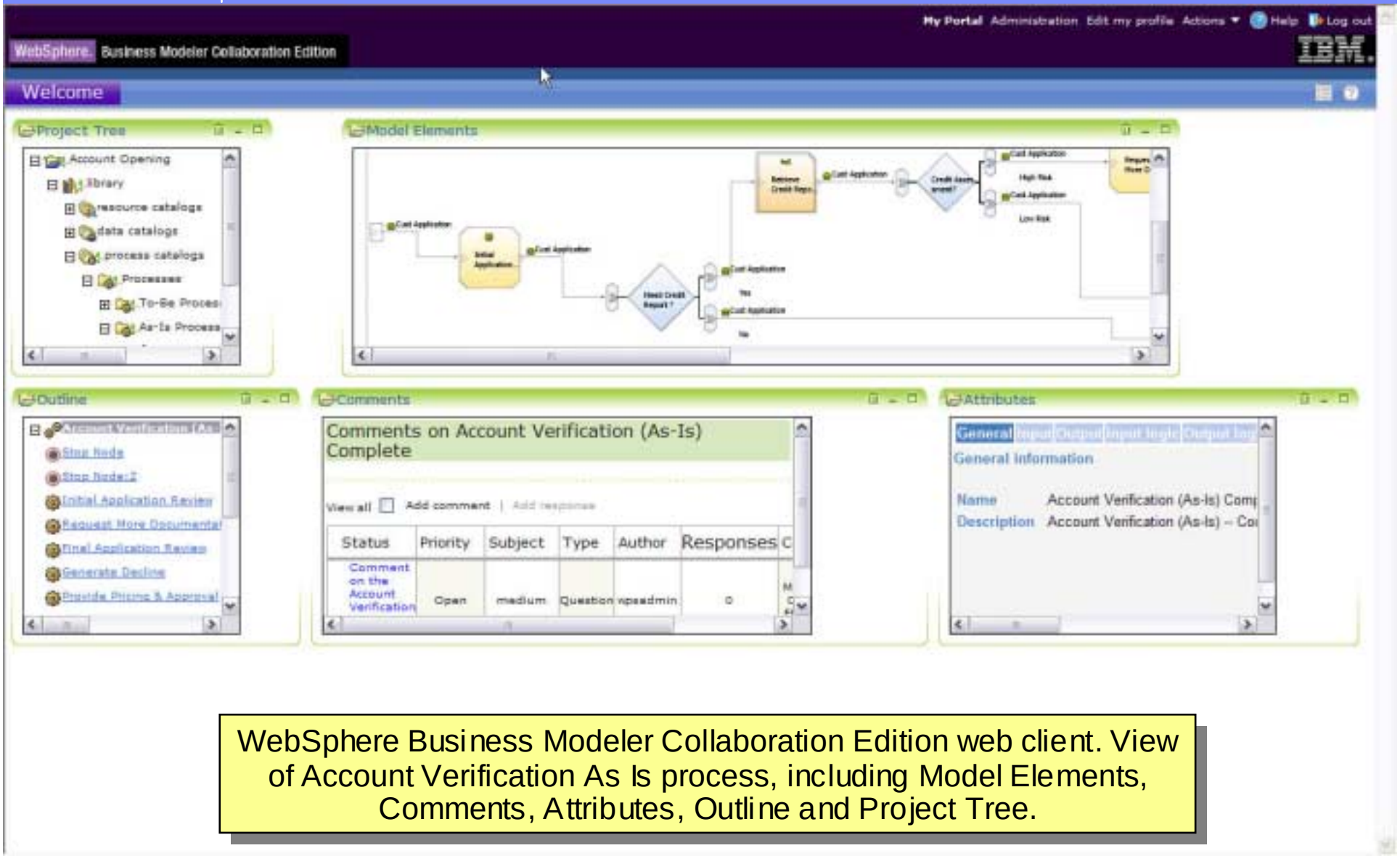
Collaborating on Business Models

Monica checks the As Is Model into Rational ClearCase and publishes it to the Collaboration Server, to validate the model and receive feedback from the rest of the company.

Individuals such as John, the manager of the Credit Department, use their web browsers to review and validate the As Is model and add comments, attachments and web links.

Monica responds to comments and asks for clarification when necessary.





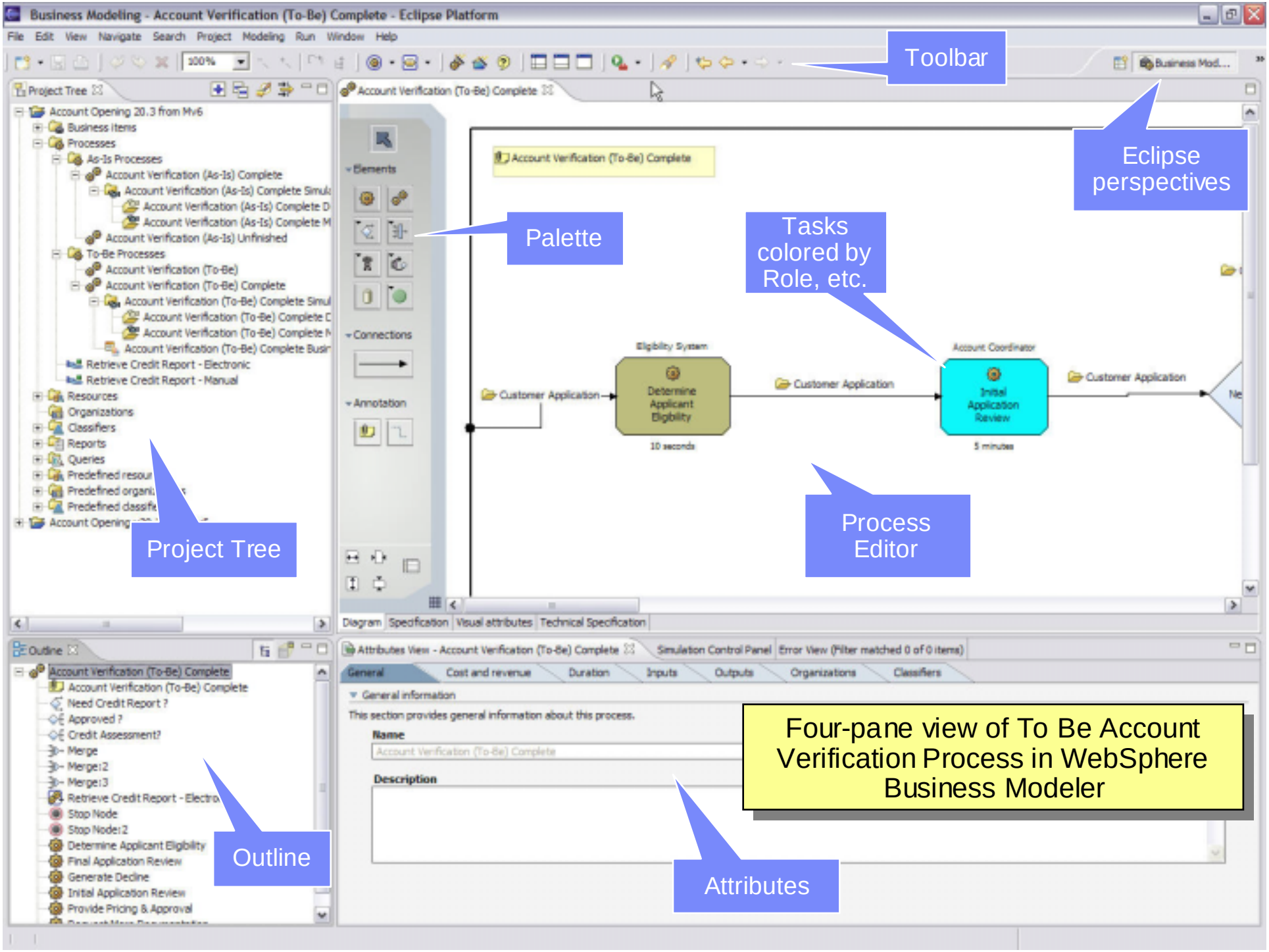
WebSphere Business Modeler Collaboration Edition web client. View of Account Verification As Is process, including Model Elements, Comments, Attributes, Outline and Project Tree.

Optimize the Process – To-Be

Upon receiving several comments and documentation as attachments, Monica makes some minor changes the As Is Account Verification process model as required. She is now ready to model the To Be model, which will represents an optimized Account Verification process.

Monica knows that she will transform portions of the To Be model into useful artifacts for automation and also possibly for development of new services, if required. She also knows that from the same model she will also generate an Observation Model that will be used to monitor the process once it is automated and deployed.

Monica bases her design of the To Be model on the requirements and goals she reviewed in Requisite Pro, as well as the results of her static analysis, simulation and dynamic analysis of the As Is model. Fortunately, Monica was able to find several opportunities for automation and improvement of the process, which she is now incorporating into the To Be model.

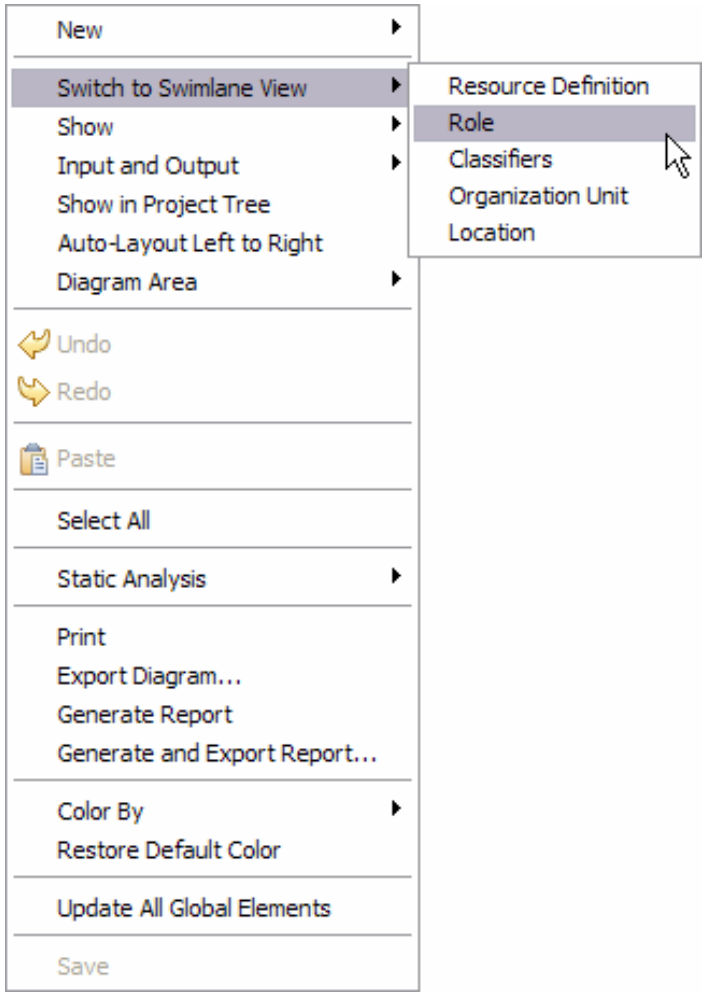

Business Modeling - Account Verification (To-Be) Complete - Eclipse Platform
Toolbar
Eclipse perspectives
Palette
Tasks colored by Role, etc.
Project Tree
Process Editor
Outline
Attributes
Four-pane view of To Be Account Verification Process in WebSphere Business Modeler

Assign Roles

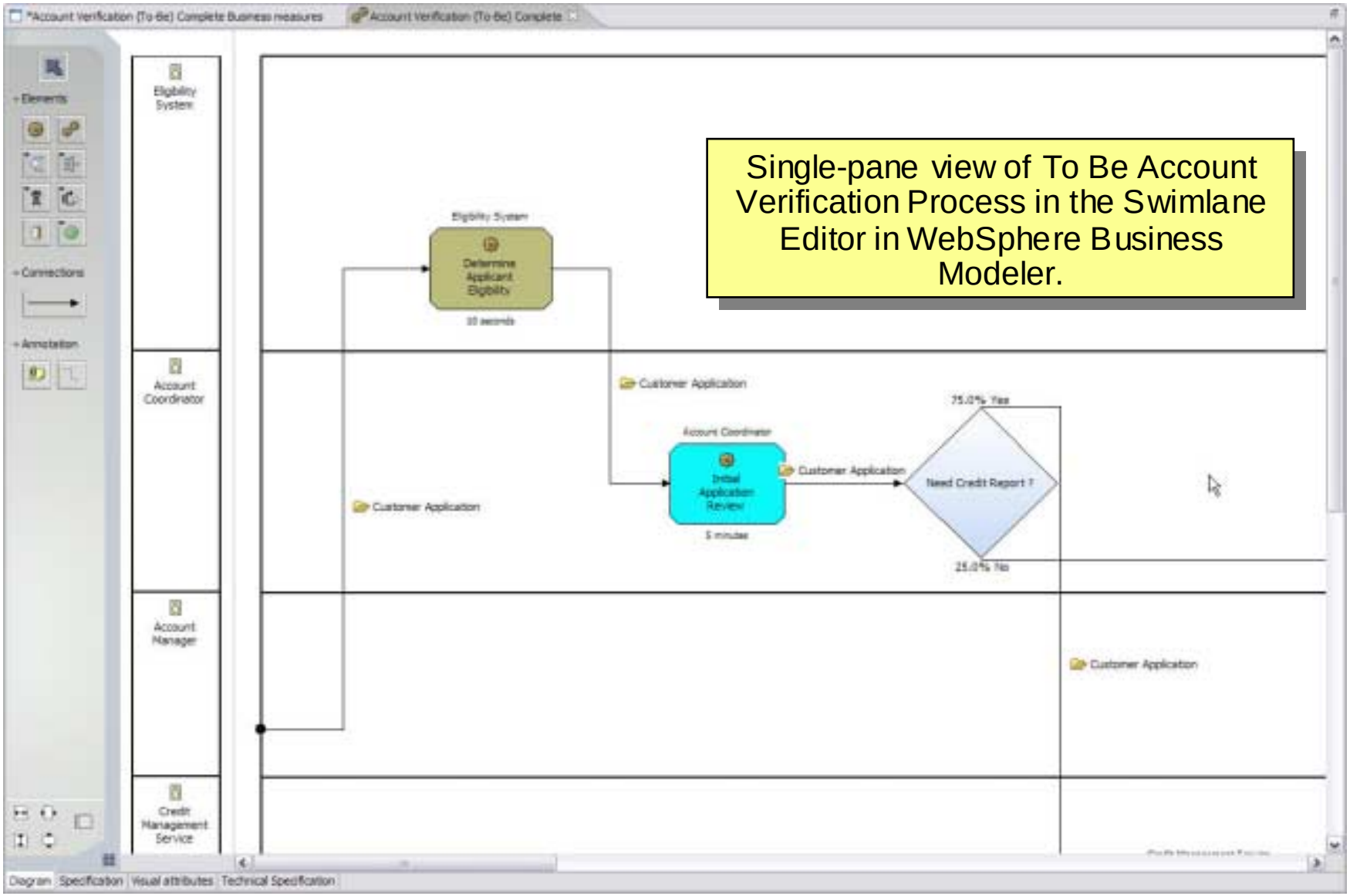
Monica uses the Swimlane Editor, in the swimlanes by Role view, to complete the To Be process, which helps her visualize her model in a another useful way.

Monica is able to drag-and-drop tasks between the Role swimlanes, allowing WebSphere Business Modeler to update the Role automatically.

Demo: Switch to Swimlane View by Role and explore the swimlane. Drag and drop a task from one swimlane to another and see how the Role is updated automatically in the Attributes.



Visualize the Process by Role

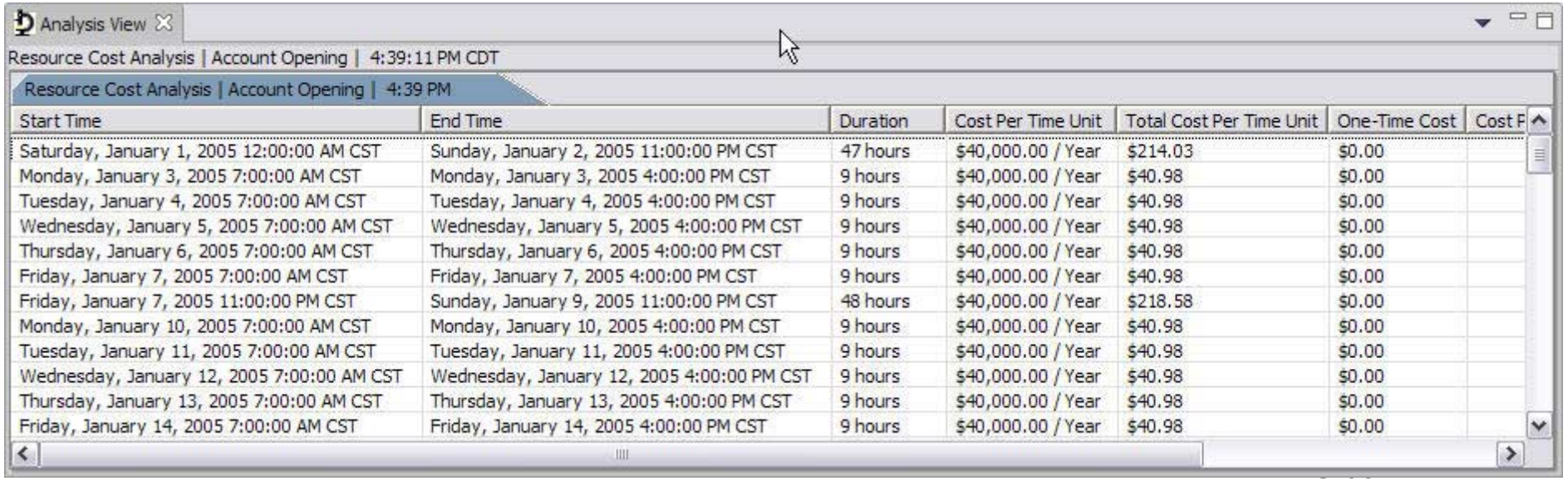


Analyze the Optimized Process

Monica runs several Static Analysis reports on the To Be process model. She runs several reports such as:

- Activity cost and duration
- Activity by classifier
- Resources cost summary
- Matrix analysis (resource/role)
- And others…

Demo: Run a Static Analysis report (TBD)

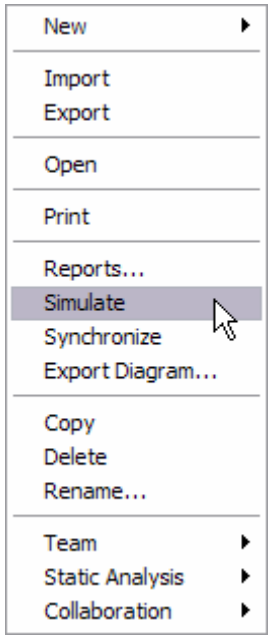


Start Time	End Time	Duration	Cost Per Time Unit	Total Cost Per Time Unit	One-Time Cost	Cost F
Saturday, January 1, 2005 12:00:00 AM CST	Sunday, January 2, 2005 11:00:00 PM CST	47 hours	$40,000.00 / Year	$214.03	$0.00	
Monday, January 3, 2005 7:00:00 AM CST	Monday, January 3, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Tuesday, January 4, 2005 7:00:00 AM CST	Tuesday, January 4, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Wednesday, January 5, 2005 7:00:00 AM CST	Wednesday, January 5, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Thursday, January 6, 2005 7:00:00 AM CST	Thursday, January 6, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Friday, January 7, 2005 7:00:00 AM CST	Friday, January 7, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Friday, January 7, 2005 11:00:00 PM CST	Sunday, January 9, 2005 11:00:00 PM CST	48 hours	$40,000.00 / Year	$218.58	$0.00	
Monday, January 10, 2005 7:00:00 AM CST	Monday, January 10, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Tuesday, January 11, 2005 7:00:00 AM CST	Tuesday, January 11, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Wednesday, January 12, 2005 7:00:00 AM CST	Wednesday, January 12, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Thursday, January 13, 2005 7:00:00 AM CST	Thursday, January 13, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	
Friday, January 14, 2005 7:00:00 AM CST	Friday, January 14, 2005 4:00:00 PM CST	9 hours	$40,000.00 / Year	$40.98	$0.00	

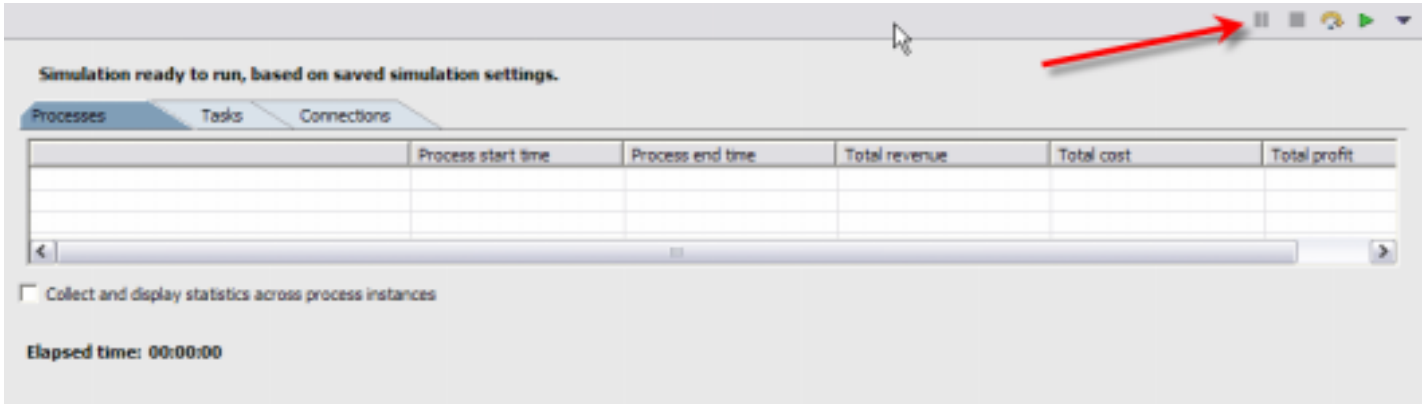
“What If” Simulation

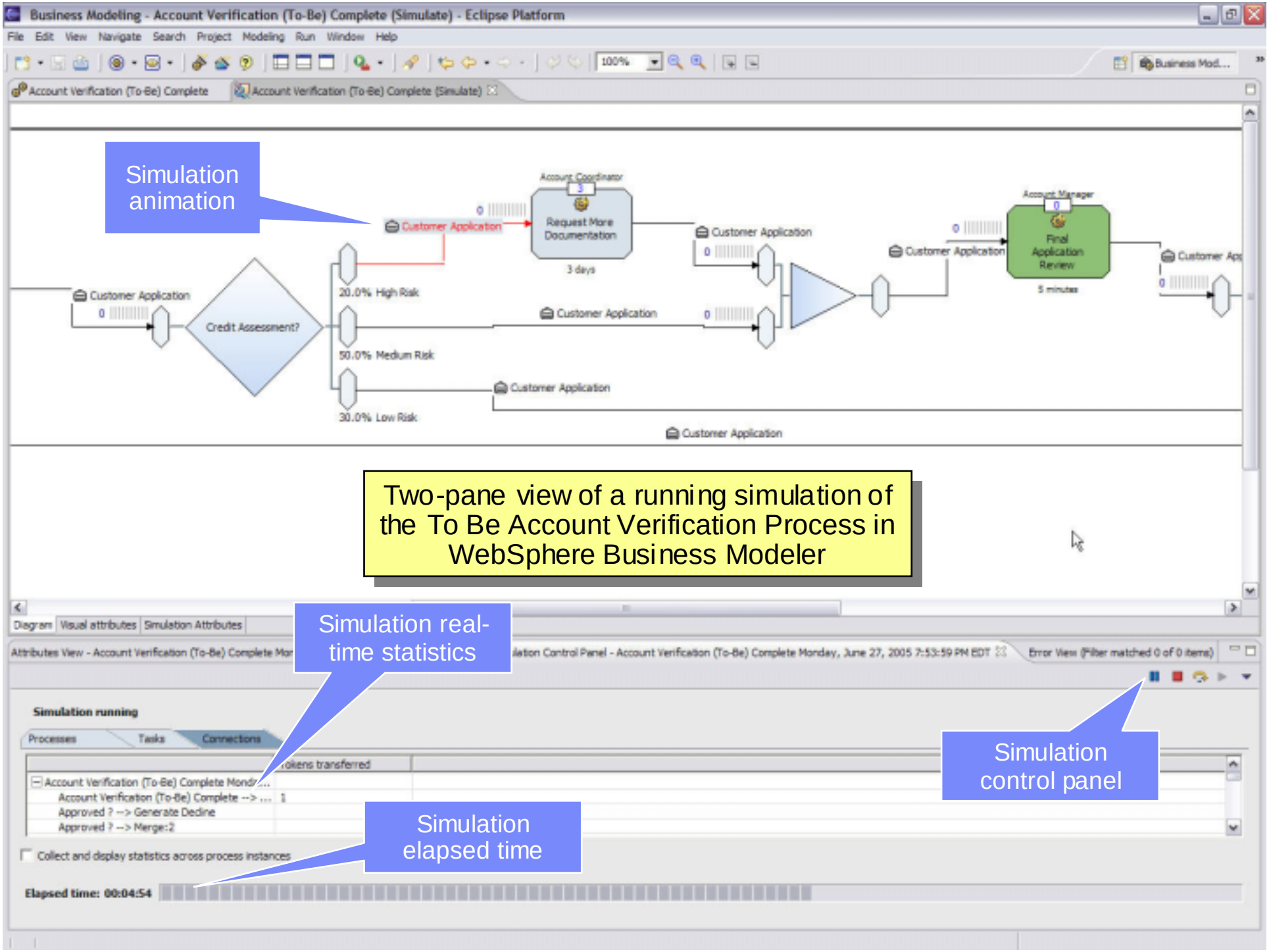
Monica runs multiple simulations of the To Be model, performing “what if” analysis. For example, “what if I move resources available for one task and reallocate them to another?” In order to run the simulation, she:

- Creates a simulation snapshot by selecting Simulate from the menu
- Defines or modifies simulation attributes such as how many instances of the process should be run and how often they should start, resource allocation, etc.
- Selects ▶ Run Simulation from the Simulation Control panel



Demo: Run a pre-configured simulation of To Be model with only 2 tokens and animation turned ON.



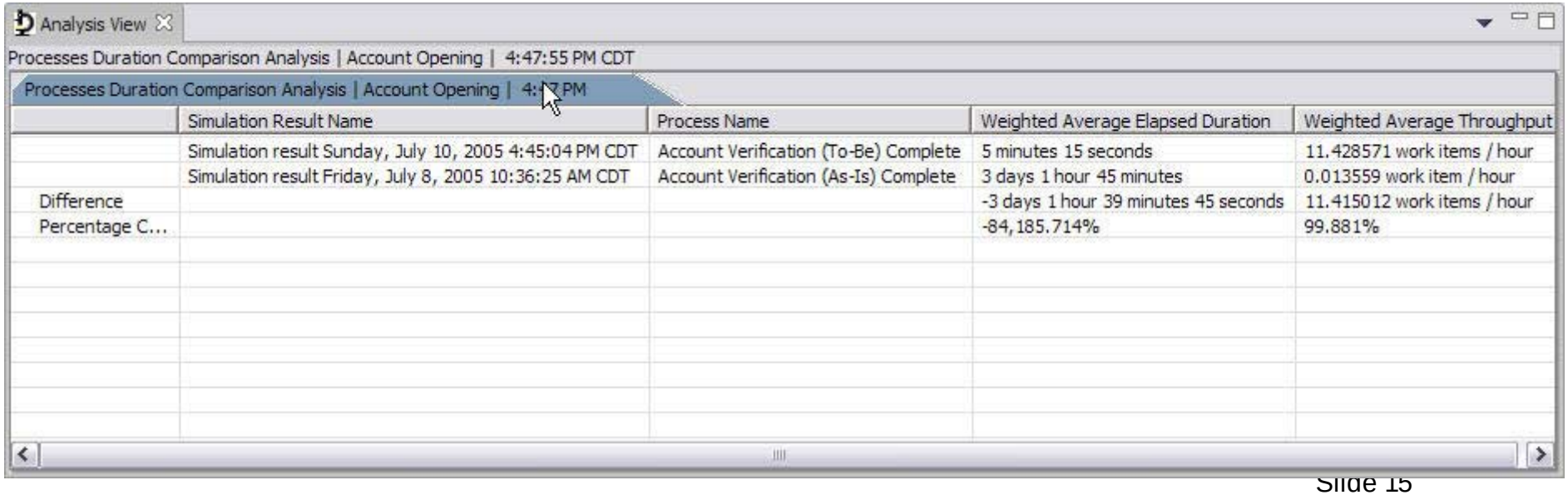

Business Modeling - Account Verification (To-Be) Complete (Simulate) - Eclipse Platform
File Edit View Navigate Search Project Modeling Run Window Help
Account Verification (To-Be) Complete
Account Verification (To-Be) Complete (Simulate)
Simulation animation
Customer Application
Request More Documentation
3 days
Credit Assessment?
20.0% High Risk
50.0% Medum Risk
30.0% Low Risk
Final Application Review
5 minutes
Two-pane view of a running simulation of the To Be Account Verification Process in WebSphere Business Modeler
Diagram
Visual attributes
Simulation Attributes
Simulation real-time statistics
Simulation control panel
Simulation running
Processes
Tasks
Connections
Account Verification (To-Be) Complete --> ...
Approved ? --> Generate Decline
Approved ? --> Merge:2
Collect and display statistics across process instances
Simulation elapsed time
Elapsed time: 00:04:54

Compare the Results

Demo: run a Dynamic Analysis→Process Comparison report

Once Monica has completed her simulations, she runs several Dynamic Analysis reports, including a Process Comparison report, against the results from the As Is and To Be simulations.

Process Comparison reports allow Monica to understand how the To Be process is expected to perform versus the As Is. She can see that both process cycle times and costs are reduced in the To Be version of the process.

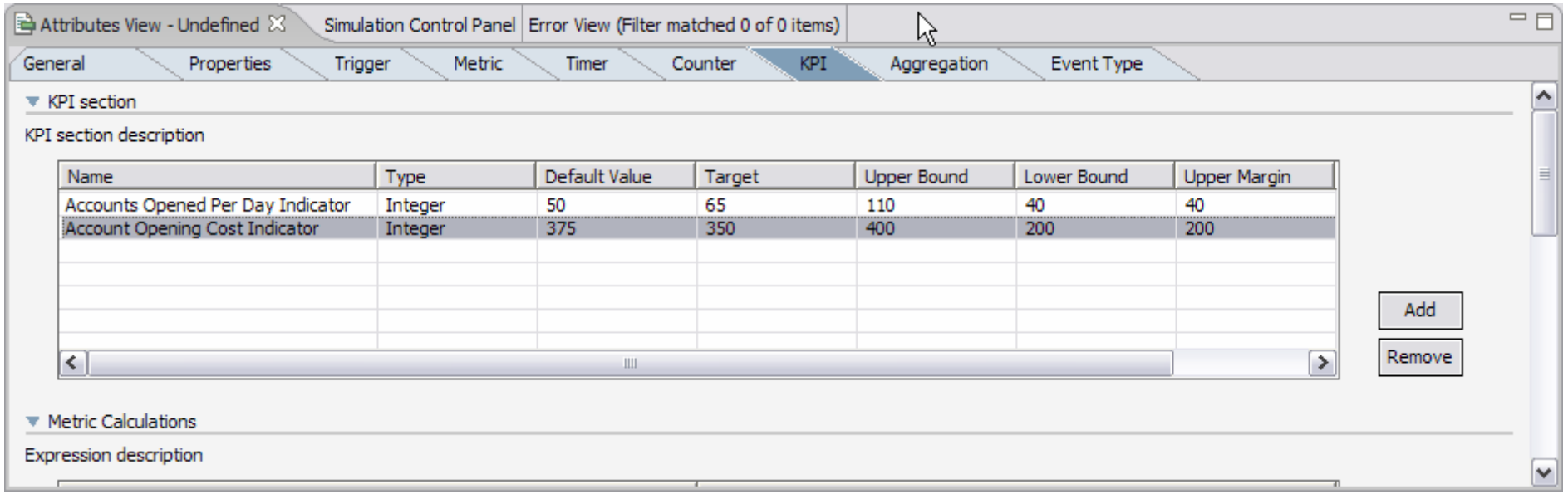


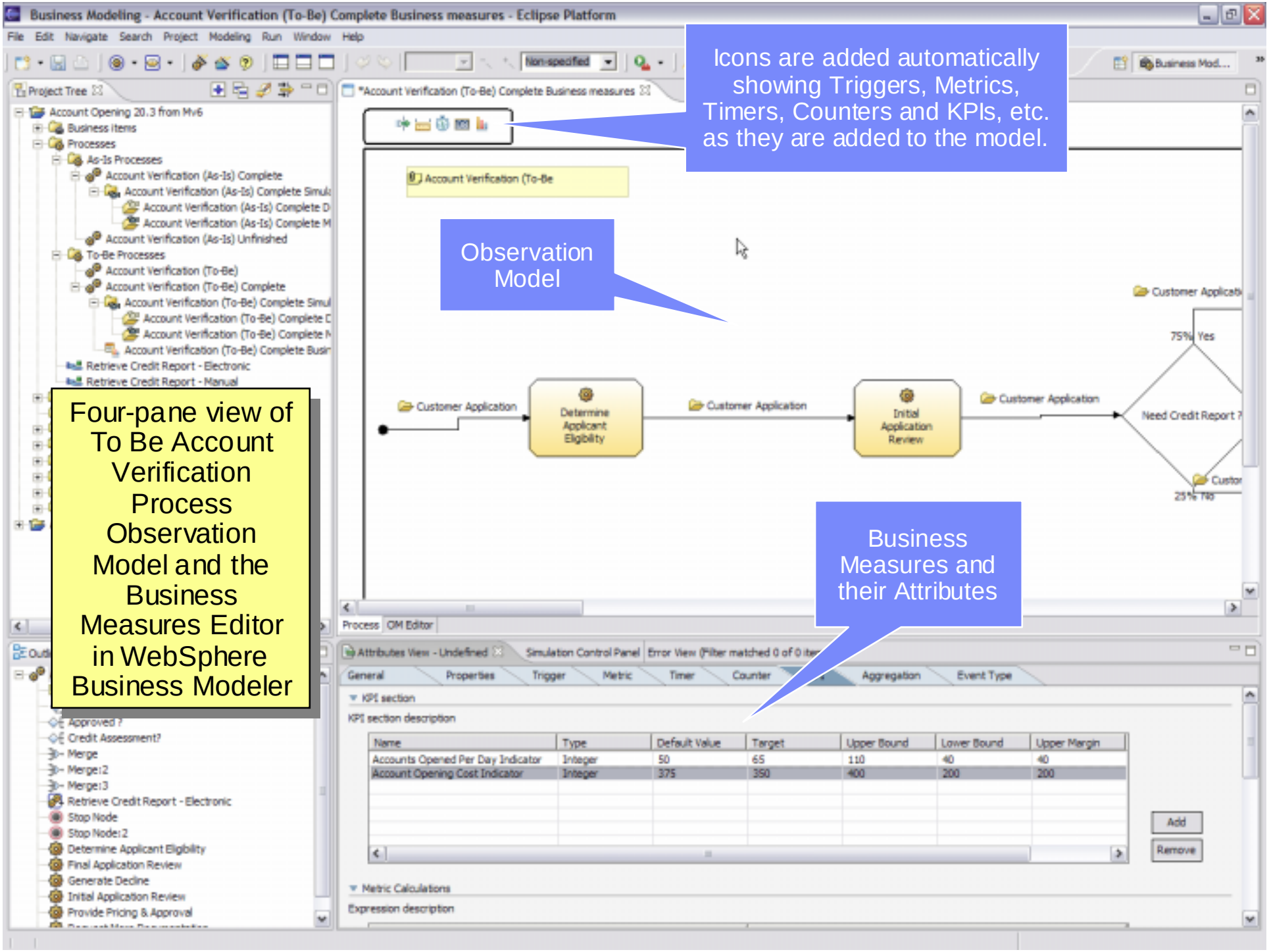
	Simulation Result Name	Process Name	Weighted Average Elapsed Duration	Weighted Average Throughput
	Simulation result Sunday, July 10, 2005 4:45:04 PM CDT	Account Verification (To-Be) Complete	5 minutes 15 seconds	11.428571 work items / hour
	Simulation result Friday, July 8, 2005 10:36:25 AM CDT	Account Verification (As-Is) Complete	3 days 1 hour 45 minutes	0.013559 work item / hour
Difference			-3 days 1 hour 39 minutes 45 seconds	11.415012 work items / hour
Percentage C...			-84,185.714%	99.881%

Define Key Performance Indicators

Monica generates a default Observation Model, and then defines custom Metrics and Key Performance Indicators in the Business Measures Editor, based on the business goals she reviewed in Requisite Pro. She exports the Observation Model for deployment to WebSphere Business Monitor. WebSphere Business Monitor will monitor the process once it is automated and deployed.

Demo: Open Business Measures and explore each tab – focus on KPI and Aggregation[across multiple process instances].



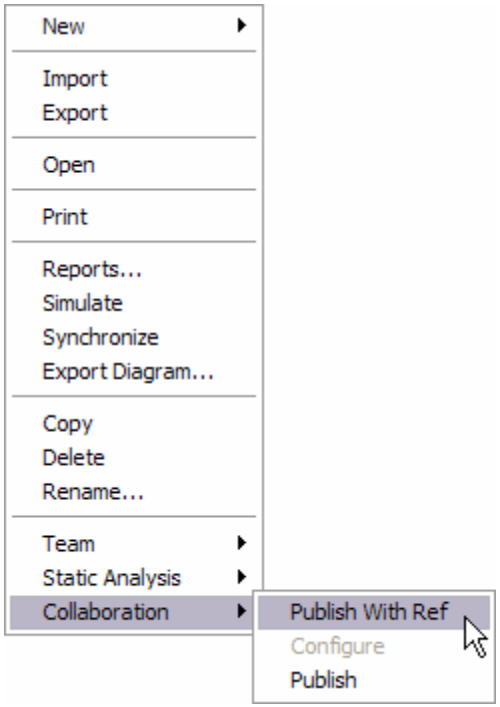

Business Modeling - Account Verification (To-Be) Complete Business measures - Eclipse Platform
Icons are added automatically showing Triggers, Metrics, Timers, Counters and KPIs, etc. as they are added to the model.
Observation Model
Four-pane view of To Be Account Verification Process Observation Model and the Business Measures Editor in WebSphere Business Modeler
Business Measures and their Attributes
Account Verification (To-Be
Customer Application
Determine Applicant Eligibility
Initial Application Review
Need Credit Report ?
75% Yes
KPI section
KPI section description
Name
Type
Default Value
Target
Upper Bound
Lower Bound
Upper Margin
Accounts Opened Per Day Indicator
Account Opening Cost Indicator
Add
Remove
Metric Calculations
Expression description

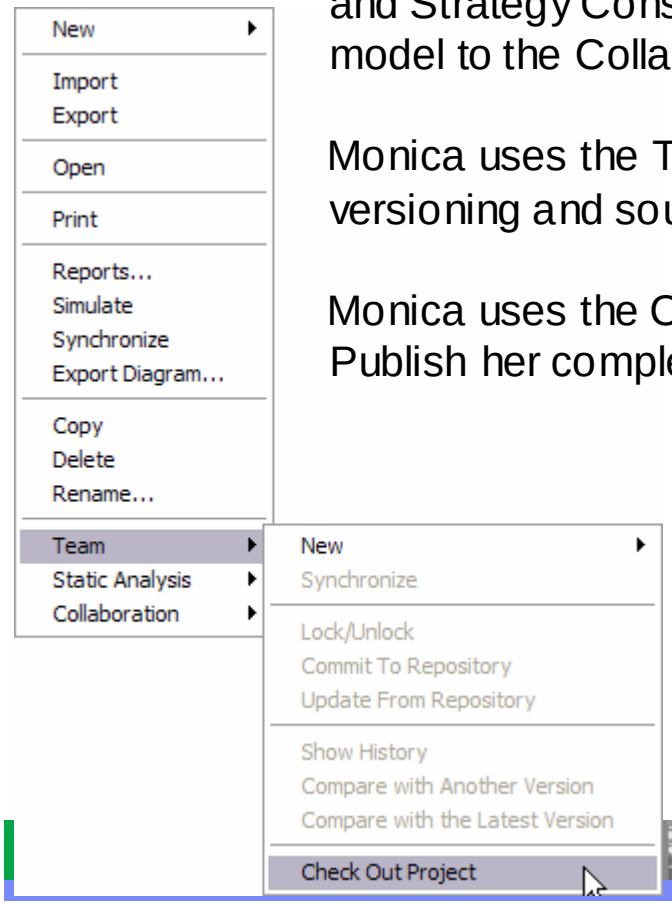
Publish for Final Feedback

Monica is pleased with the outcome of the static analysis, simulation and dynamic analysis she has performed using WebSphere Business Modeler. She is now ready to receive feedback on the To Be model from others in the organization, including the Line of Business Manager and Strategy Consultant, etc. so she publishes the To Be model to the Collaboration Server.

Monica uses the Team feature to Check-in her project for versioning and source code management into ClearCase.

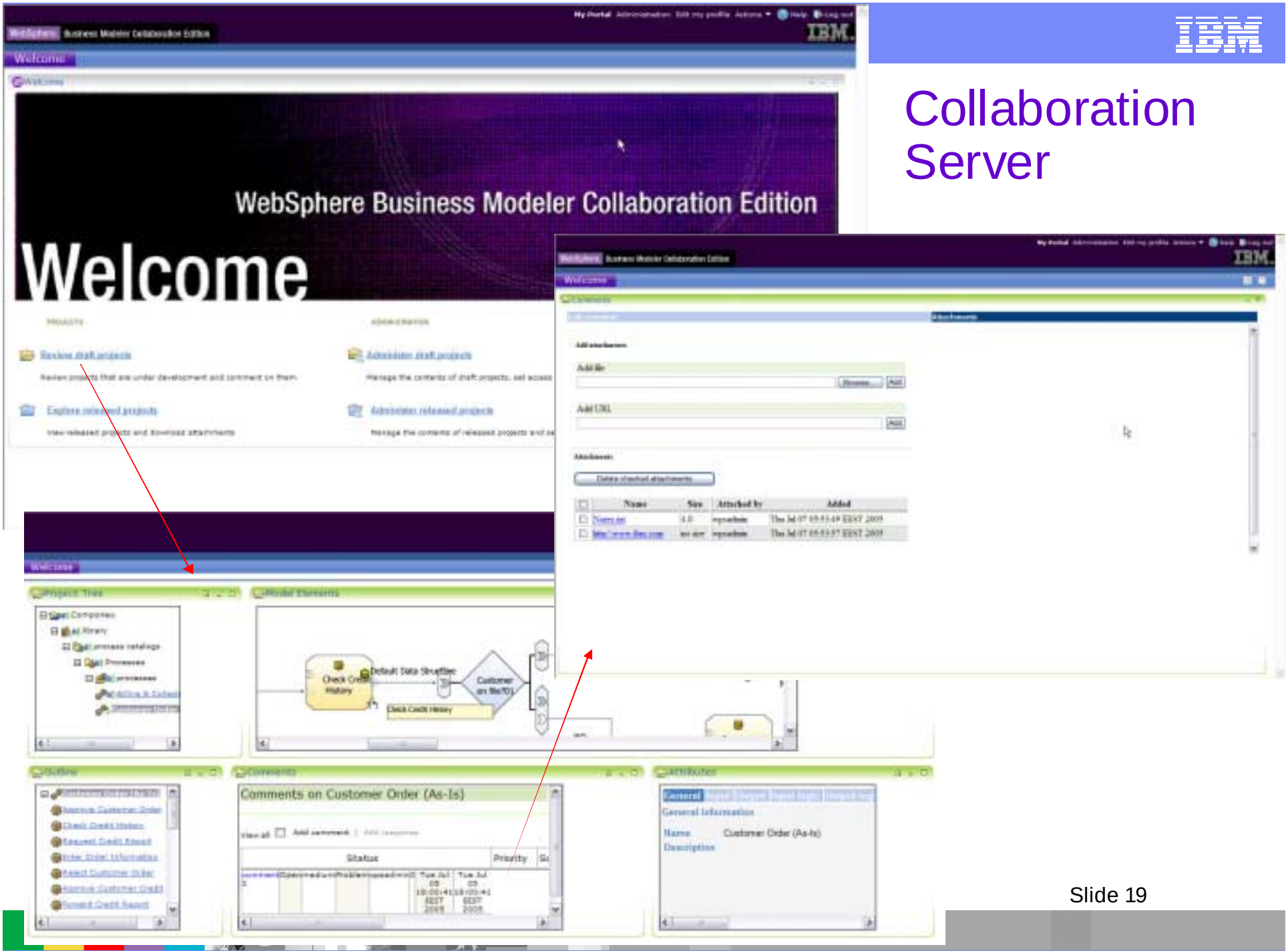
Monica uses the Collaboration feature in the Modeler to Publish her completed To Be model and awaits feedback.





Demo: Right-click on completed To Be model and show the Team and Collaboration menus, without making any selection.

Collaboration Server



Collaboration – Business ⇔ IT

Michelle the Operations Manager and John the manager of the Credit Operations department review offer some additional suggestions.

Bob the VP of Sales has his key reps review the way applications are submitted to see if they have any ideas on how to improve. They come back with several great ideas.

Bob circulates the KPIs to the other execs who add a few relevant metrics they'd like to see included in the new solution.

All agree on what needs to be done, with knowledge of the impacts to their way of working, and an understanding of the benefits they expect.

After optimizing the To Be Model and validating it with the business community, Monica is confident that it is ready for automation and deployment.

Forward Engineer - Time to Value

Monica tweaks the to-be to incorporate the new ideas.

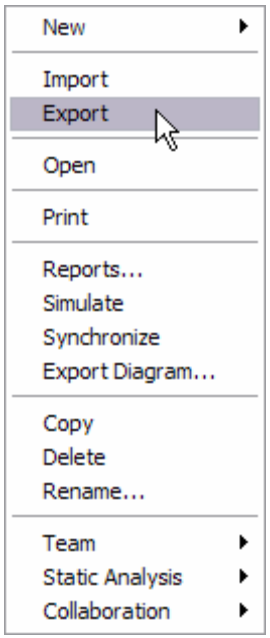
It's now optimized and ready to forward engineer.

Using WebSphere Business Modeler, Monica transforms the optimized To Be model into useful artifacts such as the BPEL model, WSDLs and XSDs, for her Integration Developer counterpart, Sandeep, to automate and deploy to WebSphere Process Server.

The Solution Architect, Wilhelm, will use the same process model as a business contract. He will use Rational Software Architect (RSA) to read the model and drag-and-drop modeling artifacts to create his UML diagrams. He will later use diagrams, again in RSA, to generate J2EE artifacts for new service implementations specified in Monica's process model.

Transform and Export – Implement the Strategy

Monica uses the Export menu to transform her model into WebSphere Process Server artifacts (BPEL, WSLD, XSD) and to export her observation to the WebSphere Business Monitor.

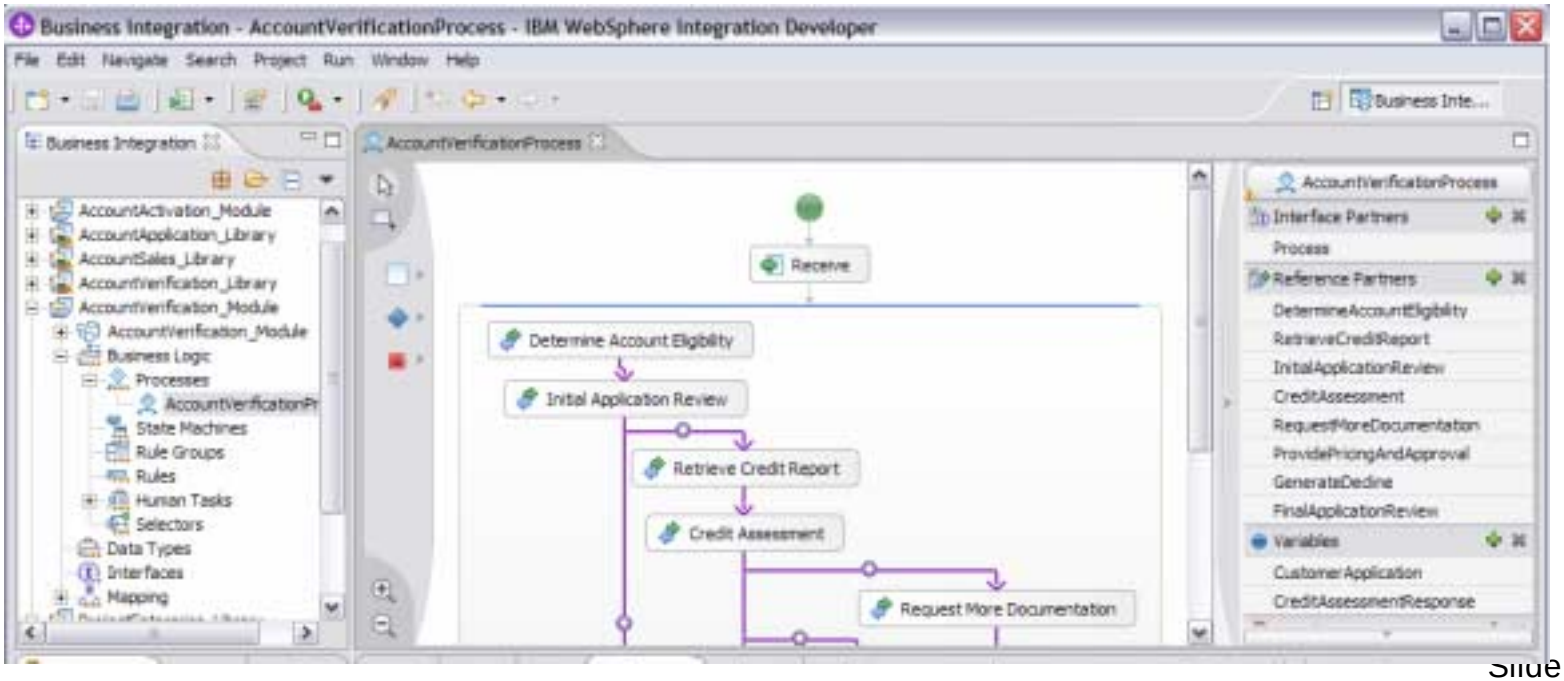


Demo: Right-click on the To Be model and select Export. Show the various export options, focusing on WebSphere Process Server and WebSphere Business Monitor and Development tool

Integration without Java

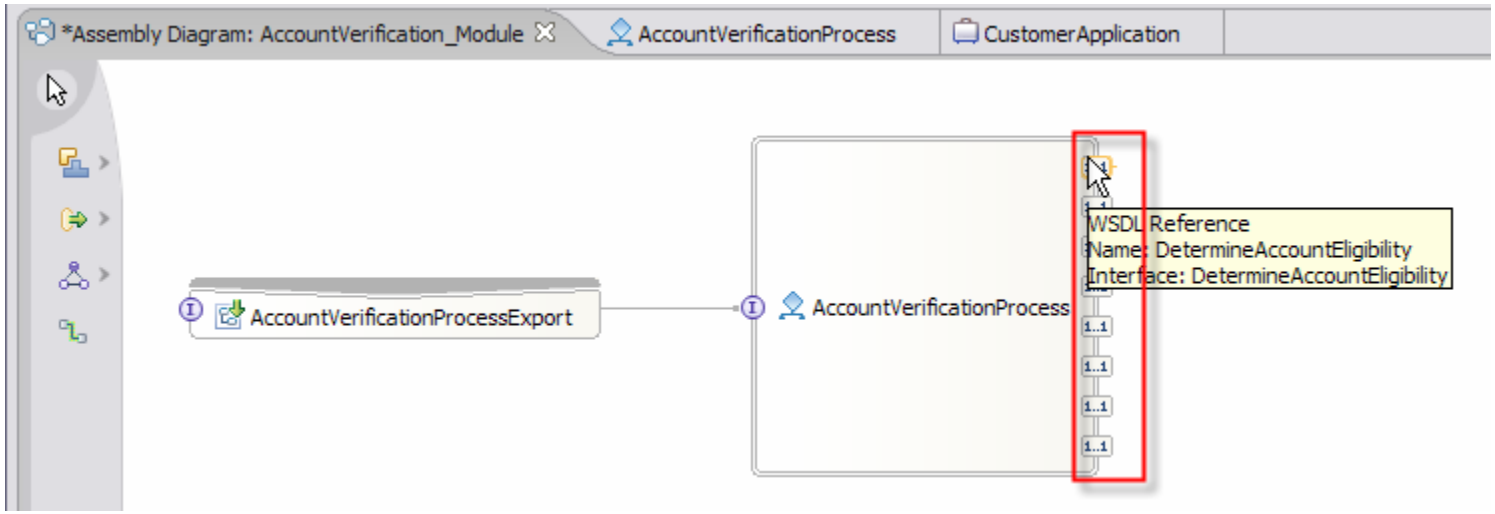
Sandeep, our Integration Developer, imports the generated BPEL into WebSphere Integration Developer.

Sandeep optimizes the BPEL to the runtime environment and prepares the Business Process for deployment.



Wire the Process – Drag and Drop Ease of Use

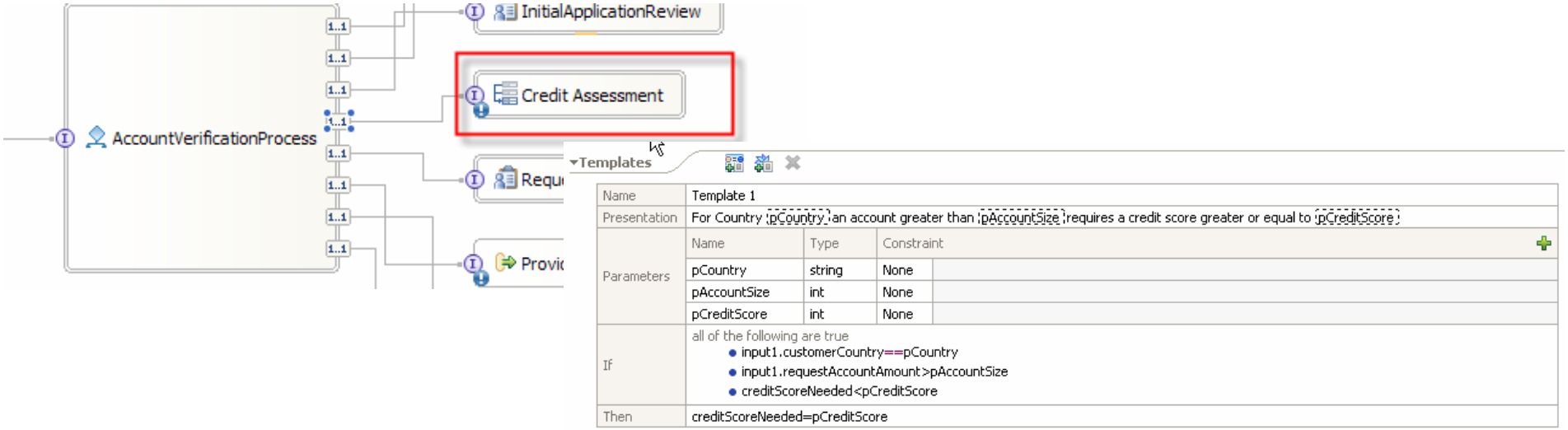
Sandeep now see which other services the business process required. The business process has flagged these as references that Sandeep will resolve in the Assembly Diagram. Sandeep does not need to know how each service is implemented or which protocol to use – the environment manages those details.



Combine New with Existing Services – Reuse = SOA

Sandeep leverages existing service assets, or can create new where needed.

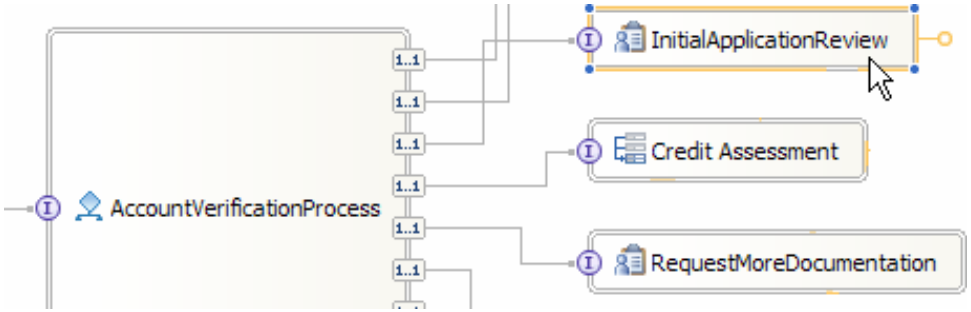
He knows that the Credit Assessment task is implemented as a Business Rule, so he drops a Business Rule component right on the Assembly Diagram and proceeds to implement the rule.

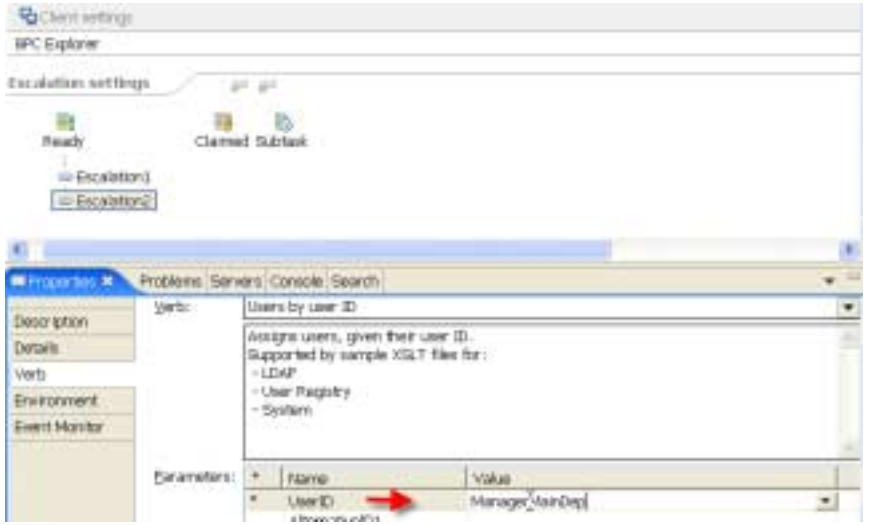


Integrate Humans

Sandeep notes that the Initial Application Review is a Human Task and implements it with the Human Task Manager.

He pulls the necessary information from the model to determine who can actually work on this item and the escalation policies.





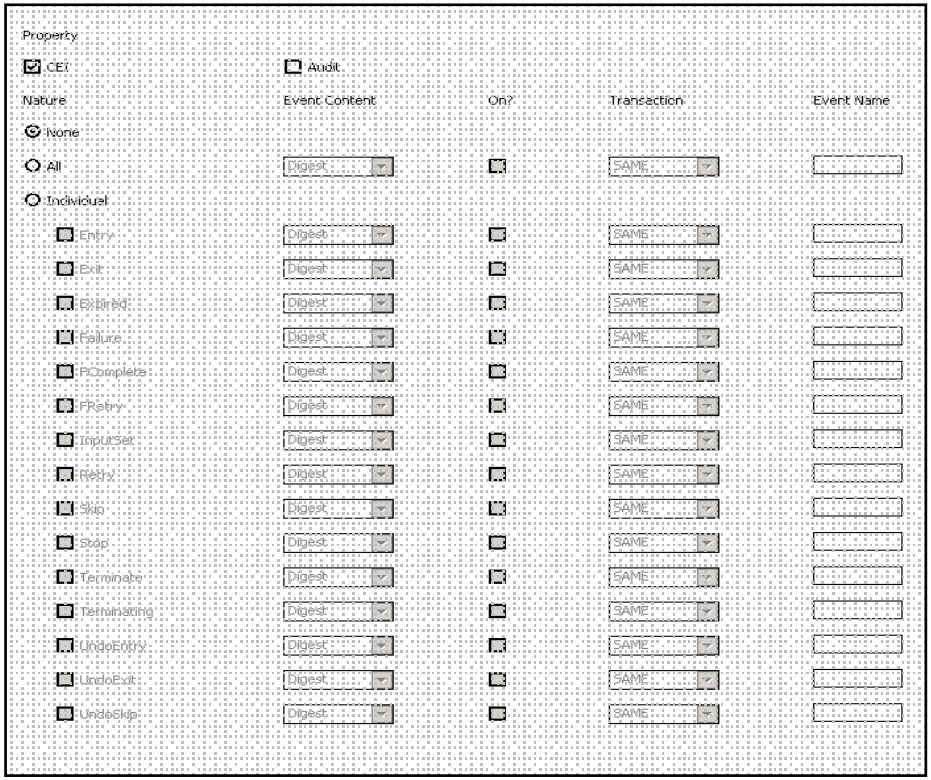
Integrated Test Environment – Time to Value

Sandeep then tests the service inside the WebSphere Integration Developer environment.

Once the integration test is complete, Sandeep passes the completed application (EAR file) to the Administrator for staged deployment.

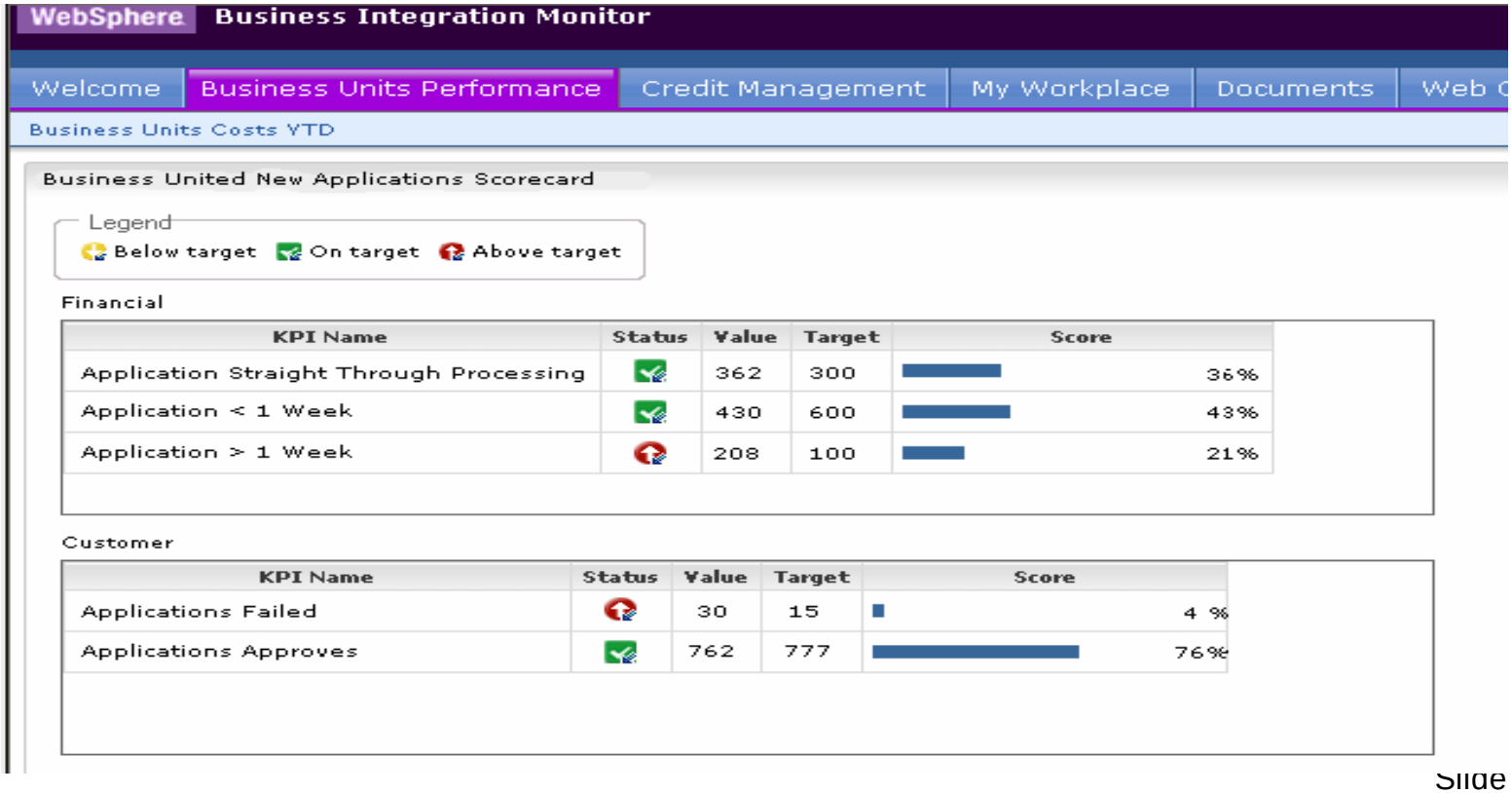
Implemented Process

Time passes….The solution is in production. New account applications are flowing through the system, while CEI events are generated by WebSphere Process Server and caught by WebSphere Business Monitor…



Run the Business - Operational Performance

Michelle, our Operations Manager signs onto Portal… and opens the customized view of the new Automated Account Opening solution. She can browse the results of her efforts to improve their way of doing business.



Sense and Respond

Michelle reviews her New Application KPIs.

The bar graph that shows the number of *account verification* processes active and completed. She can see the aggregate of the results and noticed that 4% of the account verification processes failed versus a target of 1.5%. She also notices that 21% of these processes are more than 1 week old and sends John a note to that effect.

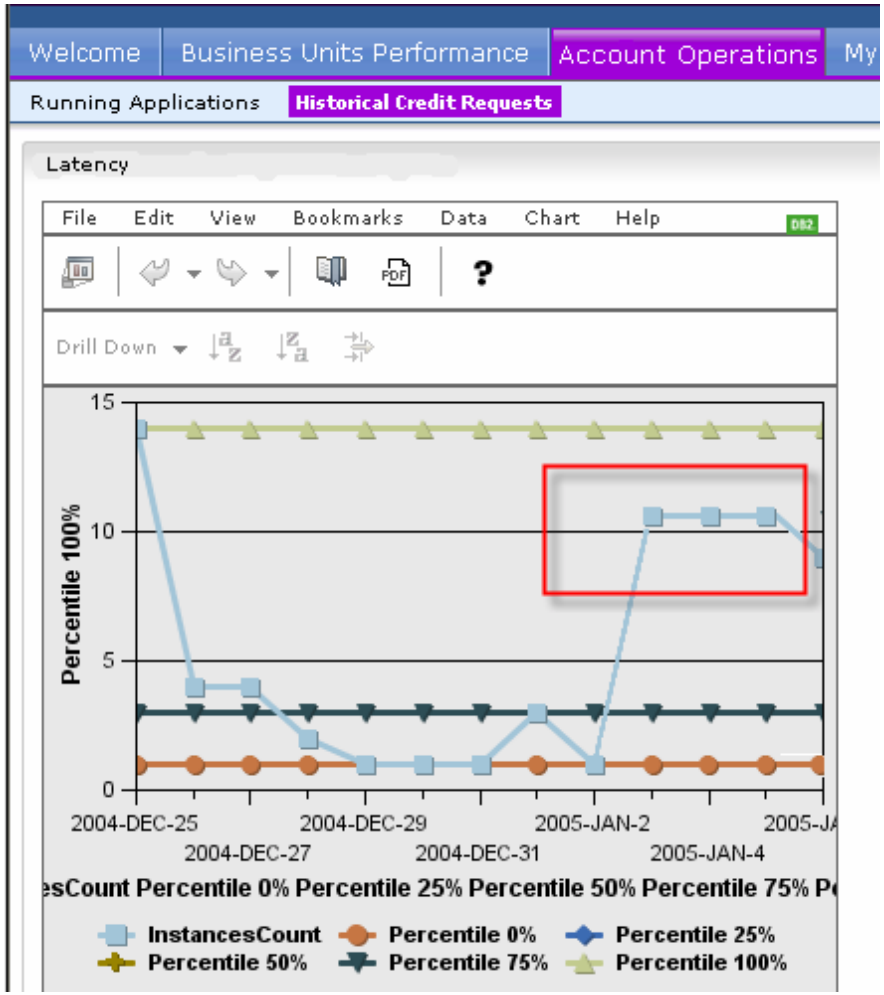
KPI Name	Status	Value	Target	Score
Application Straight Through Processing		362	300	36%
Application < 1 Week		430	600	43%
Application > 1 Week		208	100	21%

Customer

KPI Name	Status	Value	Target	Score
Applications Failed		30	15	4 %
Applications Approves		762	777	76%

Real Time Metrics

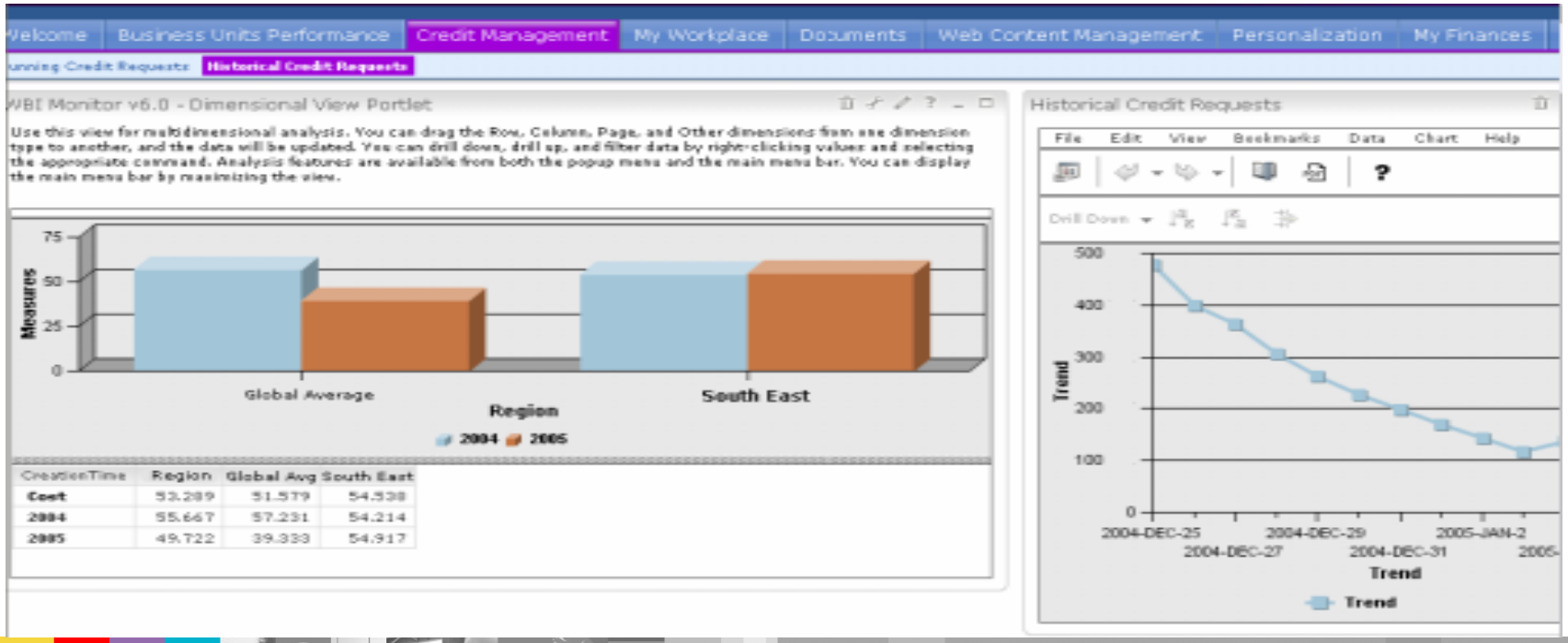
John checks with Mary and is told that they've had problems getting the online credit checks through to CreditWorks, their preferred business partner in the South East due to storms.



Dynamic Process

John logs on to his Credit Operations Dashboard and reviews the history of credit checks in the South East. While secondary suppliers cost a lot more than CreditWorks, it's clearly less cost than executing these manually.

He also notices that applications are being kicked out due to incorrect addresses.



Dynamic Process – Power of Business Rules and Closed Loop

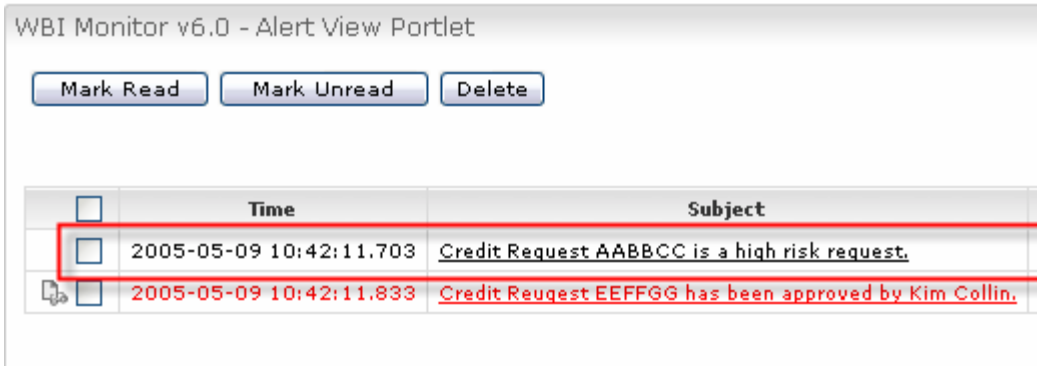
John IMs Sandeep and they agree to change the Business Rule to route credit checks first to any provider who is online, regardless of price.

He sends a note to Monica and asks that the process be updated to return these applications to the sales department for repair when the address can't be validated.

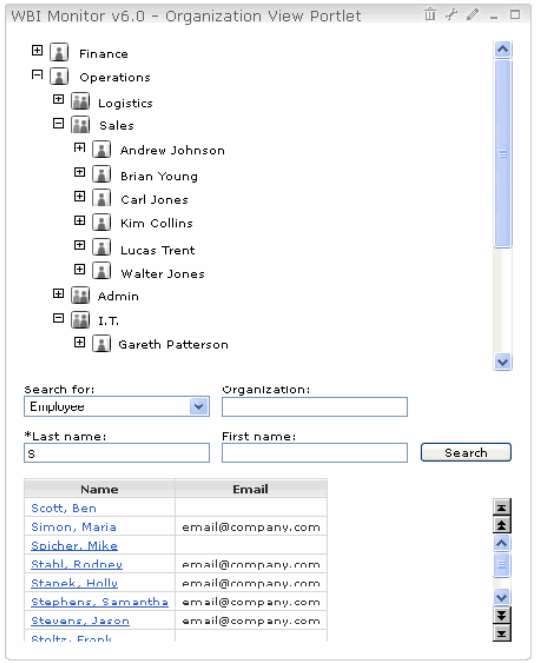
John's pretty pleased with himself, and his ability to manage his operation. Michelle's Blackberry buzzes while she's in her meeting with John telling her everything's taken care of.

Enables Fast Decisions World Wide

Michelle's meeting ends and she returns to her desk to find an alert that a VIP customer is requesting a credit in excess of their pre-defined limit of $1m.



She uses the Organizational View Portlet to determine who is authorized to process such a high request. She sees that she needs to go Bob, the VP of Sales. He's on business in Asia. She transfers this request directly to him and IMs him to tell him it's on the way.

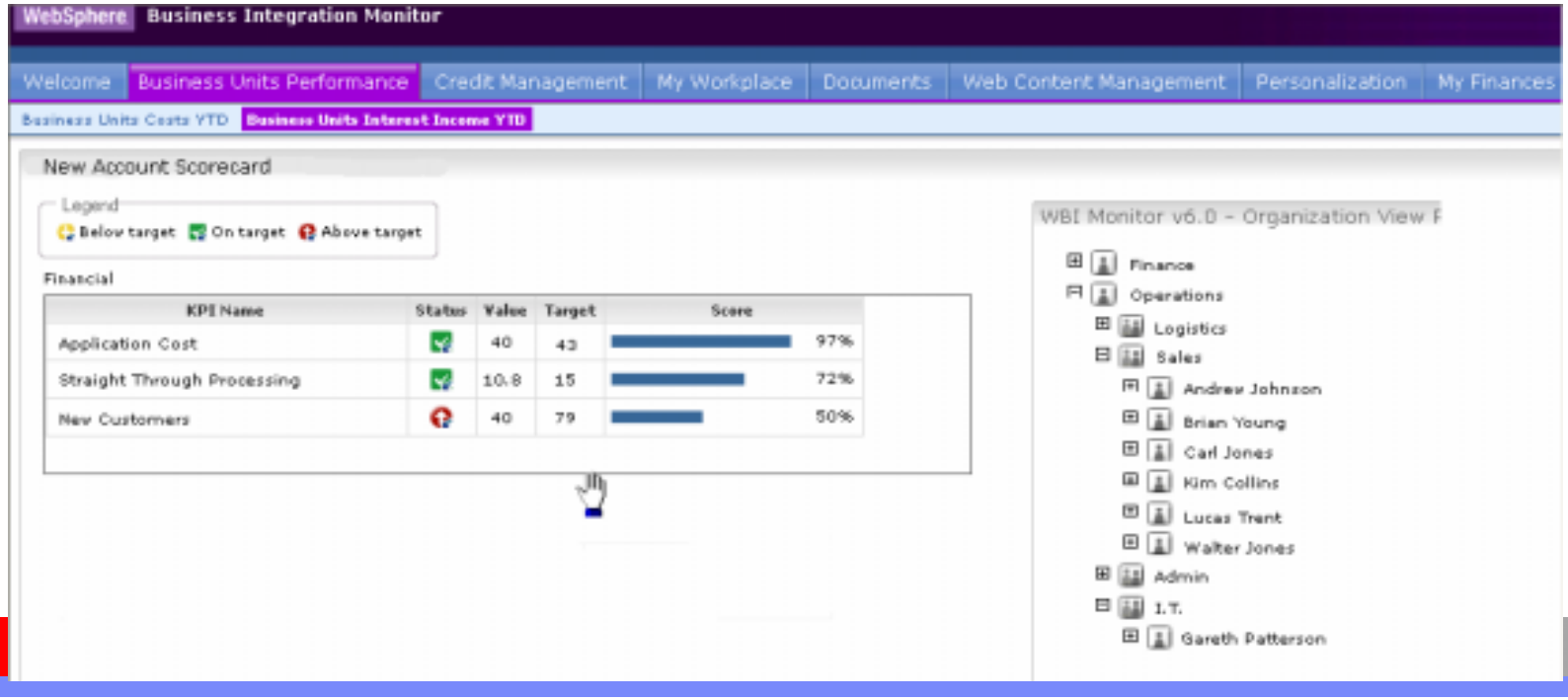


Kick it up a notch

The approval request arrives in Bob's inbox at the hotel. He knows there's a large deal pending with his VIP customer on a new product line. The deal's critical to making the numbers this quarter. He approves the request, and CCs the Chief Risk Officer so that he's not surprised when he logs onto the Risk portal Monday.

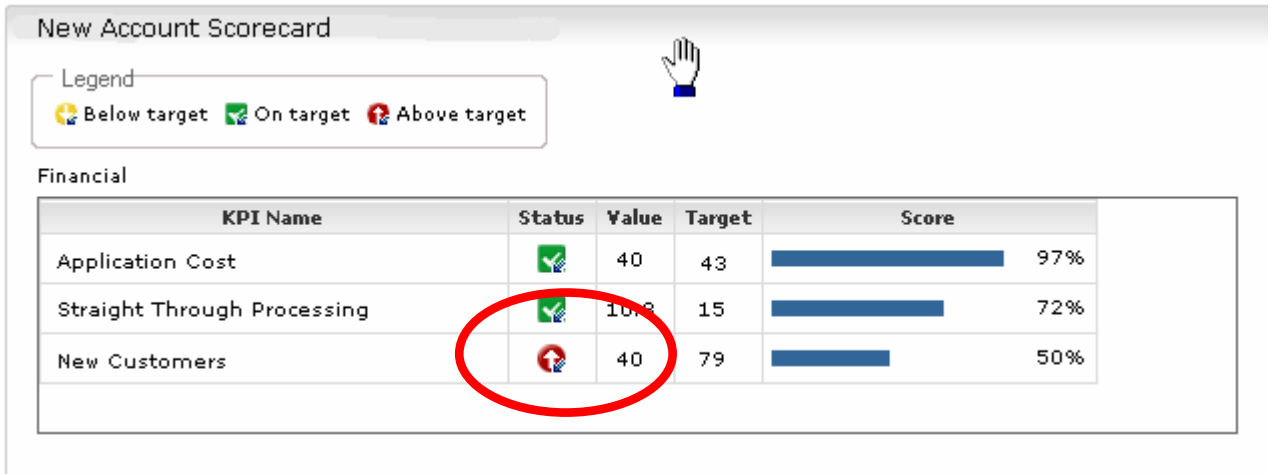
While he's logged on Bob brings up his dashboard to check on the results of his IT investment, a newly automated solution for managing the opening of new customer accounts.

He signs on to his Business Portal and sees a customized portlet view.



Higher Level Solutions

Bob focuses on the *new customer KPI.* Operations have clearly streamlined and costs are down, but the customer base has not grown according to his expectations. He sends the head of Marketing a note saying he's like to support his efforts with a targetted Sales promotion. They decide to discuss it at the Quarterly meeting next week.



Implement Strategy Faster

At the meeting the execs brainstorm on how they should approach the goal of increasing market share. They come up with two different ideas which they agree to pilot with different promotions in each of two regions, North East and Mid West.

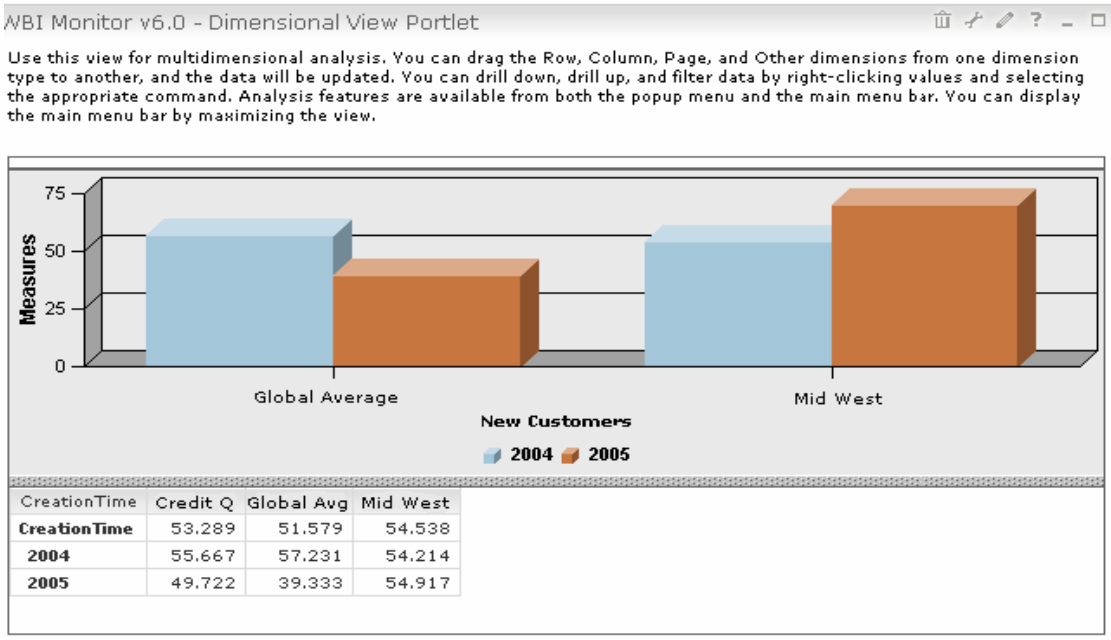
Effectiveness of the promotions will be measured by percent increase of new customers opening accounts in each region.

The Chief Risk Officer approves the promotion with the provision that the success also be measured by credit quality.

The promotions are executed in the next quarter…..

Raise the Bar – Executive Impact

Bob checks his new customer metrics to see how the promotions are going. He noticed that the number of new customers in the Mid West is increasing faster than his global average.



WOW

Bob checks his Dashboard (actually he has it running all the time) to see how things are going. He noticed that the number of new customers in the Mid West is increasing faster than his global average. He Sametimes the Chief Risk Officer that the promotion seems to be working.

Key Points

- By now everyone will have forgotten about Monica and Sandeep and Wilhelm (IT) and be focused on Michelle and John and Bob and the execs, who:
- Business and IT integrated
- Can Sense and Respond real-time
- Are empowered to actually run their business units as the want to and need to - directly tied to things like Closed Loop and Business Rules (Mary and John)
- Gained strategic advantage with higher level solutions – Composite applications (SOA) break down organizational barriers and empower execs to implement strategy faster.
- Notice by the way that a project that strated as a way to cut costs is now directly impacting Revenue.