



WebSphere's Advanced Technology Improves Business

Automate And Improve
Your Business Decisions

Businesses React To Events



Call to the help desk



Sale is made



Inventory movement



Web site login

- They occur in real-time, not static data from a file or database
- The non-occurrence of an event can be significant
- Patterns or event relationships may exist

Businesses Run On Rules

Commission Payments. Who should get what, and why?

Is this possible fraud?

Is this customer eligible to receive this loan?

Should we offer a special promotion for our best customers?

Claims processing decisions.

Billing. Are there discounts, taxes, S&H?

Inventory movement. Anything need backfill?

Joint account opened might lead to other banking needs?

Toll not paid. Take a photo, ticket, check for other violations, or all of the above?

Incorrect login. How to handle?

Utility Spikes may need attention

Quotes requested. How to respond?



Product configuration rules

Determine if eligibility is met.

Based on buying patterns, suggest xyz.

Should I do an up-sell/cross-sell offer?

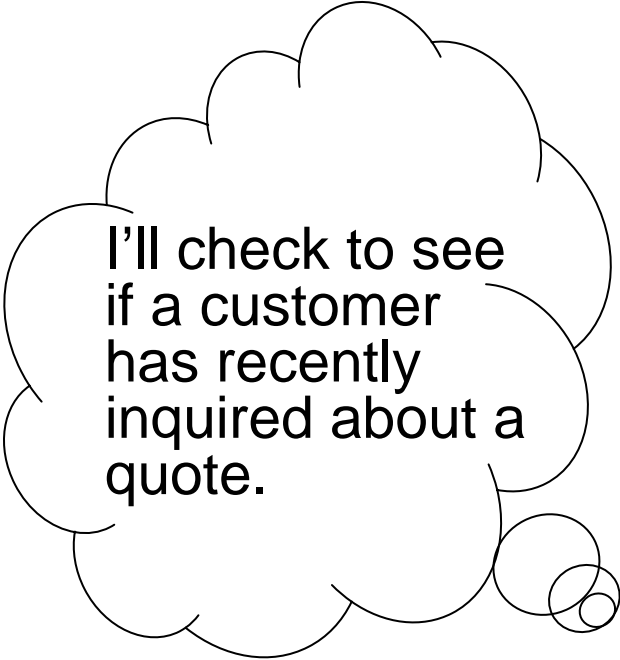
Did the customer fill out the form correctly?

Order validation for a sale made

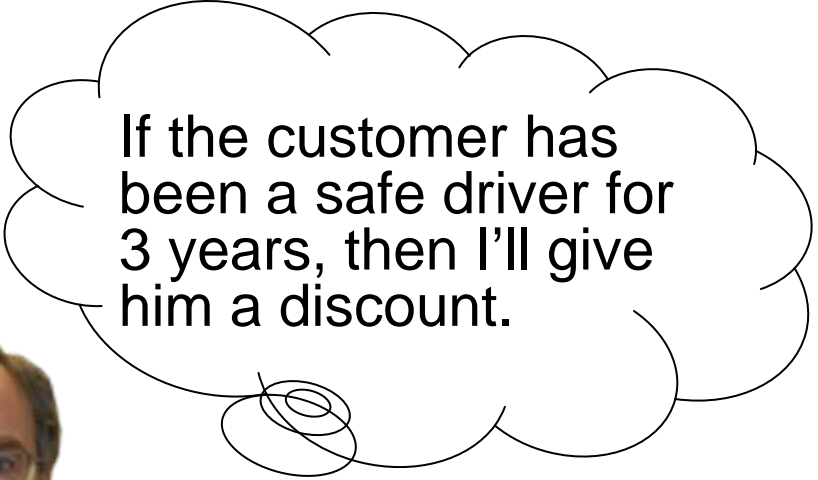
Risk assessment. Compute a credit score for this person.

Using Events And Rules, Businesses Need To Make Intelligent Decisions

Customers ask for quotes on automobile insurance policies. Service Oriented Finance must decide how much to charge in order to get the business but still make a profit.



I'll check to see if a customer has recently inquired about a quote.



If the customer has been a safe driver for 3 years, then I'll give him a discount.



**Policy
Business Expert**

What Characterizes Intelligent Decision Management?

- Business events can be recognized and trigger a business process
 - ▶ e.g., if fraud is suspected, launch a business process to resolve the case
- Business rules can be invoked from a business process
 - ▶ e.g., the order fulfillment process invokes rules to determine the order price
- Business expertise can be captured as business rules
 - ▶ e.g., if the order price is more than \$500, give a 5% discount
 - ▶ e.g., if a customer uses his credit card in London and Delhi within 24 hours, his card may have been stolen
- Business rules and business events can be shared in a repository, encouraging collaboration between business experts and developers
- Business rules and business events have lifecycle management to support creation through retirement, including versioning and tracing
- Updates can be made quickly and easily

Combining Business Events And Rules Creates Business Opportunity

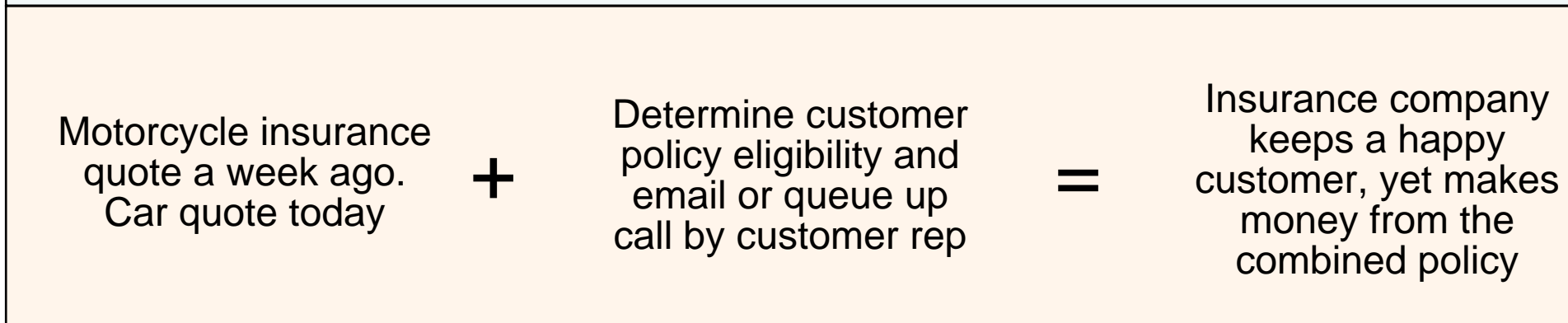
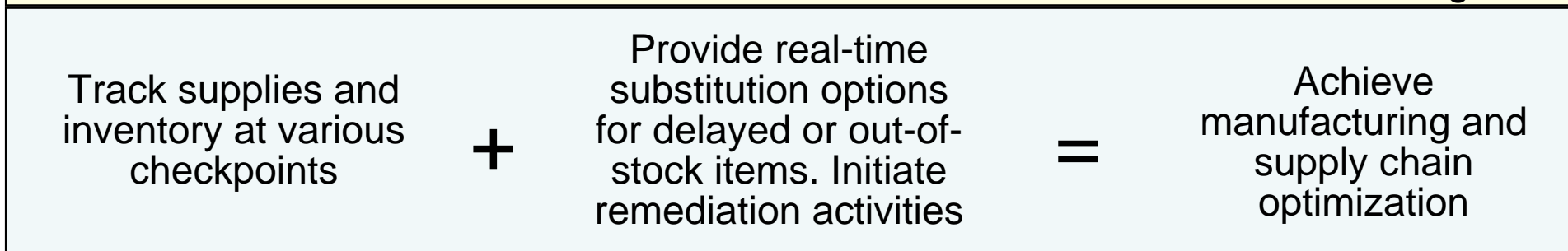
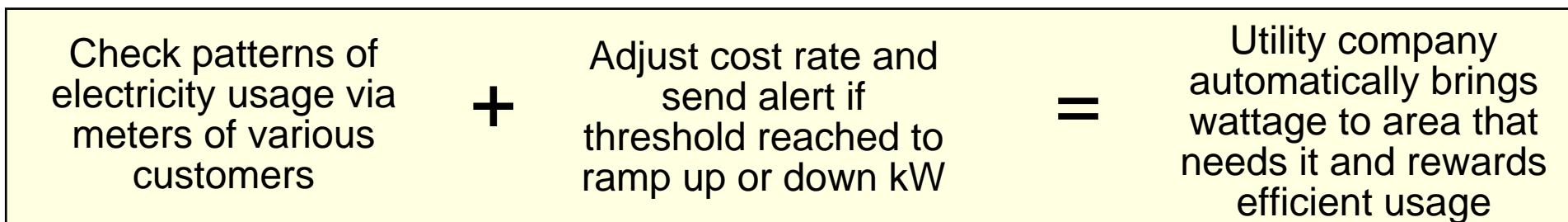


Discharge forms submitted, medical test results arriving, prescriptions filled, appointments kept or missed	+	Determine post-discharge program. Schedule earlier appointment based on test results. Send alerts to validate drug dosages	=	Healthcare provider manages chronic care patients to reduce the risk of readmitting costs
---	---	--	---	---

Collect credit applications and correlate household criteria and occurrence info	+	Score for potential fraud. Interrupt all processes if fraud possible and investigate	=	Financial company avoids fraudulent payments
--	---	--	---	--

Track customer behavior on company website per offerings they look at, their email inquiries, when they see a local rep	+	Check customer's credit score and purchasing history to give prequalification offer at any given moment	=	Boost personalized cross-sell and up-sell opportunities
---	---	---	---	---

Combining Business Events And Rules Creates Business Opportunity



How Can We Recognize Events That Require Action?

- Tap into specified event flows
 - ▶ Examples: messages, e-mail, file system, HTTP requests, JDBC
- Define which events we need to recognize
 - ▶ Author event rules
- Monitor event flows for specified events
 - ▶ Single events
 - ▶ Filtered events
 - ▶ Event patterns
- Trigger an action when an event is recognized

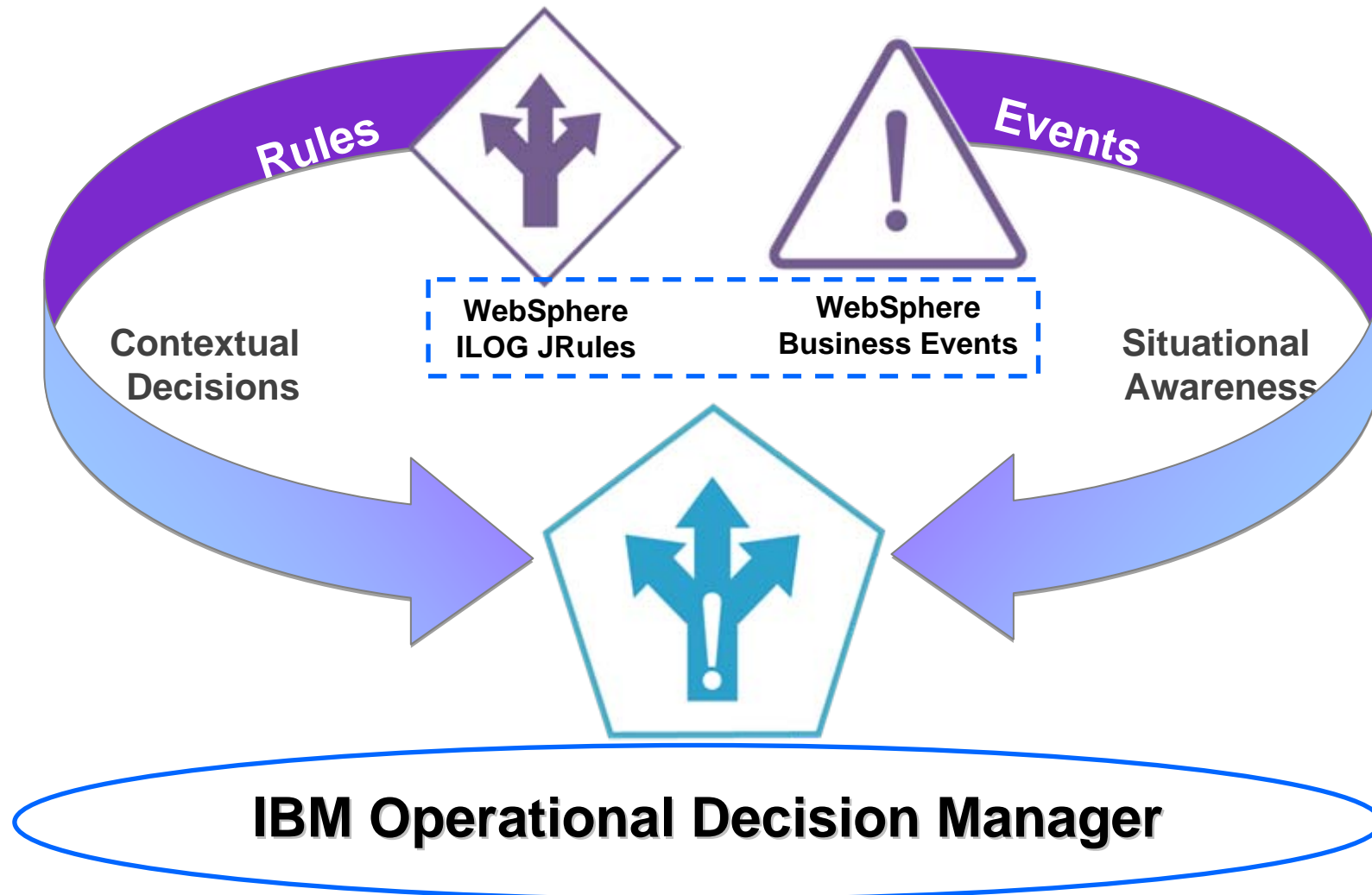
A business event server is required

We Also Require Automated Rules To Make Decisions Quickly

- Personal decision making is time consuming
- Business experts cannot focus on key decisions because they spend their time making less important decisions
- Decision making by non-experts is error prone and inconsistent
- Understanding how a decision was made is often impossible
- Changes to rules requires training for decision makers
- “Human speeds” cannot keep up with the flow of events

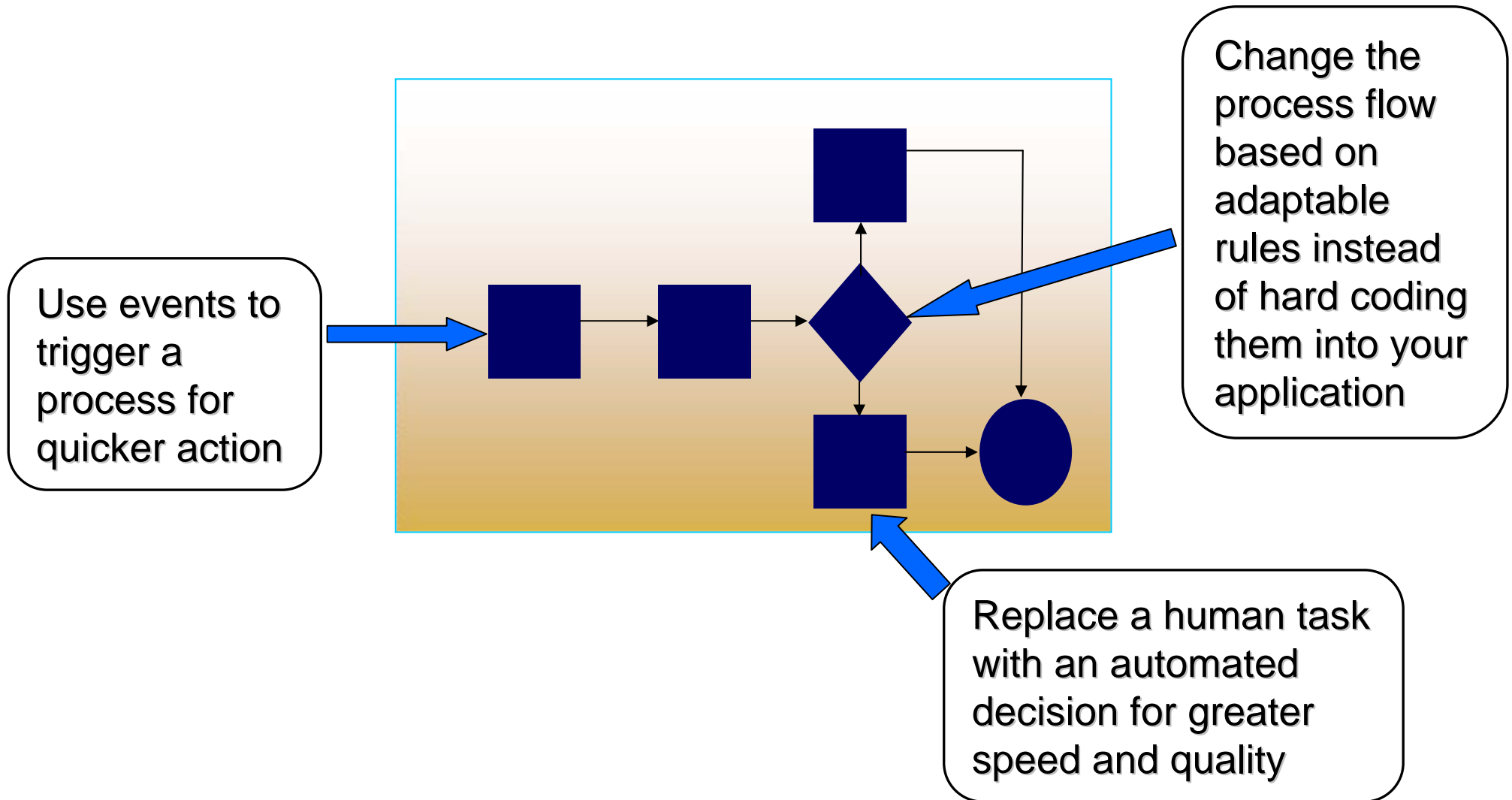
Automating decision management is required

IBM Operational Decision Manager Captures Rules And Events



*An integrated solution offers a consistent approach
to automating business decisions*

IBM Operational Decision Manager Can Make Your Business Processes Smarter



Can My Decision Management Solution Help Me Detect Possible Fraud Or Identity Theft?

Customers sometimes dispute claims, and not all turn out to be valid. I wish we could detect earlier when a dispute might indicate fraud or identity theft.



Business Expert

IBM can discover, filter, and correlate large numbers of events automatically so that you can act on patterns of interest.



IBM

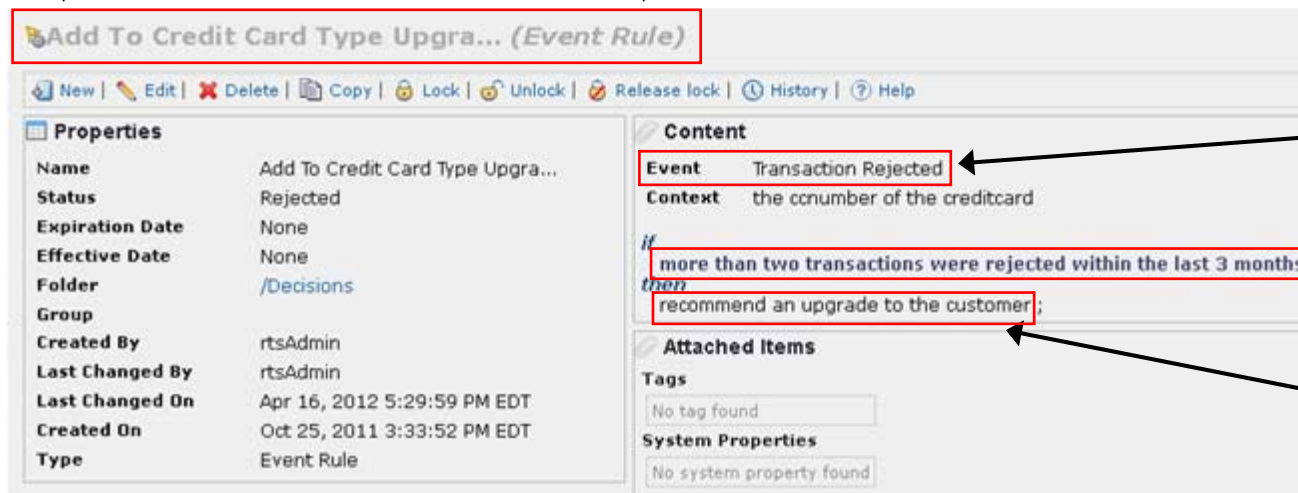
Create Your Event Filters Without Programming

A browser-based tool (Decision Center Console) is used for building business event correlations without programming



Natural language event **filter** to only select business events of interest

A **correlation event rule** determines if the received event should send an action



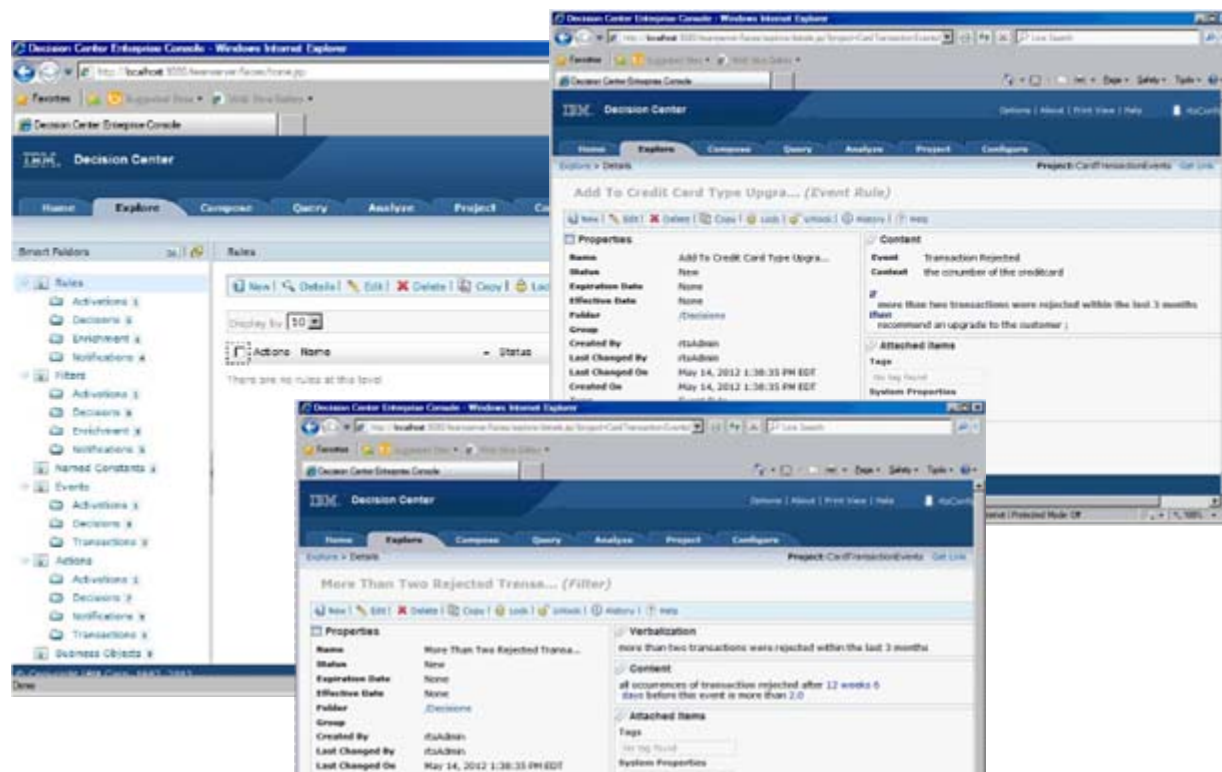
When this event is received

Use this filter to ignore unwanted events

Send this action

Demo: Capture Business Events To Identify Suspicious Claims

- A business expert recognizes patterns that indicate fraudulent customer behavior
- Using Operational Decision Manager, one can easily create event filters, and correlations



Intelligent Operational Decision Manager Applies Your Best Expertise To Every Decision

How can I capture my team's expertise so that I can make intelligent decisions?



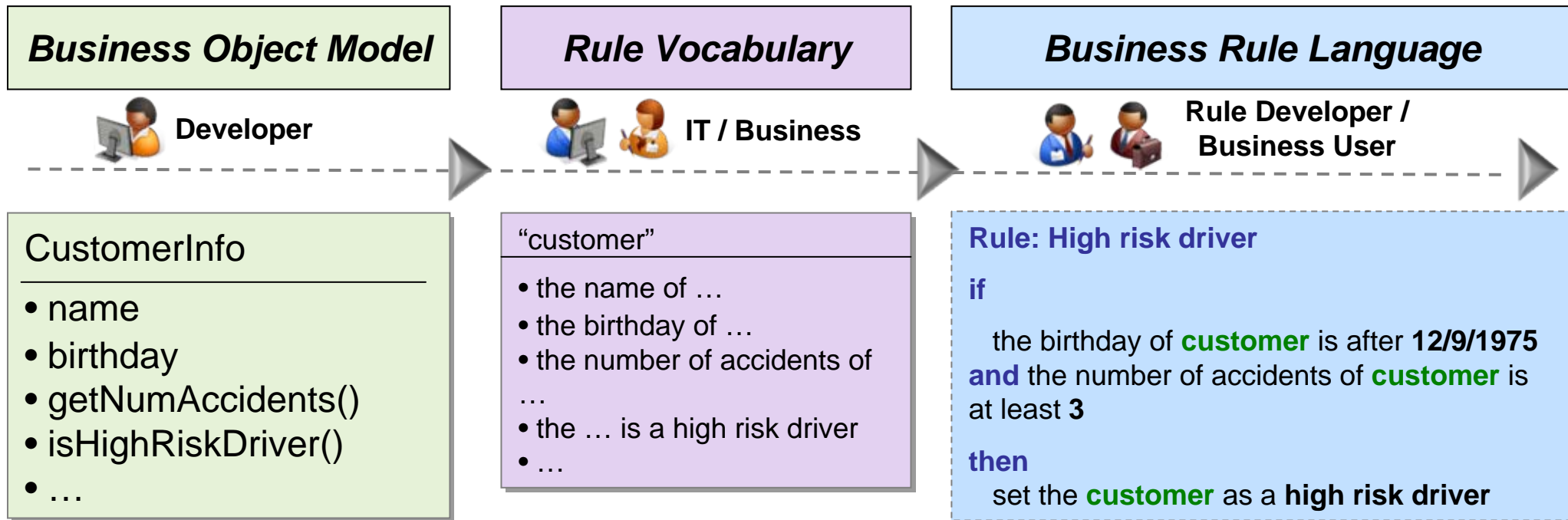
**VP Credit Card
Services**

Let me show you how your business experts can easily capture, collaborate, and manage their knowledge with automated rules.



IBM

Business Experts Can Create Rules Easily Using Natural, Not Technical, Language



- Automatic rule vocabulary generation
- Vocabulary localization
- Consistent execution language

Even work in your native language

"client"

- le nom du ...
- l'anniversaire du ...
- Le nombre d'accidents du ...
- le ... est un conducteur à risque
- ...

Règle: Conducteur à risque

si

L'anniversaire du **client** est après le **12/9/1975** **et** le nombre d'accident du **client** est au moins **3**

alors

Classifier le **client** comme **conducteur à risque**

Be More Productive With The Collaborative Decision Center Business Console

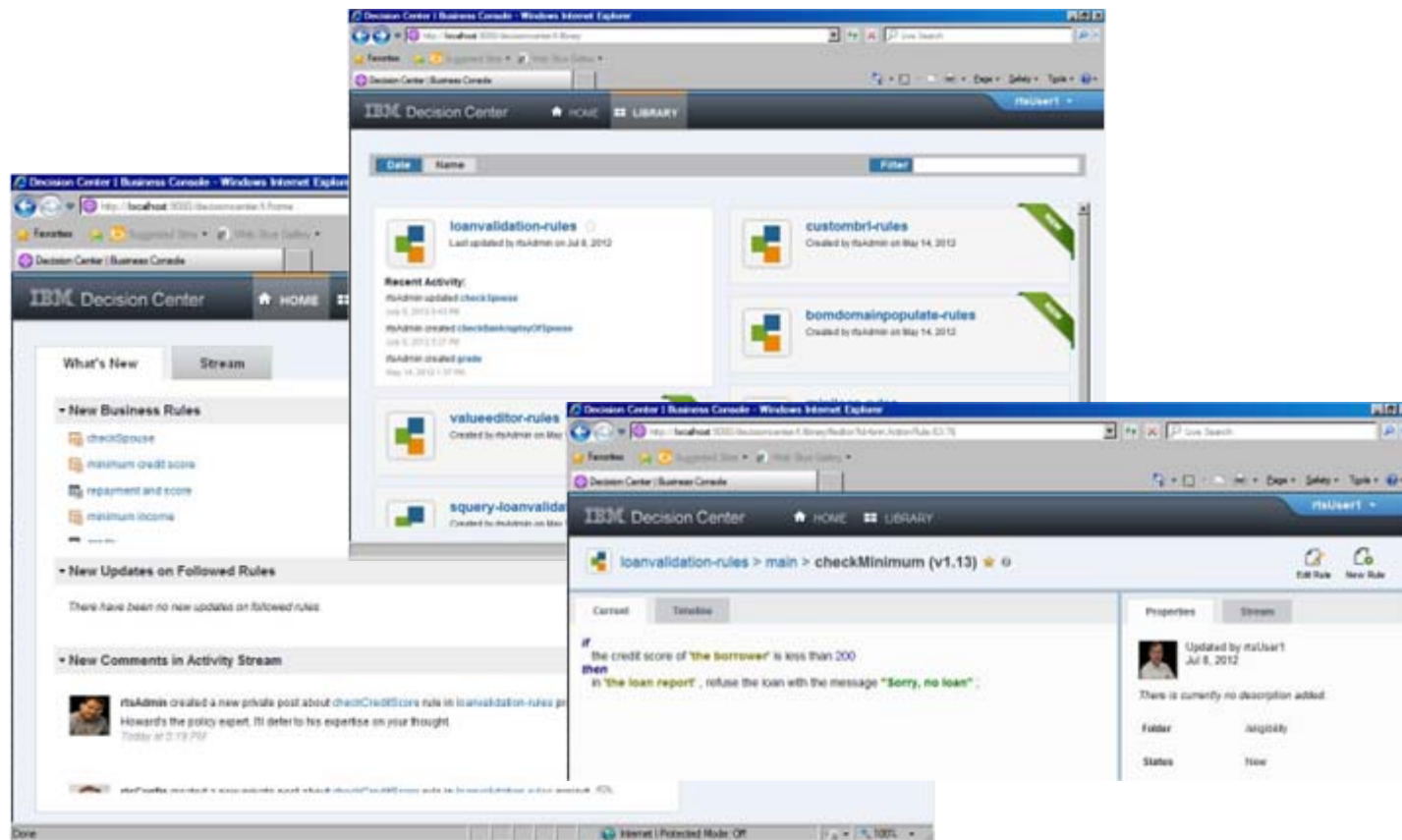
- In real time, experts can exchange comments and receive change notifications on rules that interest them

The screenshot displays the IBM Decision Center Business Console interface. The top navigation bar includes 'Home' and 'Library' tabs, and a user profile 'Rachel' with 'Preferences' and 'Logout' options. The main content area is divided into several sections:

- What's New Activity Stream:** A section with a dropdown arrow and a notification badge '3'. It lists 'New Business Rules' with sub-items: 'Local Sedan Surcharge', 'Local SUV Surcharge', and 'Local Truck Surcharge'.
- New Updates Since You Logged Out:** A section with a dropdown arrow and a notification badge '4'. It lists 'Global Sedan Surcharge', 'Summer Surcharge', 'Winter Surcharge', and 'Spring Surcharge'.
- New Comments in Activity Stream:** A section with a dropdown arrow and a notification badge '2'. It shows two comments:
 - Yeepin** posted a comment: 'NY rate rule you updated is not correct. Please change the value to 23% thx - yp' (Nov 15 2011 at 10:20 am)
 - David** posted a comment: 'NJ rate rule is also wrong. Need to be changed to 14%' (Nov 15 2011 at 11:00 am)
- Followed Items:** A list of items including 'Regional Sales Distribution', 'Return Policy', 'Sales Promotion Policy', 'Surcharge', and 'miniloan-rules'.
- Rules Recently Worked On:** A list of items including 'New Jersey Pricing', 'Sedan Rates', 'Tax Rates', 'Surcharge', and 'NJ Surcharge'.

Demo: Easily Create A Business Rule With IBM Operational Decision Manager

- Using a natural language approach, a business user will author a rule in his area of expertise
- The business user will seek feedback on his rule from fellow experts



Rules Need To Be Managed Effectively

How can we manage and check all of our rules when they're developed by different experts?



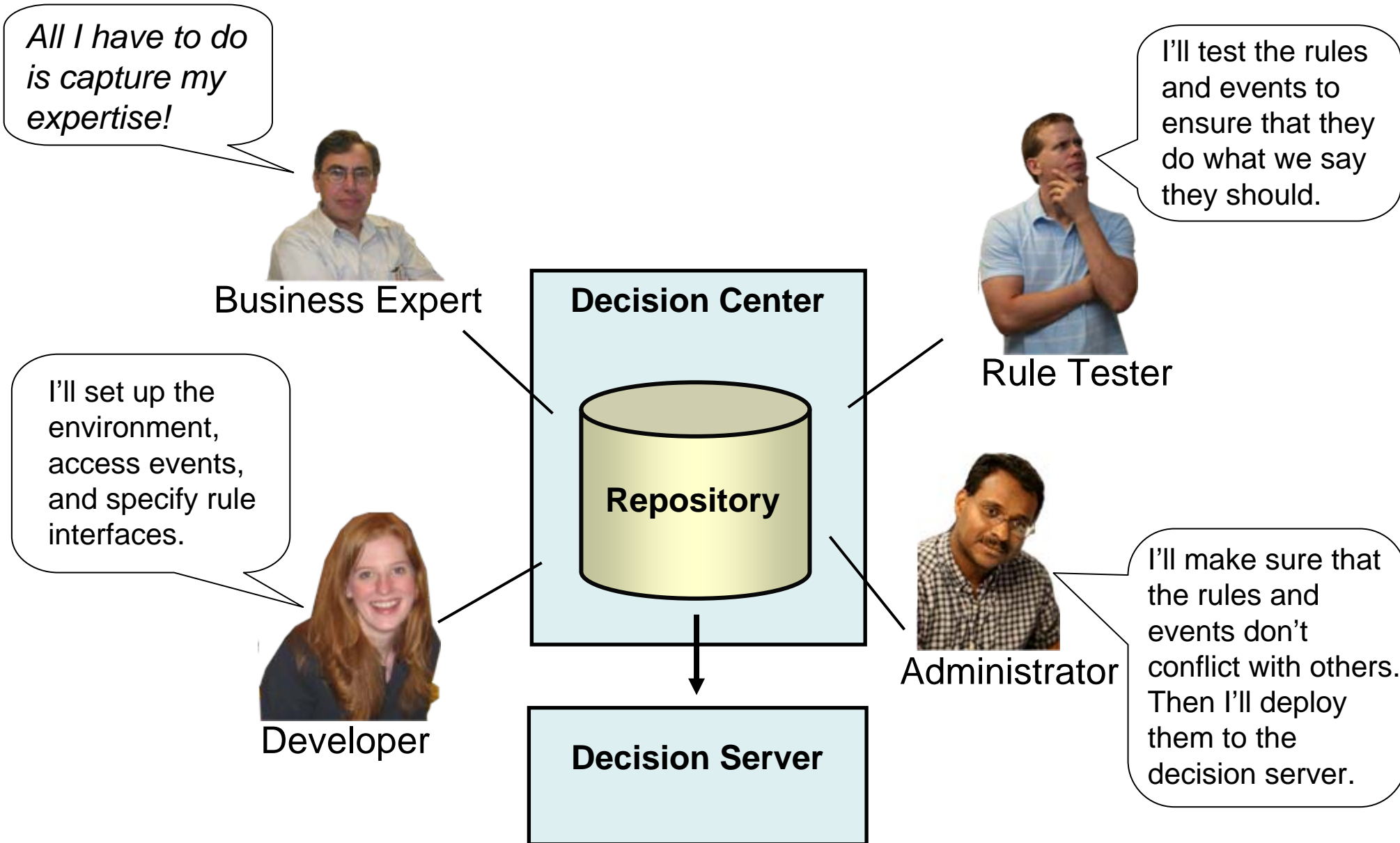
**Policy
Business Expert**

IBM allows teams to work together safely and effectively.

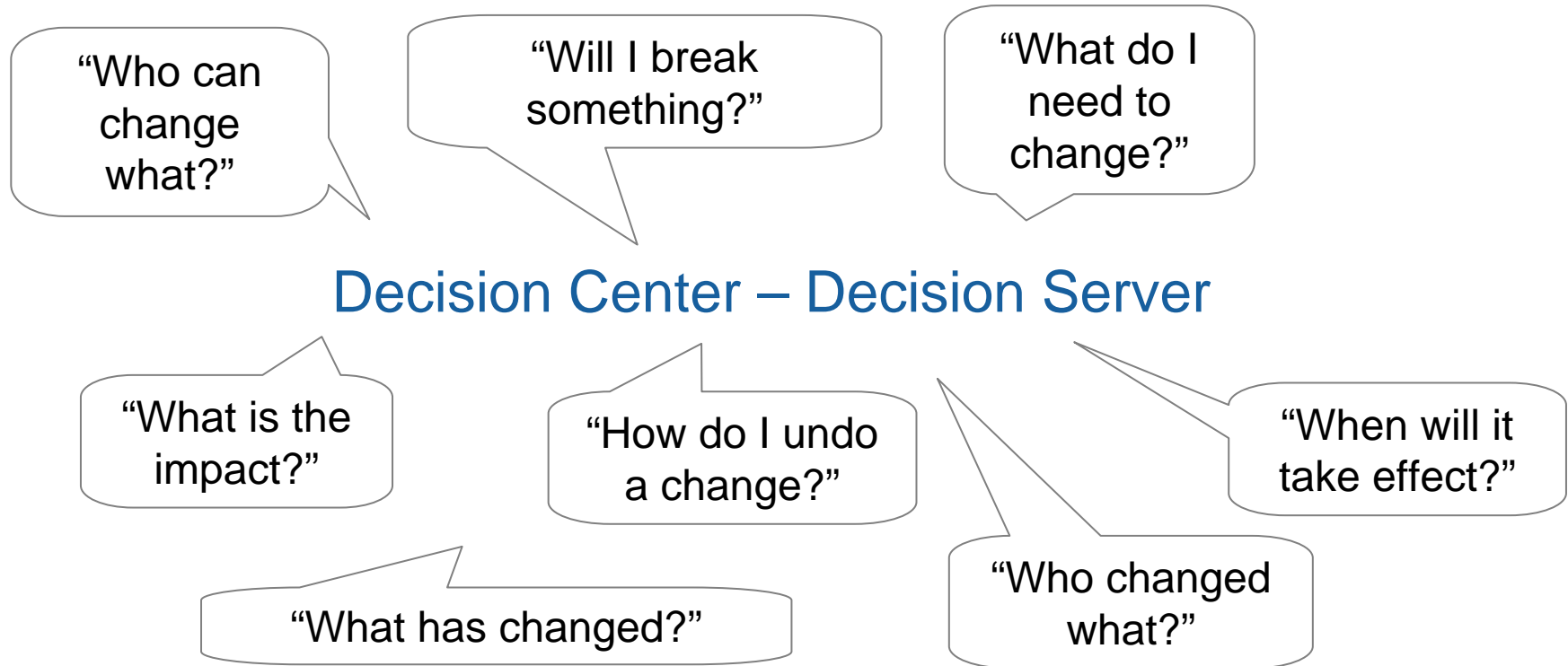


IBM

IBM Operational Decision Manager Allows Collaboration Amongst Stakeholders



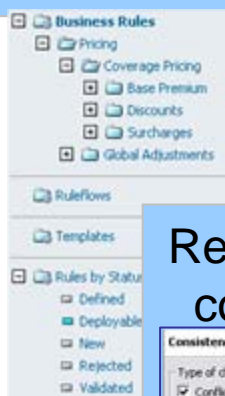
With IBM, You Can Lower Risk With Safe And Predictable Decision Governance



With IBM, You Can Manage Effectively Even Very Large Numbers Of Rules

- Event rules and business rules
- Find and organize rules of interest
- Release projects flexibly, including branching and merging
- Perform rule consistency and completeness checks
- Run simulations to compare outcomes

Rule organization and smart views



Security and permissions

PERMISSION	TYPE	PROPERTY	VALUE
<input type="checkbox"/>	Create	Action Rule	Yes
<input type="checkbox"/>	Create	Smart View	-
<input type="checkbox"/>	Create	Folder	-
<input type="checkbox"/>	View	Action Rule	-
<input type="checkbox"/>	Update	Action Rule	-
<input type="checkbox"/>	Update	Actio	-

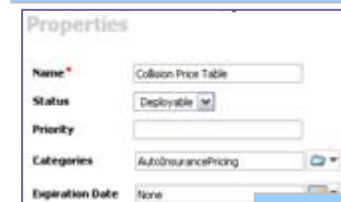
Reporting and consistency



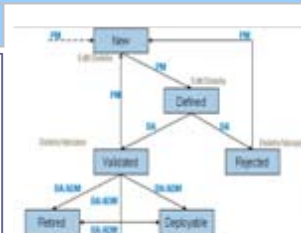
Rule queries

Find all business rules such that the status of each business rule is deploy and the expiration date of each business rule is before
 Do set the status of each business rule to rejected

Rule



Rule life cycle



Simulation



History and versioning

Explore > Details > History

Explore Version Details | Compare 2 Versions | Restore Version

Display by 10

Version	Changed By	Comment	Date
<input checked="" type="checkbox"/> 1.0	Adam		3/6/06 5:44 PM
<input type="checkbox"/> 1.1	Adam		3/6/06 5:44 PM

Demo: Ensure That Rules Do Not Conflict

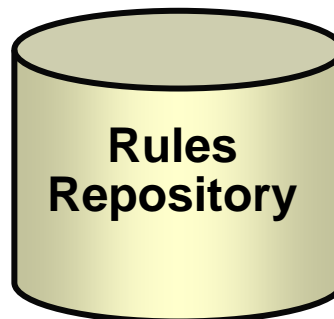
- Teams may produce rules that conflict with each other
- IBM Operational Decision Manager automatically can detect rule conflicts so that they can be resolved



Team A



Team B



Administrator

I'll check for rule conflicts.



Swiss Customs Streamlines Tariff Calculations For Border Control



The Challenge:

- Facilitate trade while reducing threat of illegal goods
- Enforce customs regulations consistently
- Increase the effectiveness of 2,500 customs officers

The Benefits:

- Scalable system validates 200,000 customers declarations daily
- 96% of declarations are processed automatically
- Customs officers update the rules to keep pace with changing regulations
- Pre-validated customs declarations allow faster, but better, border checks

Why Customers Choose IBM



Challenge: Create a custom web-based point-of-sale system

“WebSphere’s application stack was more evolved, more integrated, and more capable out-of-the-box. This translated into significantly lower application development costs, estimated to be 15% less compared to Fusion.”

“TBC is saving close to 50% off future development and integration costs [with WebSphere]”



Challenge: Handle rapidly changing regulatory demands

“When we sat down with IBM, their road map blew us away... we knew it was best of breed.”

“With WebSphere, we expect to see over 40% in savings across the board”

An International Logistics Provider

Challenge: Replace a legacy system

“[We] stopped supporting a million lines of custom code; reduced outage backlog recovery time from 8 hours to 15 minutes”

“ODM is also proving to dramatically boost developer and analyst productivity, by as much as 50%”

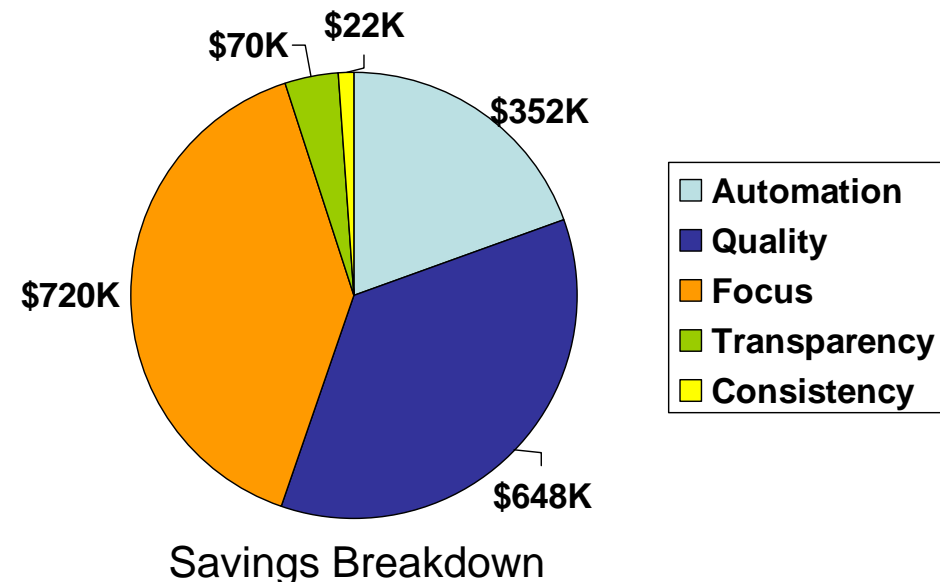
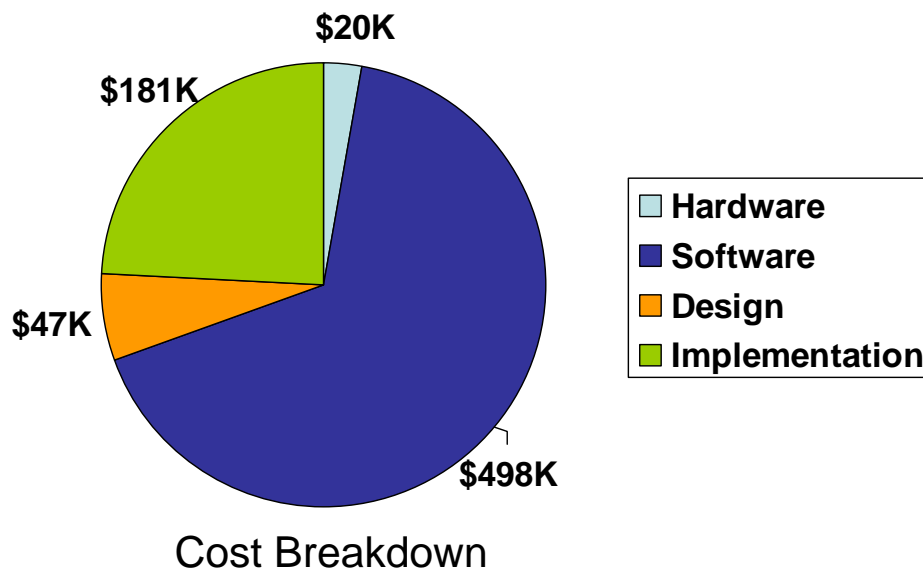
Branham report titled, “Choosing IBM WebSphere over Oracle Fusion based on Real World Experiences. A Perspective on BPM and Connectivity & Integration Solutions”, dated June 2012. Used with permission from Branham Group Inc.

Common Benefits Of Decision Management Solutions

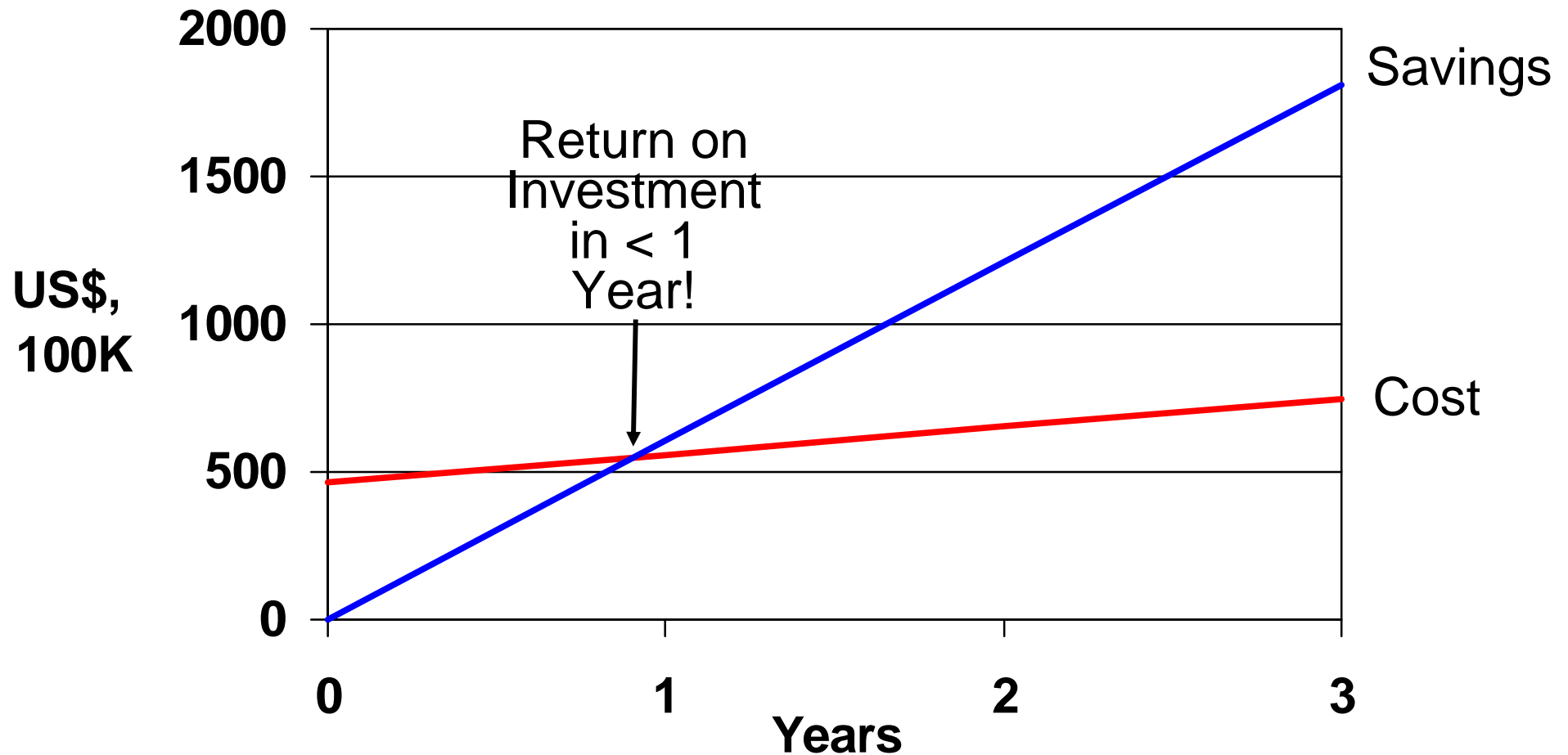
- Automation
 - ▶ Makes decisions without sick days, vacations, and coffee breaks
 - ▶ Reduces labor costs and processing time
- Quality
 - ▶ Make decisions with the best expertise
 - ▶ Reduce lost revenue due to errors, angry customers
- Focus
 - ▶ Allow experts to spend more time on the most difficult decisions
 - ▶ Experts spend more time on the most profitable decisions
- Transparency
 - ▶ Understand how decisions were made
 - ▶ Save time, money, and headaches trying to assign blame
- Consistency
 - ▶ Change rules without re-training
 - ▶ Eliminates inconsistencies and down-time

You Do Not Need Many Rules Or Decisions To Justify A Decision Management Solution

- The number of decisions is a key factor. Even a relatively low number of daily decisions can benefit from automation
- Eliminating costly mistakes saves much more money than just reducing the time to make the decision
- The number of rules is only a minor factor in the savings



... And The Investment Payback Is Fast



Results based on IBM internal study as of 03/06/2012.
Cost calculations are based on publicly available U.S.
list prices; prices will vary by country.

Why Invest In Decision Management With IBM? Consider Our Triple “A” Rating!

- **Adapt** to rapid change
 - ▶ Common business language for line of business to quickly improve decisions without waiting on IT
 - ▶ Unified environment to manage rule and event definitions
 - ▶ Hot deployment accelerates change implementations
- **Align** across Business and IT
 - ▶ Non-technical decision language improves communication and provides visibility across the business
 - ▶ Centralized repository for team collaboration
 - ▶ Runs on various platforms, including natively on z/OS for the mainframe
 - ▶ Intuitive testing and simulation allow business to validate changes
- **Act** with precision and reliability
 - ▶ Events and rules integration to decide *when* and *what* to do
 - ▶ Versioning and release management for reliable change governance
 - ▶ Automated and optimized, with a high performance runtime to support mission-critical decision services

