

What are organizations doing to improve automated decision making?

A collection of success stories that describe the business need and value of implementing operational decision management – the next generation of business rules



What Are Organizations Doing to Improve Automated Decision Making?

*A collection of success stories that describe the business need and value
of implementing operational decision management – the next generation of business rules*

These case studies provide a preview of how and why IBM customers are using operational decision management software to improve a variety of critical jobs – from claims processing to payment authorization and settlement.

IBM Operational Decision Management (ODM) software – the next generation of IBM’s market-leading business rules – enables organizations to drive more responsive, automated actions to business opportunities or risk conditions by making the authoring, changing and delivering of operational decisions simpler and safer for business users.

If you’re looking for an effective solution in any of these job areas, you’ll find a real world reference point in this collection.

- Payment Authorization: Visa Europe
- Customs and Border Control: Swiss Customs
- Claims Processing: Horizon Blue Cross Blue Shield of New Jersey
- Health and Wellness Management: Athletes’ Performance, Body Media
- Underwriting: Hiscox
- Eligibility Determination: Junta de Castilla y León, Latin American Tax Collection Agency
- Product Pricing and Bundling: Accovia
- Loan Processing: Novagalicia Bank
- Assisted Diagnosis in Healthcare: University Hospital of Antwerp
- Automated Routing and Billing in Logistics: Odyssey Logistics
- Promotion and Loyalty Programs: Beauty Care Retailer
- Product Recommendations: BNP Paribas
- Property and Realty Management: Property Exchange and Rental Company

To try the IBM ODM product or to learn more about operational decision management, visit ibm.com/ibmodm. Additionally you may view select customer success videos on the WebSphere Channel youtube.com/user/ibmdecisionmgmt.

Visa Europe (Payment Authorization), United Kingdom7

Visa Europe teamed with IBM to develop a high-performance clearing and settlement platform serving 4000 member institutions. To handle a wide variety of local conditions, the platform enables Visa business users to rapidly assess and adjust thousands of business rules governing operations. [Watch video.](#)

Swiss Customs (Customs and Border Control), Switzerland13

How can so many rules be efficiently and reliably developed, tested, administered and deployed? Since 2006 the Swiss Federal Office for Information Technology has been using a Business Rule Management System (BRMS) for this task. In July 2011, the plausibility analysis service was redeployed to the IBM WebSphere JRules BRMS.

Horizon Blue Cross Blue Shield of New Jersey (Claims Processing), United States17

Horizon BCBSNJ needed to become more efficient in business process management (BPM) and drive rapid, automated and continued process innovation. Horizon BCBSNJ teamed with IBM and IBM Premier-level Business Partner Prolifics to deploy a suite of IBM WebSphere® BPM and business rule management systems (BRMS) tools. The WebSphere tools provide a platform for innovation, keeping costs down, increasing process agility and visibility, and significantly improving the efficiency of key processes. [Watch video.](#)

Athletes' Performance (Health and Wellness Management), United States19

When developing its leading corporate wellness offering, the company deployed IBM WebSphere ILOG JRules, which utilizes training and nutritional logic to customize individual programs for its clients as they proceed through their wellness programs.

Bodymedia (Health and Wellness Management, United States25

With years of helping individuals monitor their bodies for critical factors that impact weight loss by capturing more than 5,000 data points a minute, BodyMedia wanted to go beyond simply tracking and providing data. The company sought to provide personalized, actionable recommendations to help individuals improve their success rate. Based on a decision management solution, the company's new feedback system acts as a coach and nutritionist, offering tailored guidance through the day on diet and exercise.

Hiscox (Underwriting), United Kingdom27

Hiscox sells a variety of general liability and household insurance products through various channels, including online and via call centers. Creating, managing and updating the complex business rules for each product was a laborious process for the IT department – and reducing speed to market for new and updated offerings had become a key business driver. Starting with its UK household insurance business, Hiscox used IBM WebSphere® Operational Decision Management to build a central repository for rules governing eligibility, underwriting and rating, which integrates with multiple web and call centre systems. The company then created a first-of-its-kind solution for its US direct insurance business that guides the customer through the policy application process in real time via a dynamic website.

Junta de Castilla y León (Eligibility Determination), Spain..... 31

Spain's recent passage of a law promoting care and autonomy for dependent people compelled its Social Services agency to reengineer its IT systems to comply with new regulations as well as provide better service to citizens. It placed all of its programs under a central process management system to automate work and shorten time for delivering services, which allowed the agency to adapt quickly to the new regulatory framework, and provides greater flexibility for implementing future policy changes.

Latin American Tax Collection Agency (Eligibility Determination)..... 35

The tax collection agency of a Latin American country struggled to effectively collect taxes because of the complexity of the tax code and the frequency of annual tax changes. The agency implemented a business rules management solution to automate tax collection using WebSphere ILOG JRules and provided an online questionnaire enabling taxpayers to quickly classify their tax status and determine the appropriate tax payment.

Accovia (Product Pricing and Bundling), Canada 39

Accovia sought to integrate its booking engine with a business rules management system that would support a high degree of travel management autonomy. The company integrated its travel industry booking engine with the IBM WebSphere® ILOG® Business Rules Management System (BRMS), which helps Accovia deliver products to market more quickly, improving agility and competitiveness. [Watch video.](#)

Novagalicia Bank (Loan Processing), Spain..... 41

Bank employees were struggling with 173 business rules for routing product requests to the individuals with proper decision-making authority. Rules changed daily, and it was taking too long to implement the changes. The bank implemented IBM WebSphere ILOG JRules business rule management system (BRMS) to eliminate guesswork and error, lower risk and accelerate time-to-market for product processing.

University Hospital of Antwerp (Assisted Diagnosis in Healthcare), Belgium 45

The University's rare-disease diagnosis platform allows for an earlier, quicker and more accurate diagnosis by integrating both medical expertise and data mining tools. Rules are generated much faster and more accurately through a predictive model based on known patient data. In comparison with a pure rule-based system, a combination with data mining tools provides both higher sensitivity and more specificity. The solution can serve as an intelligent and dynamic knowledge base on rare diseases. The improvement in the quick diagnosis and treatment of rare diseases can mean the difference in the lives of patients.

Odyssey Logistics & Technology Corporation (Automated Routing and Billing in Logistics), United States 47

Odyssey Logistics & Technology Corporation (OL&T) wanted a next-generation supply chain management platform to help provide end-to-end transportation solutions and reduce costs for customers. OL&T created the platform using an IBM business process management solution, which increased the company's visibility, flexibility and responsiveness, allowing it to react quickly to constantly changing customer and marketplace needs in a global logistics environment. [Watch video.](#)

Beauty Care Retailer (Promotion and Loyalty Programs), France..... 53

A paper-based, manually-driven loyalty program was slow to capitalize on sales opportunities and was confusing for store staff and customers at this beauty care retailer. The company developed a new loyalty program based on IBM WebSphere ILOG JRules business rules management software that automatically calculates promotion discounts and current loyalty points and recommends products for future purchases. Now, business users can quickly implement promotions to capitalize on business opportunities.

BNP Paribas (Product Recommendations), France 57

For BNP Paribas, a European leader in global banking and financial services, personalization is key to winning customer loyalty and increasing profits. To this end, the bank is rolling out a new master data management initiative that will give it unprecedented flexibility and speed to accommodate to changing market conditions and customize offers for each client.

Property Exchange and Rental Company (Property and Realty Management), United States 63

With over 3 million lines of code in its complex 35-year-old legacy mainframe system, the property exchange and rental company found itself facing several critical business issues. The system also limited the modes of member notification and threatening revenue.



Visa Europe

Processing payments with unprecedented agility and reliability

Smart is...

An open clearing and settlement platform that allows Visa Europe to create and implement vast numbers of complex business rules faster than ever before.

Visa Europe addressed the unique nature of the European market by building a **new payment platform** which houses tens of thousands of business rules governing payment clearing and settlement. An open business rules management system **speeds time-to-market** and gains **cost efficiencies**. The result is greater business agility and competitiveness for both Visa Europe and its 4,000-plus member institutions. Simulation capabilities are soon expected to allow business users to **become more proactive, predicting and assessing the impact of changes** to key business rule parameters.

The European marketplace is highly complex. Efforts to unify it from an economic and commercial standpoint have been under way for decades, yet to this day it is still comprised of many discrete markets, currencies and sets of regulations. One of the latest efforts to strengthen the market through unification, led by the European Union was the creation of the Single Euro Payment Area (SEPA) and ratified by European Union member states adopting the Payment Services Directive (PSD, 2007/64/EC).

The SEPA initiative created a common set of rules for payments in countries using the Euro, under which all electronic payments are considered domestic, even those that take place across national borders. The goal was to create greater efficiency and promote commerce.

A strategic response to these specific and unique European member institutions business drivers was required and, as a result, Visa Europe became a dedicated European payments provider and wholly independent organization from the global payments provider Visa Inc.

A complex landscape calls for a new approach

Growing Visa Europe in response to the nature of the European environment became a challenge while remaining part of the global Visa Inc organization and global set of demands for change. This made it difficult to make responsive changes to shifting regulations and market conditions. This is why the creation of a dedicated European organization was deemed a wise move.

The issue is one of complexity. Each time a Visa card is used anywhere in the world, an authorization takes place and a transaction is created between the issuer's financial institution and that of the merchant. At the end of each day, all of those millions of transactions must be settled.





Business benefits

- Allows customized rules to be brought to market much faster, typically three times faster than before, providing market differentiation through greater agility
 - Reduces the cost of business rule maintenance, with savings of over 25% experienced to date.
 - Will enable the creation of the most appropriate business rules using “what if” scenarios based on real data
 - Makes the rule management process directly accessible to business users, adding flexibility and responsiveness
 - Offers massive scalability and high performance, with 30,000 business rules supporting over 500 transaction types in 36 diverse markets
-

Every transaction is run through a set of business rules that govern the fee charged, the exchange rate applied, and other validation parameters such as proper formatting. These rules must be changed periodically, for example to adjust fees in response to market conditions, add new members or accommodate new regulations.

Under the legacy Visa Inc. global payments platform, each of these business rules was effectively hard-coded into the system, making it very difficult to bring new rules to market. Implementing a single policy change could take up to 18 months from the time of initial request to go-live—and while any given parameter might not need to change very often, the sheer number of them means that there is always a change that needs to be made.

When extended across the 36 countries, multiple currencies and thousands of members served by Visa Europe, it's easy to see the management challenge posed by this rules-based clearing and settlement process. “For the European market, there are literally tens of thousands of business rules to consider,” says Justin Snoxall, vice president and head of development services for Visa Europe. “It's a uniquely convoluted landscape that can make doing business difficult. For example, with so much to consider and the limitations of the legacy system, introducing new products or services could take a long time. This hampered our efforts to enter new markets.”

Breaking the business rule logjam

Visa Europe's answer to the management challenge was to chart its own course. The new organization used its independence to create a separate authorization platform and clearing and settlement platform that would integrate with the Visa Inc. global system while adding a high degree of flexibility and agility to the payments process.

Smarter banking:

Leveraging insight to build better business rules



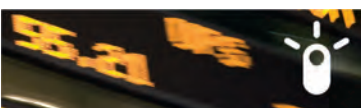
Instrumented

Live transaction and market data is collected from 36 markets and brought together in the high-performance Visa Europe Clearing and Settlement Service.



Interconnected

A business rule management system combines real-world information with business logic that enables rules to be tailored and bespoke to market and in some instances individual member institutions.



Intelligent

With deeper understanding of the potential impact of changes, Visa Europe will be able to address the needs of its members more effectively—creating true market differentiation.



Solution components:

Software

- IBM DB2®
- IBM WebSphere® Application Server
- IBM WebSphere ILOG® JRules
- IBM AIX

Services

- IBM Software Services for WebSphere
-

“[VECSS is] a tremendously powerful concept, and a much more efficient, effective way to do business for both us and our member institutions.”

—Justin Snoxall, vice president, head of development services

Called the Visa Europe Clearing and Settlement Service (VECSS), the new platform uses IBM WebSphere® ILOG® JRules at its heart, markedly different from the older mainframe-based solution. The tens of thousands of business rules that govern its function are no longer hard-coded. They are stored as rules and gain further context from member institution business parameters stored in an IBM DB2® database, which allows them to be managed consistently and changed easily through a built-in business rules management system (BRMS). Rule changes now involve far less expenditure of staff time, resulting in savings in the maintenance costs associated with updates and reducing the total cost of ownership.

More significant, though, is the speed of change made possible by the new system. “The time it takes to change a business rule has gone from nine months to only three,” says Snoxall. “Within 13 months we’ve made 60 rule changes, while migrating members over to the new system at the same time. The BRMS actually has the potential to make changes within days and longer term even overnight, so should the business need arise for more rapid change, we’ll be ready,” Snoxall says. “It’s a whole new level of capability that’s a far cry from the legacy mainframe-based system.”

The scalable VECSS system is also much more efficient than the earlier clearing and settlement platform, which increases the quality of service to members. Since launch, it has been able process in excess of one billion transactions every six weeks. At peak times, VECSS is able to process over 8,000 transactions per second.

The efficient transaction handling and rule management offered by the system is very important in the context of Visa Europe’s unique business environment. The requirements of the member institutions are so widely varied that the organization is called upon to provide a high degree of customization. “Clearing and settlement follows a distinct set of processes from end to end, but not all payment transactions are processed in the same way,” Snoxall says. “We need to take into account specific conditions per region, contract type, customer—a whole host of variables.” The result is over 500 transaction types to deal with, which require 10,000 editing and validation rules, plus another 20,000 fee calculation rules. All of these must be managed effectively, which is made far simpler by the flexible solution.



► The inside story: Getting there

“The way we approached the development of VECSS was not what one might expect because of the nature of our organization,” says Justin Snoxall. “We provide payment processing services to financial institutions, but Visa Europe is not a commercial service provider motivated by profit. Rather, it is a cooperative association devoted to serving the interests of our member financial institutions. Each of them has a say in what we do. So one of our major tasks was to gain their support for the VECSS project.”

An organization with such a large number of stakeholders might naturally chart a conservative course when implementing change, aiming to take the path of least resistance. “While we could have continued to use the global Visa Inc clearing and settlement platform, we saw the opportunity to create a far more capable solution and seized it,” Snoxall says. “I think our leadership showed great foresight in creating Visa Europe and empowering us to develop our own technology solution.”

To ensure internal support, transparency was essential. “Our members were kept informed of the project status and objectives, with care being taken to demonstrate the business value of the plan at all times,” Snoxall notes. “It’s a collaborative environment and we have strong relations with all of our members. As a result, the buy-in for the project was very smooth.”

The interaction with members played an important role in the way the project unfolded, Snoxall says. “We did encounter a few reservations about the ability of our organization to deliver on its own, so we looked for a partner who could be more than a systems integrator. We decided to go with a strong vendor who complemented our own capabilities, and the members gave us their full support.”

A new way to find the best answer

The flexibility made possible by VECSS has added considerably to the competitiveness of both Visa Europe and its members. New institutions can be added to the network much more quickly than ever before, and at less cost. New regulations are accommodated faster, and changes in status or the services provided to a given member are made with ease.

Enhancements are planned to leverage insight based on real-world data to determine the most suitable business rule for each situation. “The potential of the system is very exciting for our business users,” Snoxall says. “The ease of management is only the beginning. Once fully deployed,



they will be able to run 'what-if' scenarios that test the effect of any given rule change before implementing it. The BRMS will provide guidance for adjustments to the rule parameters, to deliver the desired result. That should help us reliably set the appropriate fees to maximize both member profitability and service utilization, while ensuring that members in different markets are treated equitably.”

To make certain that the deployment would support the company's goals, Visa Europe sought assistance from IBM Software Services for WebSphere. Using the proven ILOG Solution Implementation Standard deployment methodology, IBM applied its extensive WebSphere ILOG BRMS implementation experience to help ensure the solution's success.

An engagement with IBM ILOG Professional Services across the architecture, design and construction phases helped to manage implementation risk and ensure that the significant performance requirements were achieved. “The IBM team played an important role in the success of the project,” says Snoxall. “Their expertise dovetailed with ours to create a far more robust solution.”

Achieving true business agility

The ultimate goal is to enable Visa Europe's general business users to manage business rules directly, making all needed adjustments before releasing the rule to IT for quality assurance and deployment. Each rule, and the change management process, are designed to be easily accessible and understood by line-of-business employees. This will result in even greater business agility by further speeding time-to-market.

Making it possible for business users to manipulate the rules themselves has important implications for the alignment of business and IT objectives at Visa Europe. By handing much of the change management process over to business users, IT can step back and devote more resources to the organization's future roadmap, such as the creation of innovative new services.

This potential to make business users a part of the picture is where the real power of the system lies, according to Snoxall. “What VECSS gives us is tools that can put key capabilities into the hands of users. They become an integral part of the process, rather than mere consumers of it. That's a tremendously powerful concept, and a much more efficient, effective way to do business for both us and our members. The better the service they can provide to their customers, the more accepted Visa becomes—and that's what's going to help us fulfill our vision of Visa becoming ‘the world's most trusted currency’.”

For more information

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Read the original article here:
<http://bit.ly/swiss-customs>

Business Rules in the e-dec System of Swiss Customs

Is the declared value of an automobile imported into Switzerland plausible or is the importer attempting to cheat at customs? With a continuously updated catalog of about 700 business rules in the customs clearance solution, the e-dec system automatically checks if everything in the customs declaration is correct.

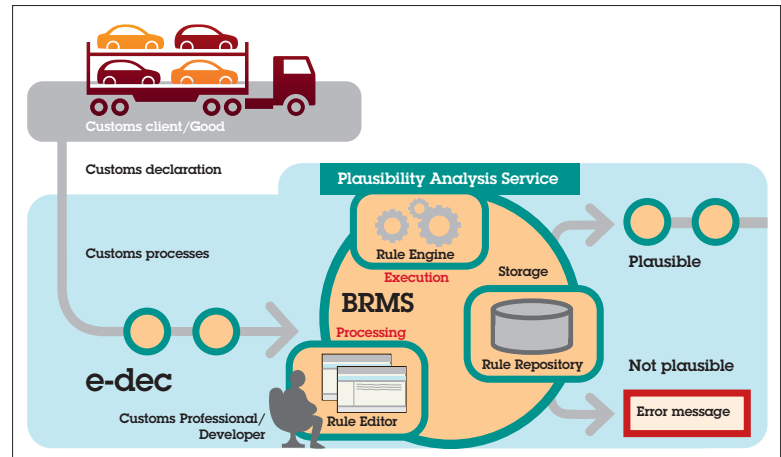
E-dec is a service-oriented e-government platform of the Swiss Federal Customs Administration. E-dec is developed by the Federal Office for Information Technology (BIT) and has been in operation since 2006. The Swiss government requires companies to declare all imported or exported goods. Today, 96.5% of these declarations take place electronically with the e-dec system. The information systems of the companies who import or export contain a module which communicates with e-dec. Over 1500 systems are connected to e-dec, processing approximately 200,000 declarations per day. Through the importing of goods, e-dec accounts for customs duties and value added tax of about 23 billion Swiss Francs per year.

Electronic Customs Clearance

How does electronic customs clearance work? For example, a Swiss dealer wants to import automobiles from Germany into Switzerland. The entire business process, from purchase at the manufacturer to sale to the customer, is transacted in the dealer's information system. At a point in this process an electronic customs declaration is prepared and sent to the e-dec system. Such a declaration is a very comprehensive electronic document which is composed of up to 200 data elements per contained good. For example, the value and weight of the good must be declared, or in the case of automobiles, the vehicle identification number. E-dec automatically processes this message and sends back the necessary documents for the import within a few seconds.



The customs declaration—e.g. for an automobile—undergoes a process in e-dec composed of several services. One of these is the plausibility analysis service which checks whether the information from the customs client is correct, e.g. is the value of the automobile plausible?



The business rules for checking the customs declaration are recorded by the customs professional in the rule editor and stored in the rule repository. In the plausibility analysis service, the rule engine compares the information of the customs client with the business rules stored in the repository within fractions of a second. For example if the specified value of the automobile is too low, the plausibility analysis generates an error message.

Business rules for plausibility analysis

The e-dec platform consists of various processes (e.g. import, export, postal traffic) which are composed of different services. One of these services is plausibility analysis (see graphic). This plausibility analysis service checks—in a fraction of a second—the technical correctness of the transmitted data on the basis of a variety of business rules. In the case of the aforementioned automobile import the service checks, among other things, whether the vehicle identification number has been specified for each vehicle and whether the declared import value lies within a specified realistic range.

Currently there are around 700 business rules. These rules change at regular intervals on the basis of statutory regulations and the requirements of various federal agencies. Thus one important requirement is a flexible adaptation of the rules independently from regular software release cycles.

Flexible Administration of the Rules with BRMS

How can so many rules be efficiently and reliably developed, tested, administered and deployed? Since 2006 the Swiss Federal Office for Information Technology (BIT) has been using a Business Rule

Management System (BRMS) for this task. In July 2011, the plausibility analysis service was redeployed to the IBM WebSphere JRules Business Rule Management System (BRMS).

For administration purposes, all business rules are stored in a central repository. Various rule editors allow developers and customs professionals to jointly create new rules or adapt existing ones. These rules are then tested and released for deployment to the production environment. Thus, in a short period of time changes can be quality assured and put online.

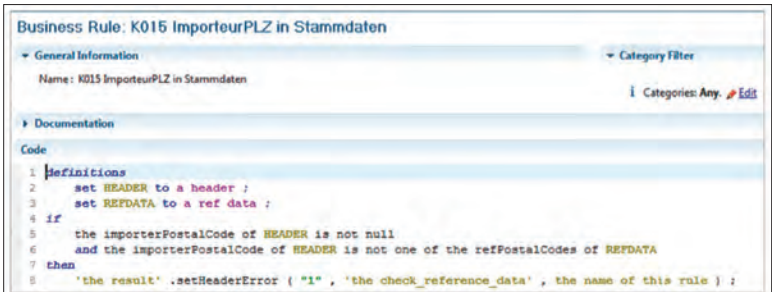
The customs clients must be familiar with the plausibility rules in order to make correct declarations. The BRMS generates detailed rule reports which are made available to clients on the Swiss Customs website.

Benefits of the BRMS at e-dec

Is the use of a complex BRMS worth it? The following benefits were apparent from the experience at e-dec:

- The plausibility analysis service and the rules contained therein are reused by several customs clearance processes, which increases the efficiency of the administration of the business rules.
- The business rules systems provides a good overview of the rules in all stages of development. This contributes to quality assurance.
- The web-based user interface enables customs professionals to administer the rules. This guarantees flexibility and speed in the adaptation of the rules.
- The rule execution provides extremely high performance and is very scalable.
- The BRMS itself did not require development and was able to be very quickly integrated into e-dec.

The architectural approach for administration and execution of business rules and the specific product selected have proven themselves in practice. The use of a BRMS in other systems of the Federal administration with business rules can bring various advantages and is recommended by the e-dec team.



```

Business Rule: K015 ImporteurPLZ in Stammdaten
General Information
Name: K015 ImporteurPLZ in Stammdaten
Category Filter
Categories: Any Edit

Documentation
Code
1 Definitions
2 set HEADER to a header ;
3 set REFDATA to a ref data ;
4 if
5   the importerPostalCode of HEADER is not null
6   and the importerPostalCode of HEADER is not one of the refPostalCodes of REFDATA
7 then
8   'the result' .setHeaderError ( "1", 'the check_reference_data', the name of this rule ) ;

```

Example of a business rule in the rule editor in IBM WebSphere JRules (Screenshot).



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Horizon Blue Cross Blue Shield of New Jersey optimizes agility and ROI



IBM WebSphere business rules and process management tools accelerate improvement in key processes

Overview

Process improvement

Horizon BCBSNJ needed to become more efficient in business process management (BPM) and drive rapid, automated and continued process innovation.

A BPM solution from IBM

Horizon BCBSNJ teamed with IBM and IBM Premier-level Business Partner Prolifics to deploy a suite of IBM WebSphere® BPM and business rule management systems (BRMS) tools.

300 percent ROI per process

The WebSphere tools provide a platform for innovation, keeping costs down, increasing process agility and visibility, and significantly improving the efficiency of key processes.

Solution Components:

Software

- IBM WebSphere® ILOG® JRules
- IBM WebSphere Lombardi Edition
- IBM WebSphere Process Server

Horizon BlueCross BlueShield of New Jersey (Horizon BCBSNJ) is New Jersey's oldest healthcare insurer, serving more than 3.6 million members with a wide array of medical, dental and prescription insurance products and services.

Challenge

Horizon BCBSNJ is a process-centric organization. However, the business was established in a manual, paper-intensive era, and virtually all critical processes had remained manual until four years ago, when the company launched a business process improvement initiative. To achieve both process improvement and its underlying business objectives, Horizon BCBSNJ needed to become more efficient in business process management (BPM) and drive rapid, automated and continued process innovation.

Solution

Horizon BCBSNJ teamed with IBM and IBM Premier-level Business Partner Prolifics to deploy a suite of IBM WebSphere® BPM and business rule management systems (BRMS) tools. The company worked with Prolifics to create a BPM center of excellence to provide Horizon BCBSNJ with methodologies, best practices and design patterns for the lifecycle of process improvement projects regarding enrolment, claims processing and coordination of benefits.

Horizon BCBSNJ business analysts now use IBM WebSphere Lombardi Edition software to identify and document business processes affecting the company's partners and to automate, build and deploy BPM solutions on a portal. The IBM WebSphere Process Server application provides a platform that helps improve visibility into business processes and extend



their availability, while IBM WebSphere ILOG® JRules software enables the company to create and centralize access to business rules that help claims processors adhere to best practices. The WebSphere tools provide a platform for innovation, keeping costs down, increasing process agility and visibility, and significantly improving the efficiency of each of the company's key processes.

Benefits

- Reduces processing time for standard claims by 20 to 30 minutes each
- Generates an average ROI of 300 percent for each internal process improvement project
- Increases customer and provider satisfaction by freeing claims processors to focus on more complex claims

For more information

To learn more about IBM WebSphere software, please contact your IBM representative or IBM Business Partner Prolifics at www.prolifics.com, or visit:

ibm.com/websphere



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"IBM BPM tools are definitely helping Horizon be a more efficient and smart organization. Our ROI is phenomenal, and we're more agile; more able to adapt our processes to market conditions."

— Bill Looney, enterprise architect, Horizon Blue Cross Blue Shield of New Jersey



Athletes' Performance gets people fit with scalable technology

IBM WebSphere ILOG JRules business rule management system automates real-time training data

Overview

The need

Cost-effectively codify expertise residing in spreadsheets and the collective knowledge of leading experts in behavioral sciences, fitness, nutrition and physical therapy to expand personalized fitness product offerings to a larger wellness market.

The solution

When developing its leading corporate wellness offering, company deployed IBM WebSphere ILOG JRules, which utilizes training and nutritional logic to customize individual programs for the company's clients as they proceed through their wellness programs.

The benefit

- Boosts customer retention rate to 92 percent
 - Enables a single performance specialist to work with 16 clients at a time
 - Leverages decades of experience to a larger audience
-

Athletes' Performance Inc. has pioneered a unique, integrated approach for performance training, nutrition and physical therapy for elite and professional athletes—as well as the general public. The company operates four training facilities in Arizona, California, Florida and Texas, and also provides an extensive menu of on-site services.

“Olympic and professional athletes come to us for our in-depth training programs,” says Jon Zerden, chief technology officer at Athletes' Performance and Core Performance. “And through our wellness offering, Core Performance, we deliver these proven training components to consumers—through our website, at Core Performance training facilities and through corporate wellness programs.”

Data scalability opens new markets

But as Zerden notes, ensuring broad consumer market adoption for specialized athletic training programs faces two immediate hurdles. Athletes' Performance management needed to be able to adapt its programs to a larger audience—yet the company had to make sure that its reputation for extremely high-quality training was not compromised.

“Scalability is essential for entering new and highly competitive markets,” says Zerden. “Getting ready to compete in the consumer market called for automating the bulk of our professional-level coursework so we could reach more customers through mobile devices, web devices and exercise equipment with interactive sensors.”



“Automation of the bulk of our wellness programs means that we can constantly improve our position as the leader in integrated fitness and nutrition programming for elite athletes and leading corporations alike.”

—Jon Zerden, Chief Technology Officer,
Athletes' Performance and Core
Performance



BRMS provides rules-based data capture and automation

Finding a way to automatically capture knowledge from the company's over 100 practitioners initially seemed a daunting task for Zerden and his team. And once captured, trainer information had to be transformed into practical, user-specific counseling tailored to individual consumers, which Zerden and his colleagues found to be time-consuming, potentially inaccurate and difficult to customize.

“We came to the conclusion that we needed a rules-based approach to embed intelligence within our training systems in real time and on the fly,” Zerden says. With this realization, the IT team at Athletes' Performance decided to deploy IBM® WebSphere® ILOG® JRules Business Rule Management System (BRMS), which enables the company to automate guidance—such as best practices for exercise and diet—while also being able to automatically apply customized decisions for specific training situations/user personalities in real time. “The JRules BRMS was the only solution capable of both automating as much guidance as possible and still preserving flexibility for remote and on-site coaching staff,” Zerden says.

Solution components:

Software

- IBM® WebSphere® ILOG® JRules Business Rule Management System
-



Training methods become deliverable through multiple channels

Deployment of the JRules BRMS solution helped ensure that all workout recommendations are immediately accessible to customers interacting with exercise equipment touch screens, as well as mobile devices and web browsers. This, says Zerden, was made possible by loading the JRules BRMS solution with 36,000 training rules taken from multiple Excel spreadsheets holding the collective knowledge and experience of company fitness specialists.

By implementing the JRules BRMS solution within a SOA/REST architecture that relies upon cost-effective open-source tools, the company's IT team was able to quickly deploy a specialized rules engine. Individual customer information is captured from daily evaluations and questions, and is fed into a customized program based upon the company's Core Performance training methodology. This Core Performance Prescription Engine (CPPE) then makes real-time modifications to direct training regimens by taking into account factors such as pace, schedule changes, injuries and general health.

Zerden says the solution also helps ensure that fitness staff can refine training information on an ongoing basis. “Automation of the bulk of our wellness programs means that we can constantly improve our position as the leader in integrated fitness and nutrition programming for elite athletes and leading corporations alike,” he says. “With the help of a single IT analyst, our Performance Innovation team composed of professional trainers can quickly make changes in the system—and the updates are instantly proliferated worldwide to our customers.”

More proof points expand market share

Based on the JRules BRMS solution, the company’s Core Performance Prescription Engine is now the world’s first intelligent and adaptive rules-based system for delivering optimal and consistent physical training globally in real-time. The CPPE currently hosts approximately 36,000 training rules for customizing training programs for consumer clients—and provides the company with the ability to prove health gains and expand market share.

“The JRules BRMS system gives us the ability to better promote our services with corporate accounts,” Zerden says. “We can now collect data points on how training positively affects triglycerides and other blood markers, which makes a strong case for retaining our programs to improve employee health.”

Reliable governance upholds brand standards

The JRules BRMS also helps ensure consistency of service and training throughout the company’s facilities, which is critical for the Athletes’ Performance brand. “BRMS tools were really the only option to make each environment consistent from facility to facility or across different types of training programs,” Zerden says. “The solution put a governance process into place, so our customers know that no matter where they’re working out—or whether they’re in one our facilities or interacting with a mobile device—they can rely upon the same rigorous training protocols that increase physical fitness.”

New service capabilities hit game-changing retention levels

Adopting the JRules BRMS also helped ensure that the company's highly sophisticated service offerings could successfully be scaled, customized—and offered at competitive prices to retain growing legions of amateur athletes and corporate clients, Zerden says.

“Health club customer retention rates hover around 60 percent annually, which means that competing organizations typically lose 40 percent of their membership base every year,” Zerden says. “Thanks to the power of the JRules BRMS solution, we’re able to automate wellness guidance, which allows a single performance specialist to provide up to 16 clients at a time with a highly cost-effective wellness experience. As a result, we can boast 92 percent annual membership retention, so our attrition rate is eight percent—which is an extraordinary customer satisfaction metric for any company targeting consumers.”

BRMS scouts data for future opportunities

Zerden's team continues to discover new ways for JRules BRMS to capture and deliver critical training information. “The data elements we’re now working with include biometric movement patterns, which we can use to illustrate how our programs reduce insurance costs and employee absenteeism,” Zerden says. “Information like this will go a long way to expand our training offerings in the future. And we also believe some of our findings will help related health and fitness research fields. As far as we can tell, we’ve just begun to scratch the surface of opportunity with our new data-mining capabilities.”

For more information

Contact your IBM sales representative or IBM Business Partner, or visit us at: ibm.com/brms

For more information on Athletes' Performance, visit:

- www.athletesperformance.com
- www.coreperformance.com

Additionally, financing solutions from IBM Global Financing can enable effective cash management, protection from technology obsolescence, improved total cost of ownership and return on investment. Also, our Global Asset Recovery Services help address environmental concerns with new, more energy-efficient solutions. For more information on IBM Global Financing, visit: ibm.com/financing



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Please Recycle



BodyMedia, Inc.

BodyMedia introduces a personalized feedback system that is the first of its kind to act as a guide, coaching individuals with tailored advice throughout the day to help them stay on track toward weight-loss goals.



Pittsburgh, Pennsylvania
www.bodymedia.com

“Our BodyMedia FIT Armbands have tracked calorie burn for hundreds of thousands of people trying to lose weight, but we wanted to also help consumers understand how all of this data could affect their weight-loss goals.”

—Christine Robins, chief executive officer,
BodyMedia, Inc.

Headquartered in Pittsburgh, BodyMedia, Inc. is a pioneer in developing wearable body monitors that equip consumers with information they can use to make changes to their health and wellness, including weight management and other conditions affected by lifestyle choices. The BodyMedia platform is registered with the Food and Drug Administration (FDA) as a Class II medical device and is clinically proven to enhance users' weight loss by up to three times.

The Opportunity

With years of helping individuals monitor their bodies for critical factors that impact weight loss by capturing more than 5,000 data points a minute, BodyMedia wanted to go beyond simply tracking and providing data. The company sought to further differentiate its body monitoring solution and provide personalized, actionable recommendations to help individuals improve their success rate.

What Makes It Smarter

Based on an intelligent decision management solution, the company's feedback system acts as a coach and nutritionist, offering advice and guidance throughout the day on diet, exercise and even sleep patterns tailored to each individual. Using set rules and millions of data points captured by the multi-sensor BodyMedia FIT Armband and user foods logged, the solution makes predictive calculations unique to each user, determines whether daily goals will be missed and offers precise suggestions on how to reach them before the end of the day. For example, if the feedback system sees that the user is falling short of the calorie burn target, it may suggest 20 minutes on a treadmill at a 10 mph setting or playing volleyball for 15 minutes, depending on the individual's preferences, location and time of year.

What if you could help consumers make the right decisions all day, impacting every measure of their weight-loss success?



Solution Components

- IBM® WebSphere® ILOG® JRules
 - IBM Business Partner Summa
-

Real Business Results

- Gains the ability to provide personalized feedback to consumers through a wearable body monitoring device based on calculations of set rules and user data
- Boosts consumers' ability to reach their weight-loss goals by providing step-by-step personalized recommendations
- Expands consumers' knowledge of their options in diet and activities that help ensure weight loss

For more information

Please contact your IBM sales representative or IBM Business Partner. Visit us at: ibm.com/electronics

To learn more about BodyMedia, Inc. visit: www.bodymedia.com



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Please Recycle



Hiscox gains a leading edge in online insurance

Accelerating speed to market with unified management of business rules

Overview

The need

In the UK, EU and US, Hiscox sells a variety of general liability and household insurance products through various channels, including online and via call centres. Creating, managing and updating the complex business rules for each product was a laborious process for the IT department – and reducing speed to market for new and updated offerings had become a key business driver.

The solution

Starting with its UK household insurance business, Hiscox used IBM WebSphere® Operational Decision Management to build a central repository for rules governing eligibility, underwriting and rating, which integrates with multiple web and call centre systems. The company then created a first-of-its-kind solution for its US direct insurance business that guides the customer through the policy application process in real time via a dynamic website. Decision Center (a module that provides a repository and environment for business user management of rules) has also been used to simplify data validation in the company's data warehouse.

Hiscox is a leading general insurance company that operates in the UK, US and worldwide. It is listed on the London Stock Exchange (LSE: HSX), employs approximately 1,250 people, and received gross written premiums for just under £1.5 billion in 2011. The company has two main business areas: it is an underwriter for Lloyd's of London, and it has a retail business which provides general liability and household insurance for businesses and private individuals.

Like most retail insurers, Hiscox understands the importance of bringing its products to market via different channels, and has put a significant emphasis on its online presence as a means of driving business growth. However, its insurance offerings are governed by a complex array of business rules for each product – and managing these rules across both online and traditional channels was a significant challenge.

“We wanted to create a single repository for creating, managing and updating the business rules, and take advantage of our service-oriented IT architecture to integrate them with the systems that manage the different sales channels,” says Chris Waters, Head of Architecture at Hiscox IT. “In this way, when we make changes to a product, we only need to update the rules once, and the logic will flow through to the relevant websites and call centres automatically.”

Hiscox had already invested in IBM WebSphere Operational Decision Management (formerly known as WebSphere ILOG® JRules), and saw it as an ideal platform for this initiative. The first project was to build the rules for a new rating engine for the UK household insurance business.

“When a customer applies for one of our household products, we need to assess three main things based on the information they have provided,” explains Chris Waters.

“First, whether they are eligible for the product they have selected – for example, if they have chosen a contents insurance policy that is designed for homes with up to five bedrooms, but they actually have six bedrooms, they won't be eligible for that specific product.



Business Benefits

- Hiscox was one of the first insurers to provide real-time online direct insurance quotes in multiple US states – giving it a head-start on the competition and triggering significant business growth.
 - Dynamic, rule-based generation of online questionnaires reduces the time and cost of creating or updating products: changes can be rolled out within a week, with 70 percent less development effort than a traditional static website would require.
 - Hiscox now has a platform for business rule management that enables it to reduce IT cost and complexity as it phases out several legacy ratings engines.
 - The solution will eventually enable analysts and other end-users to manage business rules themselves, with little or no need for support from the IT team.
-

“Second, what are the conditions under which we will agree to underwrite the policy? Is the house in a flood zone? Do we require the customer to install a burglar alarm before we will endorse their policy? Third, we need to rate the policy so that we can provide the customer with a price for the product.

“Each of these three areas – eligibility, underwriting and rating – has its own business rules, which are managed using WebSphere Operational Decision Management and fed into a calculation engine together with the customer’s data. The results are then turned into an insurance quote and displayed to the customer on the website in real-time, so they can decide whether they want to purchase the product there and then. Alternatively, if the customer phones our call centre for a quote, the customer service representative can generate a price for them – based on exactly the same rules and delivering the same result.”

Following the success of this initial solution, Hiscox embarked on an even more ambitious project to launch an online direct insurance service for small business customers in the US.

“The situation in the US is more complex, because we are selling three different products – general liability, professional liability and business owners’ policies – to companies in 50 industries across 24 states, each of which has its own insurance regulations,” says Chris Waters. “We need to gather a lot of information from each customer before we can get to the rating stage, and we calculated that there were approximately 5,000 different possible journeys that a customer could take through the website based on the questions we need them to answer.

“Building a set of static web pages to cover all the options would have been extremely time-consuming, and updating them when we needed to make a change to one of the products would have been difficult to manage. So we looked to WebSphere Operational Decision Management for a smarter approach.”

The Hiscox team created a set of business rules that govern which questions each applicant needs to answer. For example, if an applicant answers “yes” to a question about whether they would like to add professional liability insurance to their general liability policy, the rules will initiate appropriate follow-up questions about their professional liability status. As the applicant proceeds with the online application process, the rules engine feeds the appropriate questions to a web generator, which dynamically creates the web pages in real time. As a result, the applicant only needs to answer the questions that are relevant to their situation; at the same time, Hiscox is able to collect all the information it needs to rate the customer and provide a quote.

Solution Components

Software

- IBM WebSphere® Operational Decision Management
 - IBM InfoSphere® Change Data Capture
-

“We can actually create, test and roll out a new rule in about a week if needs be. Compared to a more manual approach where changes need to be hard-coded into several different systems, it’s a considerably simpler and faster process.”

— Chris Waters, Head of Architecture, Hiscox IT

“When we launched the direct insurance service in the US, we only knew of one other insurance company that was able to offer liability insurance online, and they were only operating in one state,” says Chris Waters. “So our multi-state system was really the first of its kind, which put us way ahead of the competition. As a result we have seen very rapid growth in that area of the business, and although other insurers have subsequently launched their own online direct insurance websites, our leadership has given us an important head start.”

Making changes and launching new products

One of the most important strengths of Hiscox’s approach is that when new regulations are introduced, or the needs of the business and its customers change, business rules can easily be added or updated to reflect the evolving situation.

“In normal circumstances we manage change requests on a monthly cycle,” comments Chris Waters. “But we can actually create, test and roll out a new rule in about a week if needs be. Compared to a more manual approach where changes need to be hard-coded into several different systems, it’s a considerably simpler and faster process. For example, the dynamic generation of the web pages in the US system saves about 70 percent in terms of development time because there’s no need to rewrite static web pages every time we update the questions.”

Enhancing data quality

Besides these customer-facing applications, the WebSphere Operational Decision Management solution is also being used to facilitate Hiscox’s own internal data management.

The company’s data warehouse, which stores current and historical information used for analytical purposes, collects data from a number of transactional systems via IBM InfoSphere® Change Data Capture. This data is copied to a landing area where it undergoes a series of validation and coding processes, which are managed by rules held within the Decision Center component of WebSphere Operational Decision Management. The validation and coding are performed via batch processing, but WebSphere Operational Decision Management can also support real-time processing.

“To enhance our ETL [extract, transform and load] process without increasing its complexity, we use Decision Center to manage validation and coding on a business level,” says Chris Waters. “This helps Hiscox maintain excellent data quality and consistency. Best of all, Decision Center is relatively easy for users to learn, even if they don’t have deep technical knowledge. As a result, the rules can be managed by our business analysts, which gives them greater control of the data they use in their daily work, while freeing up the IT team to focus on other tasks.”

Looking to the future

On the longer term, Hiscox plans to make wider use of tools like Decision Center to help subject-matter experts in other areas of the business create, manage and update their own business rules. This self-service approach should make life easier for both business users and IT staff.

“We are keen to maximise our return on investment by using WebSphere Operational Decision Management widely within the business,” says Chris Waters. “From the three different projects we have already mentioned, it’s clear that this is a very flexible product with many possible applications – and we are eager to introduce more self-service capabilities so that the users can solve their own problems without needing to wait for support from IT.”

He concludes: “From an insurance industry perspective, the WebSphere solution gives us a single, comprehensive platform for rule-driven business process management. Over the long term, we plan to replace our legacy ratings systems with this unified solution and harness our service-oriented architecture to deliver even greater standardisation and control across all business units, products and channels.”

For more information

To learn more about how IBM can help with business rules and operational decision management, contact your IBM sales representative or visit: ibm.com/operational-decision-management/



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Castilla y León regional government adapts quickly to new laws

Overview

Challenge

With Spain's new law promoting care and autonomy for dependent people, this regional agency needed to confirm that eligibility verification and benefits were consistently applied.

Solution

Using advanced case management strategies from IBM, the agency created a centralized process-oriented management system for granting benefits and automating work that helps staff deliver equal and timely service to eligible citizens.

Benefits

Reduced time to process benefits; enables agency staff to support a greater number of cases; supported rapid compliance with new law and provides flexibility for implementing future policy changes.

The regional government of Castilla y León, one of Spain's 17 autonomous regions, administers a broad range of social programs through its Social Services agency. More than 50,000 people benefit from the agency's social assistance programs for the disabled and elderly, and for child protection.

Keeping pace with changing regulations

Spain's recent passage of a law promoting care and autonomy for dependent people, including the elderly and disabled, dramatically increased the number of cases that the region's Social Services agency had to process. The law not only introduced new social benefits, but backed them with precisely defined eligibility criteria. However, because data about citizens was kept in various offices, eligibility verification was often inconsistent. Additionally, agency staff found that citizens who were eligible for services were not always treated the same way for each comparable case due to inconsistencies in the process.

Applying advanced case management strategies

To support the new law and improve services to qualifying citizens, the Social Services agency launched its new Social Services Unified Access System (SAUSS) that acts as a single point of contact for citizens and enables agency staff to manage case progression and resolution consistently across all offices. The SAUSS project included the application of advanced case management strategies using IBM® Software to create a



“By combining the strengths of IBM Software and services, we are dramatically reducing the time to process benefits, allowing the staff to put more focus on handling exceptional cases.”

—José María Molina, Project Director, IT Department Social Services, Social Services Management, Family and Equal Opportunity Council, Junta de Castilla y León

centralized process-oriented management system for granting benefits, automating the agency’s work and shortening service delivery. The solution includes the following software products:

- IBM FileNet® Content Manager software provides a central repository for citizen information that can be shared by case managers across all branches and offices, thus eliminating redundant information.
- IBM FileNet Business Process Manager automates business processes to help ensure equal and timely service and payments to all eligible citizens.
- IBM WebSphere® ILOG® JRules business rule management system (BRMS) software facilitates the development, deployment and maintenance of the business rules that govern the complex decisions to be taken in the process. For instance, a rule-based decision service is used to score applications and assess eligibility.
- MicroStrategy software is used for statistics and scorecard balancing.



“We identified the advanced case management capabilities of IBM Software, including business rule management, as key in helping us cope with regulatory and internal policy changes,” says José María Molina, Project Director, IT Department Social Services, Social Services Management, Family and Equal Opportunity Council, Junta de Castilla y León. “We chose IBM Software because of the depth of its functionality, robustness, and ease of use and integration.”

Solution components

Software

- IBM® FileNet® Business Process Manager
- IBM FileNet Content Manager
- IBM WebSphere® ILOG® JRules

IBM Business Partner

- Thales
-

“As each application is processed faster and more accurately, the agency can now deliver social benefits more efficiently.”

—José María Molina

The SAUSS system was assembled by Thales, a system integrator and IBM Business Partner. Two people—one from Thales and the other from the agency—were primarily responsible for developing the rules of the system. They prepared for the project by attending an IBM Software training course given by IBM Software Education Services. In all, the project lasted one year. The system was developed to run in a Java™ environment with Microsoft® Windows® 2000.

Flexibility to support changing laws

Because all business rules governing the new system are stored in a central repository, the agency’s IT department no longer has to recode applications associated with SAUSS when new policies and regulations are passed. The agency’s policy managers can access the rule repository through a web-based interface to review, modify, test and redeploy rules to implement changes directly. Furthermore, as the decision logic is managed separately from business processes, policy changes can be implemented without requiring any changes to the processes which rely on them. In addition, policies can now be changed in one place for use by multiple processes and applications, reducing maintenance time and cost.

Handling a greater number of cases

The new system has greatly improved the productivity of approximately 1,500 agency and municipality personnel. It allows them to more easily handle the greater number of cases resulting from the introduction of the new law. Because the system automates the processing of most of the paperwork, agency staff can instead focus their time on handling exceptional cases. The solution’s powerful, user-friendly interface allows case managers to review, validate and maintain cases directly to confirm compliance with legal requirements.

Even though the number of cases has increased significantly, each application is processed much faster, enabling the agency to deliver services in far less time on average. What’s more, the agency can easily confirm that transparent and fair decisions are applied through consistent scoring and rules-based eligibility criteria across all agency centers and municipalities.

“By combining the strengths of IBM Software and services, we are dramatically reducing the time to process benefits, allowing the staff to put more focus on handling exceptional cases. As each application is processed faster and more accurately, the agency can now deliver social benefits more efficiently,” says Molina.

For more information

Contact your IBM sales representative or IBM Business Partner. Visit us at: ibm.com/software/data/advanced-case-management

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Please Recycle

Latin American tax collection agency

Increasing tax collection and cutting costs with IBM WebSphere ILOG

Overview

The need

The tax collection agency of a Latin American country struggled to effectively collect taxes because of the complexity of the tax code and the frequency of annual tax changes.

The solution

The agency implemented a business rules management solution to automate tax collection using WebSphere ILOG JRules and provided an online questionnaire enabling taxpayers to quickly classify their tax status and determine the appropriate tax payment.

The benefit

- 8.1 percent increase in tax collections
 - 3.4 percent increase in added value tax
 - 10 percent decrease in cost of tax collection
-

The tax collection authority for a Latin American country is responsible for implementing tax and customs legislation. The agency encourages voluntary compliance and as a result, helps taxpayers access and work with the information needed to evaluate how much tax they owe.

Need to increase tax collections

Tax collection as a percentage of GDP has been historically low in this country. While there are several reasons for this, one major reason is that the country's tax law is very complex. There are 7,000 tax laws that change every year, with related policies changing even more frequently.

Taxpayers had to go to special tax payer offices located throughout the country, but not especially easy for ordinary citizens to reach. At these offices they had to register—not pay. It was difficult just to get people to register, a time-consuming process, so the agency did not even know approximately how many taxpayers it had. In addition, the collection of taxes was expensive.

Modernizing legacy tax collection system

The agency wanted to make it easier for all taxpayers to understand the law, especially new taxpayers who were fulfilling their responsibility and current taxpayers who had changed their profile and needed to know their new obligations.

By focusing on technological change, the authority believed that it could raise collections and, at the same time, improve overall operational efficiencies and cut costs. It developed the solution from the



very beginning with a service oriented architecture (SOA): a collection of services designed to operate across a heterogeneous platform and which could support all areas of the authority's collection efforts. The developers foresaw 13 services to support the agency's areas. The development started with three services, one of which was the Taxpayer Identification Service, which is used by the agency's staff to register citizens in the taxpayer databases and help citizens assess the amount of tax they owe thanks to online dynamic questionnaires.

The agency accompanied its new initiative with an education campaign throughout the country.

Simplifying, automating tax rules

The authority wanted a solution that would empower business people to be in command of changing the rules themselves, with minimal IT involvement in order to increase response times and make the system more agile. The organization turned to IBM for a business rules management system (BRMS).

The authority chose the IBM® WebSphere® ILOG® JRules® business rule management system (BRMS) because it was shown to be the market leader in several studies. It implemented the JRules rule engine for its Taxpayer Identification Service. In addition, the organization used JRules to create, maintain and implement decision services—automated decision points within its business system. The many complex taxation rules in the country had to be isolated from the applications in which they were written. The IBM solution also provides automatic feedback to the taxpayer when the taxpayer is registering on tax payer databases.

With the capacity of JRules to handle thousands of complex rules in a very short timeframe, the authority developed a web-based interface where taxpayers can create a personal profile and determine their tax obligations. With online questionnaires powered by business rules, tax rules are simplified into a series of 20 to 55 questions. The questionnaire is dynamic, meaning that each question is based on the previous answers provided by the taxpayer, all in real-time, thanks to the JRules BRMS. Tax law changes every year but related policies change with more frequency, and the organization's business users can easily, safely and reliably apply the changes as they occur.

Solution components:

Software

- IBM® WebSphere® ILOG® JRules
-

8.1 percent increase in tax collections

Since the service went online, the questionnaire powered by ILOG JRules has handled an estimated 7.6 million transactions with taxpayers.

The use of ILOG JRules has led to immediate benefits. For instance, in the first year of the Taxpayer Identification Service operation, the total real tax collection for the agency increased by 8.1 percent, and income tax collection grew by 12.9 percent.

Added value tax collection grew by 3.4 percent, which is 4.17 percent of GDP, the largest percentage increase in 13 years. The overall collection of taxes has risen to 12 percent of government revenue, an increase of 15 percent.

In addition, 544,000 taxpayers were added to the authority's taxpayer databases, 35 percent more new taxpayers than the previous year. Most of these users registered using the new self-registration process.

Even with the cost of software development, the tax collection cost dropped by 10 percent.

Planning further use of WebSphere ILOG JRules

IBM also provided the agency with Professional Services to quickly implement the software, ensure optimal JRules execution performance, assist in creating an effective rule governance plan, and double-check its technical flexibility in fitting with other components.

Currently, the organization plans to use the JRules BRMS in several other areas, for instance, to implement a risk assessment analysis made by a third party and distribute workloads for document delivery for taxpayers.

For more information

Contact your IBM sales representative or IBM Business Partner, or visit us at: ibm.com/software/websphere/ilog-migration/

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Overview

Greater flexibility

Accovia sought to integrate its booking engine with a business rules management system that would support a high degree of travel management autonomy.

An integrated solution

Accovia integrated its new travel industry booking engine with the IBM WebSphere® ILOG® Business Rules Management System (BRMS).

Reduced time to market

The new solution helps Accovia deliver products to market more quickly, improving agility and competitiveness.

Solution Components:

Software

- IBM WebSphere® ILOG® Business Rules Management System
-

Accovia enables dynamic packaging and pricing for travel industry customers

IBM WebSphere ILOG Business Rules Management System supports booking engine for travel packages

Accovia designs, builds and implements IT solutions such as booking engines and business intelligence systems for travel and tourism professionals throughout Europe and North America.

Challenge

With consumers demanding more options and control over their travel choices, the viability of prepackaged and prepriced travel products is waning. Tour planning, pricing and booking take place in an increasingly dynamic environment where knowledgeable travelers package and manage their own tours via the web, with no travel agent interaction.

Tourism professionals now require greater flexibility from their booking engines so that they can introduce new offers to the market faster and respond to their customers' emerging demand for real-time dynamic packaging. In turn, Accovia, which was in the process of developing a next-generation booking engine, sought to integrate its solution with a business rules management system that would support a high degree of travel management autonomy.

Solution

Accovia integrated its new travel industry booking engine with the IBM WebSphere® ILOG® Business Rules Management System (BRMS). Using the IBM solution, Accovia can better manage how travel services—including flights, accommodations and on-site options—are packaged. And the solution enables the Accovia booking engine to calculate pricing in real time as customers design their individualized packages.



The WebSphere ILOG BRMS solution is the foundation of a two-tiered business rule system that Accovia provides to its customers through its new booking engine. The first tier of complex rules is designed for specialists developing strategically important new or seasonal offerings. The second tier comprises a simpler set of rules designed for business users to deploy quickly in tactical response to daily fluctuations in pricing and availability.

Benefits

- Enhances customer satisfaction by enabling booking engines to meet traveler demand for real-time dynamic packaging and booking
- Speeds time to market, reducing the time required to build new products from months to weeks
- Increases competitive and pricing agility by enabling the company to put new business rules into production within hours, rather than weeks

For more information

To learn more about IBM WebSphere software, please contact your IBM representative or IBM Business Partner, or visit: ibm.com/websphere



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“To offer real-time dynamic packaging, we needed to build our solution on a foundation that reacts quickly to the market. ILOG BRMS offers functionality that allows users to manage their own rules using the routines of their web application.”

— Jean-Marie Grange, head of implementation team, Accovia

Novagalicia Bank

IBM WebSphere ILOG JRules helps banks automate routing rules for product processing

Overview

The need

Bank employees were struggling with 173 business rules for routing product requests to the individuals with proper decision-making authority. Rules changed daily, and it was taking too long to implement the changes.

The solution

The bank implemented IBM WebSphere ILOG JRules business rule management system (BRMS) to eliminate guesswork and error, lower risk and accelerate time-to-market for product processing.

The benefit

Hours rather than days to implement changes to business rules; 14 minutes per night to assign 200,000 non-payments to appropriate managers.

Spanish savings banks (caja, or caixa in Galicia) are financial institutions that arose in the 19th century to encourage the habit of thrift among the poor by accepting low-volume deposits and granting small loans. Over time, these banks have grown to rival commercial banks. In the Autonomy of Galicia, Novagalicia Bank is the largest financial institution and the sixth largest Spanish savings bank. It has 1,368 branches, 7,224 employees, 2.9 million customers and 124 billion EUR in annual business volume. The bank also has 17 branches in 10 other countries, including U.S., Switzerland, Brazil, England, Mexico and Portugal.

Novagalicia Bank has been quick to adopt electronic banking technologies such as mobile banking and electronic invoices, and is a banking technology leader among savings banks in Spain. In 2005, the bank embarked upon service oriented architecture (SOA) initiative, internally called "Metrópolis," to increase its flexibility with repeatable business services. The bank also undertook a business process management project to improve agility and operational performance by organizing more efficient workflows and business processes. Within this effort, Novagalicia Bank created business rules to help employees channel products such as loans through the approval processes.

There are many departments and committees within the bank that must act on a loan depending upon a variety of factors such as: The channel through which the request originates, (i.e., the Web or a branch), and the type of collateral the customer is offering. The process is complex and full of rules and regulations internal to the bank and imposed by government, regional and central banks.



“We have a better quality product and more satisfied customers with JRules. In addition, business users are able to change and manage business rules in conjunction with the architecture team in a matter of hours using Rule Team Server, as opposed to days previously.”

—Jose Antonio Fernandez, Director of
Architecture and Transactional Bank,
Novagalicia Bank.

While responding to customers' needs promptly was of the essence, it was also critical that proper controls be in place in order to manage risk. The business rules ensured that loan applications would go to the right individuals in the right departments, who were authorized to deal with the risk level involved.

Anxiety, errors in making routing decisions

A customer entering the bank to apply for a loan initiated a chain of approvals that was outlined in a 45-page book containing 173 business rules. When followed manually, the decision-making process was error-prone, and routing product requests took too much time.

“There are numerous departments that deal with loans, depending upon the level of risk and type of loan involved,” says Jose Antonio Fernandez, Director of Architecture and Transactional Bank. “The branch had this book to guide them in what to do when a customer requested a certain product. And what made it especially difficult was that the rules change quickly.”

In order to deal effectively with its loan business and other products, Novagalicia Bank changed its risk consignment practices. On one day a department might deal with loans up to a certain limit, and on the next day that limit may be lowered because of tightening money or rising risks, including regulation changes by central bank institutions and other governmental policy agencies.

30-millisecond decision-making

The bank needed to automate its business rules to solve these challenges and enable loan and other product requests to be sent quickly for processing. Seeking a business rule management system (BRMS) that could be implemented as part of the SOA initiative, the bank also looked for a technology that would enable business users to change rules quickly.

By using the traditional development systems (PLI/IBM® CICS®/IBM DB2®), only a limited percentage of the business rules could be automated due to their high complexity, their difficult maintenance and the difficulty of achieving an effective response to changes.

Solution components

Software

- IBM® WebSphere® ILOG® JRules
 - IBM WebSphere ILOG Rule Team Server
-

“JRules is part of our SOA tools portfolio, that allow us to provide solutions to complex problems with the response time and the consequential cost-saving required by our business.”

—Jose Antonio Fernandez

For the solution to its problem, Novagalicia Bank turned to IBM and the WebSphere® ILOG® JRules BRMS. With the JRules BRMS, the bank was able to implement its 173 business rules as repeatable business services, saving programming time by reusing these services. JRules works seamlessly within the SOA, executing within 30 milliseconds to direct a request to the right individual with the proper authorization to make a decision.

“Implementing ILOG JRules has allowed us to automate all of these business rules, considerably reducing the effort required for their development and maintenance, by using efficient validation methods and involving the people responsible for business in the different stages of the project,” says Fernandez. “This solution helps the colleagues, since it indicates which business rules have been used to make a decision, avoids mistakes that were previously checked by the Risks Department and improves the workflow that the Process Department has optimized.

“Not only does the automated BRMS eliminate guesswork and improve accuracy, time-to-market on loan processing has improved with JRules, saving days of work.” We have a better quality product and more satisfied customers with JRules. In addition, business users are able to change and manage business rules in conjunction with the architecture team in a matter of hours using WebSphere ILOG Rule Team Server, as opposed to days previously.”

Connecting the dots

Another area of the bank using WebSphere ILOG JRules BRMS is non-payments. Novagalicia Bank processes approximately 200,000 non-payments per day, and each one has to go to the manager responsible for that account. Non-payments could be for credit cards and different types of loans, and six business rules govern the assignment to the proper manager. With JRules, the 200,000 non-payments are assigned nightly in a batch process that takes 14 minutes. Before JRules this used to be a manual process involving hours or in some cases days.

“JRules is part of our SOA tools portfolio, that allow us to provide solutions to complex problems with the response time and the consequential cost-saving required by our business,” concludes Fernandez.

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Universitair Ziekenhuis Antwerpen (UZA)

For this University Hospital, a rare-disease diagnosis platform allows for an earlier, quicker and more accurate diagnosis by integrating both medical expertise and data mining tools



Universitair Ziekenhuis Antwerpen (UZA)

Antwerpen, Belgium
<http://www.uza.be/UZA>

“The improvement in the quick diagnosis and treatment of rare diseases can mean the difference in the lives of patients.”

— Geert Smits

The University Hospital of Antwerp is a University Center for top clinical and customer-friendly patient care.

The Opportunity

One of the biggest challenges in treating rare diseases (those that affect fewer than 5 people in 10,000) is the provision of an early diagnosis. Because of the rarity of their disease, patients may not be diagnosed early enough for the most effective treatments. UZA wanted to be able to diagnose and treat these rare diseases earlier and more effectively. To do so, it needed to be able to access and use information from many sources.

What Makes it Smarter

The University's rare-disease diagnosis platform allows for an earlier, quicker and more accurate diagnosis by integrating both medical expertise and data mining tools. Rules are generated much faster and more accurately through a predictive model based on known patient data. In comparison with a pure rule-based system, a combination with data mining tools provides both higher sensitivity and more specificity. The solution can serve as an intelligent and dynamic knowledge base on rare diseases. The improvement in the quick diagnosis and treatment of rare diseases can mean the difference in the lives of patients.

Real Business Results

- Rules are generated more quickly and accurately using a predictive model based on known patient data
- The solution can serve as an intelligent and dynamic knowledge base on rare diseases, improving the quick diagnosis and treatment of rare diseases
- Compared with a pure rule-based system, a combination of rules and data mining tools provides both higher sensitivity and more specificity

How can we improve the care and prognosis for patients diagnosed with rare diseases?



Solution Components

- IBM® Global Business Services® (GBS) Application Innovation Services
 - IBM GBS Strategy and Change
 - IBM Software Services: ISSIM - IBM SWG Services for Information Management
 - IBM WebSphere®: WebSphere ILOG® JRules
 - SPSS® Modeler
-

For more information

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Odyssey Logistics & Technology Corporation increases agility

Global company uses IBM software to optimize processes and meet customer needs

Overview

The need

Odyssey Logistics & Technology Corporation (OL&T) wanted a next-generation supply chain management (SCM) platform to help provide end-to-end transportation solutions and reduce costs for customers.

The solution

OL&T created the platform using IBM® BPM, IBM WebSphere® ILOG® JRules, IBM WebSphere Partner Gateway and IBM ILOG CPLEX® Optimization Studio software.

The benefit

The solution increased the company's visibility, flexibility and responsiveness, allowing it to react quickly to constantly changing customer and marketplace needs in a global logistics environment.

Headquartered in Danbury, Connecticut, Odyssey Logistics & Technology Corporation (OL&T) is a leading global logistics service provider serving customers in North America, Europe and Asia. The company combines strategic, commercial, operational and technology services enabling its customers to reduce costs and receive the best possible service from transportation providers. A sophisticated, global web-based infrastructure, proven operational processes and a vast network of logistics service providers differentiate OL&T from the competition.

Responding to increasingly complex logistics management

Unlike many companies in the logistics industry, OL&T does not own a transportation fleet. Rather, it helps customers manage their logistics processes and choose the best transportation option given each customer's unique needs. The best option can involve multiple modes of transportation, resulting in a complex collaboration among several organizations including customers and logistics service providers. In addition, choosing the right option for each customer has grown increasingly challenging as OL&T has expanded into new markets in Europe, the Middle East and the Asia-Pacific region. For each customer, OL&T must consider



“The new platform has increased productivity upwards of 300 percent for certain functions, while at the same time has reduced errors by more than 10 percent, making this very powerful technology.”

—Russell Marky, senior vice president,
global business technology, OL&T

region- and language-specific issues and give customers the ability to customize the existing business processes. Geographical data, rate calculation, transactional optimization and booking processes can vary from one country to the next.

“Switching to a task-based paradigm has reduced the learning curves of both our internal and external users, knowing exactly what to do next and taking action only when needed. This has increased productivity upwards of 300 percent for certain functions, while at the same time has reduced errors by over 10 percent, making this very powerful technology,” says Russell Marky, senior vice president, global business technology, OL&T.

Increasing complexity leads to an increase in data

The many factors involved in creating custom processes for each customer and region have increased transactional and master data, which OL&T must manage effectively. To better meet its global customers’ needs, OL&T wanted to develop the next generation of its Odyssey Global Logistics Platform, the technology it uses to create business rules and manage the many integrated components of its customers’ supply chains. OL&T sought to improve its operational efficiency, automate as many manual processes as possible, improve its ability to measure key performance indicators (KPIs) and gain greater flexibility in its business process management. “We study the big picture of logistics and we come back to each customer with a flexible plan that adapts over time,” says Leonid Podoshev, vice president, software engineering, OL&T. It’s not necessarily a static plan and that’s why the right technology, total visibility into the system and the tight control matter. Because once we put a plan in place, we have to monitor it constantly, measure it and adjust it to improve on it for the long term. Since customers may want to track different KPIs—such as how often deliveries are made, how many are made in the course of a day or whether or not shelves are stocked in a timely manner—having a tractable platform is key to our reporting.”

Solution components

Software

- IBM® BPM
 - IBM ILOG® CPLEX® Optimization Studio
 - IBM WebSphere® ILOG JRules
 - IBM WebSphere Partner Gateway
-

“The level of automation our new system delivers minimizes human error and keeps processes flowing smoothly by ensuring tasks are completed on time.”

—Leonid Podoshev, vice president,
software engineering, OL&T

Applying process innovation

OL&T applied process innovation to give its customers an intelligent, adaptive and optimized extended supply chain that's based on demand. Process innovation is the practice of synchronizing processes across business functions and managing for the cumulative end result. Rather than developing the new system itself, OL&T chose to build it using a suite of products including IBM BPM, IBM WebSphere ILOG JRules, IBM WebSphere Partner Gateway and IBM ILOG CPLEX Optimization Studio software.

The IBM applications provide greater process automation that changes the operational paradigm so that the system guides the user to the next task rather than the user having to guess the correct choice. Plus, the IBM applications include preconstructed processes based on sets of common activities, enabling OL&T to use them to quickly assemble custom processes that meet its customers' needs. OL&T uses business rules to manage rate structures, routing guides and carrier information, which are the aspects that change most frequently, helping to further reduce the complexity of the logistics management process.

The WebSphere ILOG JRules software enables OL&T to create decision tables including rate structures, possible routes and available carriers. Then, by using the information in its system, OL&T creates rules that enable better, smarter, automated decision-making and that can be adjusted quickly as needed. Further, the applications enable OL&T to monitor processes and track shipments in-transit.

Helping manufacturers stay ahead of demand

When a store runs out of popular products, logistics challenges are often responsible. For example, foods and beverages cannot be delivered to grocery stores when the manufacturer lacks the raw ingredients to make them. Market volatility is an ongoing issue for many of these manufacturers, especially when it comes to managing the costs associated with transporting the raw materials required to make products and then transporting the finished goods to retailers. The new platform helps OL&T make sense of the continuously shifting transportation landscape, and more importantly, helps identify cost savings and strategic adjustments to improve service and assist manufacturers in bringing their products to market.

Improved flexibility and responsiveness

OL&T has found that the new solution greatly increases its flexibility and responsiveness. For example, changing business rules used to take weeks but, using the new system, a similar change might take a few days or even a few hours. Users can simply edit the appropriate business rule, which is written in simple natural language that's easy to understand, even by business users. In addition, the new platform provides greater automation, which helps reduce human errors. "The system provides capabilities of directed work, so we're less dependent on the human factor because if a task is not done in time, the situation could be escalated by the system," says Podoshev. OL&T customers benefit from the new platform as well because the company's increased agility and responsiveness help customers improve supply chain efficiencies and keep costs down. For example, the company can now measure work process performance, using that information to fine-tune decisions and interactions between OL&T staff, customers and carriers. These capabilities have enabled OL&T to:

- Meet or exceed customer KPIs in areas of on-time deliveries, invoice turnaround and error-free shipping
- Implement best-in-class freight audit processes globally
- Provide visibility into shipments moving on any mode to anywhere in the world

The IBM solution also freed OL&T developers to focus on developing and improving business rules and logic. "The solution provides scalability, performance and security. We didn't need to worry about those issues because they were delivered right out of the box," says Podoshev.

For more information

To learn more about IBM WebSphere software, contact your IBM sales representative or IBM Business Partner, or visit: ibm.com/bpm

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Beauty care retailer achieves four times more business agility and 20% lift

IBM WebSphere ILOG JRules helps retailer develop rules-based decision management solution

Overview

Challenge

Paper-based, manually-driven loyalty program was slow to capitalize on sales opportunities and was confusing for store staff and customers.

Solution

New loyalty program based on IBM WebSphere ILOG JRules business rules management software automatically calculates promotion discounts and current loyalty points and recommends products for future purchases. Business users can quickly implement promotions to capitalize on business opportunities.

Benefits

- Four-fold more business agility with flexible solution for implementing promotions
 - 20% lift in sales revenue in one year reported in certain areas
 - Reduced cost of managing promotions program
 - Improved customer shopping experience
-

One of the world's leading botanical beauty care retailers is well-known in its markets for its chain of 1,500 stores where customers can shop surrounded by beautiful products and helpful staff. As a mid-to-high end marketer, the company looks to its stores to provide customers with an enjoyable shopping experience aided by well-trained employees who advise customers on the differences between products and how to use them for best results.

Inflexible loyalty program stalls sales

To further differentiate itself in its markets and strengthen its bond with customers, the company offers a loyalty program that rewards frequent buyers with discounts and promotions. However, in order to get their points, customers had to get a paper card stamped by an employee at the point of sale. The employee would then have to calculate the applicable discounts, along with promotional discounts and any coupons the customer was carrying.

The system was confusing and time-consuming, and took employees off the floor and away from advising customers, forcing them to be human calculators at the point of sale. Delays during checkouts undermined customer satisfaction with both the company and its loyalty program.

Promotional campaigns were implemented every two weeks and managed by the company's point-of-sale software solution, but the software was not designed for that purpose, and the process was costly and labor intensive.

High rates of error and training costs

In addition, there was little flexibility to engage in rapid, targeted promotions—such as putting self-tanning products on sale during prolonged rainy spells in a certain area, or offering discounts on sunscreen products during a heat wave. In many cases, it took four weeks to make a change in the bimonthly update schedule, and the



promotion system could not target a subset of stores at all. Promotions for a targeted market had to be executed manually by training employees with price lists and rules on paper, incurring high rates of error and extra costs.

The company believed that its loyalty program was critical to increasing customer satisfaction and that opportunities were being lost due to lack of business agility. It began reviewing a more rules-driven approach based on IBM® WebSphere® ILOG® JRules business rules management system to manage decision making and increase the flexibility of its loyalty and promotions programs.

20 percent lift in one year

The IBM solution blends three types of decision at the point of sale and is activated when the employee inserts the customer's new magnetic loyalty card into the system. The employee then scans the items. Using thousands of business rules in a common repository, the decision management system automatically calculates the price of the purchased item and the total basket given all applicable promotions and coupons so that the customer always comes out with the best possible price. The system also calculates the number of loyalty points the customer has accrued according to the rules of the loyalty program—certain customers may be getting double points depending on what products they purchase.

Finally, the system makes a recommendation on what products the customer might want to consider buying next, and prints out coupons for the products. When the card is returned to the customer, the back of the card shows the total price and discount rate, the current balance of loyalty points and the product recommended as the next purchase. The printing on the card is erased the next time the customer uses it, and the card is reprinted with new messages.

The automatic calculations deliver a totally personalized experience for the customer while relieving the sales person from the chore of deciding which promotional price or coupon is applicable and calculating points. Customers are happy with the new system. At last count, 85 percent of customers are signed up for the loyalty program. In certain areas in which the solution has been implemented, the company has experienced a 20 percent lift in sales revenue in one year. The company is so pleased with results that it doubled the pace of implementation to all the stores.

Four-fold increase in business agility

The WebSphere ILOG JRules solution delivers more than a POS solution that blends multiple types of decision making. The solution enables business users to manage promotions and mount targeted promotions in less than a quarter of the time it took previously. The company maintains 300 active promotions at any one time, and 50 to 200 new promotions are launched every two weeks. There are 1,000 rules that govern the treatment of any given customer, which are reused from a common repository. Amazingly, business users with no special IT training maintain the biweekly schedule and launch new promotions in under a week using the WebSphere ILOG Rule Team Server—as opposed to four weeks in the previous environment.

Business users can define and edit rules using a natural language and customizable business vocabulary. Rules can also be expressed in graphical formats, such as decision tables and decision trees. Business users can develop promotions for a small group of stores or targeted stores within an area.

The WebSphere ILOG solution is also integrated with the company's business intelligence data warehouse to predict product promotions following the analysis of results. The integration of predictive intelligence with the ability to implement changes quickly facilitates the incremental improvement of promotional campaigns.

Reduced cost of promotion management

The company is now able to deal with more information at a higher level of personalization and business agility. And all these benefits come at a lower cost for IT support, since non-technical employees are managing the system. The cost of training has gone down as well, because store employees no longer have to be trained on specific promotions that formerly were managed using price lists and rules on paper.

The same rules can also be applied for online purchases and for personalized promotions in print catalogs, helping the company maintain a consistent multi-channel presence.

As a mid-to-high-end retailer, the company has to be careful about how it positions itself in the market through pricing. All of the company's promotions are now visible to management to ensure that the various geographical regions and stores are in compliance with the company's policies.

Perhaps most importantly, the store employees are back with their customers in an advisory role, and can easily explain promotions to their customers. This provides the indispensable human glue that holds this beauty products empire together. They can also easily explain the promotions to their customers.

For More Information

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Smart is...

Knowing your customer and having the ability to customize product offers based on each customer's needs

For BNP Paribas, a European leader in global banking and financial services, personalization is key to winning customer loyalty and increasing profits. To this end, the bank is rolling out a new master data management initiative that will give it unprecedented flexibility and speed to accommodate to changing market conditions and customize offers for each client.

BNP Paribas

Providing customers with personalized offers through any channel

Today's consumers demand more from their banks. They want products and services tailored to their personal needs. They want convenient, consistent service, whether banking at a local branch, on the web, or by mobile phone. And they also want to be rewarded for their loyalty.

Many banks aspire to such a vision, but few can deliver on it. With critical data locked in silos across departments and applications, each banking division has a limited perspective of the business. But in a bold competitive move, BNP Paribas, a European leader in global banking and financial services, is building an agile infrastructure that will allow it to quickly build new product offerings and deliver targeted promotions.

"There is always someone who will challenge you on services," says Vladimir Milojkovic, Prime Contracting Project Manager, BNP Paribas. "We needed to gain control of our data if we were to create on-demand offers for our clients."





Business benefits

- Enabled bank to personalize offers through any channel—Internet, mobile phone, branch and more—based on each customer's profile
 - Reduced time to market for new products from weeks to days
 - Improved competitiveness with the ability to flexibly and rapidly evolve offers based on market conditions, competitive actions and new regulatory requirements
-

Focusing on the customer

To deliver on its strategic vision, BNP Paribas had to place the customer at the center of each transaction. It meant creating a flexible framework that would allow bank staff to:

- Quickly construct grouped offers mapped to customer requirements, such as providing home insurance with a mortgage.
- Personalize fees based on the customer's profile and service channel, such as giving discounts to some clients.
- Develop multibrand customer loyalty offerings that can be delivered on demand. These offerings would allow the bank to provide special incentives—such as waiving a monthly fee for a specified period—to clients who use several BNP Paribas products.

“We are building a flexible solution to ‘sell’ to our businesses in different countries,” says Cyrille Oudard, Head, Master Data Management, Retail Banking, BNP Paribas.

Smarter Banking:

Personalizing service across channels



Instrumented

Captures, enriches and maintains product, channel, pricing and other information in a single repository.



Interconnected

Provides a trusted source of data and decisions across service channels (Internet, phone, branch) so that customers receive consistent service at all points of contact.



Intelligent

Applies advanced business rules to customize product offers and fees based on each customer's profile and requirements.



Solution components

Software

- IBM® InfoSphere™ Master Data Management Server for Product Information Management
 - IBM WebSphere® ILOG® JRules business rule management system
-

Selecting the right partner

The team launched an evaluation and a proof of concept (POC) and compared solutions from several vendors, including IBM. Members from BNP Paribas' IT, business and procurement teams participated in the process. Solutions were rated on product functionality, technology and pricing.

Portability and flexibility were essential given that financial rules and regulations differ from country to country. "We needed a platform that could be reused regardless of the country or the types of products," says Vladimir Milojkovic. "This is a main challenge because the products which are distributed in Ukraine, for example, are not the same as the products in Italy."

After an extensive review, IBM Software was selected. "IBM provided the best solution for our needs and was experienced in managing product delivery across multiple countries," says Cyrille Oudard. "The project's construction phase was launched in July 2009. We delivered a first release for user acceptance testing in the Ukraine by mid-November and a 'go-live' by the end of 2009."

Rapidly building new products and promotions

Using IBM Software, the bank will be able to create, manage and access master data—the data that is commonly shared across systems and product catalogs. It could also quickly define product offers, as well as the complex relationships between them and the conditions under which they are sold. Customers will receive product offers filtered according to their profile and eligibility.



“If you provide the best product for each customer’s needs, the customer will be satisfied and will reinforce loyalty with the bank, leading to more profitability.”

—Vladimir Milojkovic, Prime Contracting
Project Manager, BNP Paribas

The solution enables business users, instead of IT, to generate, change and manage offers—a critical factor for reducing time to market. “We cannot afford every update being an IT project,” says Cyrille Oudard. “With IBM Software, our business users have the tools to reduce the time from idea to delivery.”

IBM InfoSphere™ Master Data Management Server for Product Information Management (“MDM Server for PIM”) provides the single, up-to-date repository of product and pricing information. Business processes also enable the bank to confirm grouped offering compatibility, base fee enforcement and conditional eligibility. Once validated, new offers can be deployed in the core banking system and made available to business applications across all channels and operations (online, branch, back office, etc.). Multilanguage and multicurrency capabilities enable the bank to deliver a generic asset that will be integrated with the core banking system across all countries where it operates.

“MDM Server for PIM provides a framework that allows our business users to work faster inside the product and offer catalogs,” says Vladimir Milojkovic. “They don’t have to wonder what to do or where to go when building grouped offers.”

IBM® WebSphere® ILOG® JRules business rule management system allows the bank to precisely define highly variable decision logic, such as eligibility and pricing rules. This enables it to target the right product or offer to the right person or adjust service fees and interest rates based on competitive activity in the marketplace. Because rules are authored and maintained in a business vocabulary and accessible via a web-based interface, business users can easily review, modify and deploy rules for use across multiple systems. Business users are provided with comprehensive governance capabilities to effectively manage large numbers of frequently evolving and interrelated rules, while also being able to work collaboratively with both technical and nontechnical roles involved in rule management.



“We will be able to reduce time to market for businesses from weeks to days.”

—Vladimir Milojkovic

Customizing services on demand

Through this strategic initiative, BNP Paribas will reduce time to market for new products and promotions so staff can flexibly and rapidly evolve offers according to market conditions. “Product changes and offers can be created almost in real time and deployed very quickly,” says Vladimir Milojkovic. “We will be able to reduce time to market for businesses from weeks to days.”

The most significant benefit, however, will be experienced by consumers, who can receive personalized offers through any service channel—on demand. For example, when the bank renews a client’s credit card, the system will identify if the client is eligible for premier credit services and offer special terms for upgrading. The system can also recommend new products based on the client’s profile, such as offering an investment account to clients with a large balance in their savings accounts. For BNP Paribas, this will be an important differentiator in a highly competitive market.

“Every bank provides packages to their customers,” says Vladimir Milojkovic. “But we can really target the right product to the right customer. If you can provide the best product for each customer’s needs, the customer will be satisfied and will reinforce loyalty with the bank, leading to more profitability.”

For more information

To learn more about how IBM can help you transform your business, please contact your IBM sales representative or IBM Business Partner.

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Property exchange and rental company modernizes business rules with IBM WebSphere ILOG JRules

Overview

Property exchange and rental company

Industry

- Travel and Transportation

Products

- IBM® WebSphere® ILOG® JRules
- IBM Software Services

For more information, visit:
ibm.com/websphere

A property exchange and rental company provides vacation exchange and travel services to businesses and consumers; an exchange program; and vacation rentals, ranging from city apartments to country cottages and to villas. It also provides advisory, research, asset management, and turnkey solutions and services.

Challenge

With over 3 million lines of code in its complex 35-year-old legacy mainframe system, the property exchange and rental company found itself facing several critical business issues. The company could not respond to changing market needs in real time or readily access the many rules related to property usage, pricing or other issues. As a result, member satisfaction suffered and the group was forced to maintain a costly call center through which 90 percent of vacation exchanges and rentals take place. The system also limited the modes of member notification, threatening revenue by impacting membership and exchange fees.

The complexity stemmed from legal contracts between the company and its participating affiliates that govern pricing and conditions of property usage. These rules are maintained by IT, not the business teams.

“Thanks to [IBM WebSphere] ILOG JRules, we now provide our 3.8 million RCI members with personalized vacations within seconds and real-time access to the world’s largest vacation exchange community.”

— Senior Director—Information Technology, Property Exchange and Rental Company



Solution

The company sought to revamp its legacy system by moving to a Service Oriented Architecture (SOA). The company worked with IBM to implement the WebSphere ILOG JRules business rule management system (BRMS), allowing its business team to more easily maintain and deploy complex decision logic and achieving scalability for its member notification program.

The company chose to create an Enhanced Search application with the JRules BRMS as the back-end platform managing all the time-share rules. The new SOA platform features one central exchange platform and more than six services, including pricing and member communications services. The rules can now be written by business analysts, changed in real time and easily searched and monitored by the business teams. The company was also able to shift support from its costly call center to the more affordable web channel.

Benefits

- Support for more than one membership delivery mechanism increases revenue opportunities around membership and exchange fees
- Capability for business teams to maintain rules reduces IT overhead
- Improved member satisfaction through improved searchability across its network of affiliate properties and reduced failed searches
- Ability to change the rules in real time and respond to market changes in hours or days instead of weeks or months
- Decreased mainframe utilization costs—70 percent overall decrease and 98 percent decrease related to web channel shift



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