

UNUM

A Corticon Success Story



Summary

Unum, a Fortune 500 company and one of the world's leading employee benefits providers, uses Corticon Business Rules Management System (Corticon BRMS) as their business rules engine (BRE) and business rules modeling solution. Unum uses the Corticon BRMS solution to automate the business rules that govern core business functions, thus delivering better customer service at reduced cost. Unum leverages Corticon BRMS across the enterprise, from underwriting and customer acquisition, to policy administration and billing, to claims management.

Corticon BRMS helps Unum to automate more of their business, while still maintaining unprecedented agility and business control. By externalizing business rules from programming code, Corticon BRMS helps Unum's IT group to deliver order-of-magnitude faster implementation and business change cycles.

About Unum

Unum is a market leader in disability, group life, long term care and voluntary benefits. Through a family of businesses built over 160 years and 10,000 employees, Unum provides better benefits for more than 171,000 businesses and their employees worldwide, helping to protect 25 million working people and their families in the event of illness or injury.

Simply Unum is a major product and service platform that makes it easier for customers to do business with Unum. This innovative approach improves virtually every aspect of managing benefits, from making benefits selection with thousands of product combinations available to simplifying and reducing administration costs. These enhancements in turn allow Unum's clients to stretch their benefits budget, minimize administrative hassle and meet the needs of a diverse workforce. Providing an integrated portal, Simply Unum helps customers get answers to questions about policies, billing and claims while making it easier for Unum to introduce new products and services. Integrating legacy systems and (previously manual) processes, Simply Unum employs a SOA-centric architecture built with a number of key technology components, including Corticon's Business Rules Management System (BRMS)¹. The platform of Simply Unum earned Unum the No. 5 spot in the 2008 InformationWeek 500.

¹ The Corticon software was licensed via TIBCO under the brand name TIBCO iProcess Decisions.

Challenge

As part of Simply Unum it was essential that new products and services could be introduced to customers quickly. In the past the business rules that defined these products and services had been hard to find and hard to change. This delayed the introduction of new products and increased complexity and costs because manual workarounds had to be introduced when rules changed too fast for the systems to respond. One of the critical challenges was reducing the time it took to make changes to these business rules.

“Our business rules were locked up in code” said Julie Gross, Assistant VP of Business Systems Implementation “and this led to lack of agility. Changes we needed urgently were taking 12-plus weeks to implement.”

Prior to the project, Unum had implemented business rules in many ways: directly in code, in complex Excel spreadsheets, and in several home-grown rule engines. The problem with all of these approaches is that only simple rules could be externalized to business analysts. Most of the logic still had to be maintained by skilled developers. Over time the business documentation of rules in use became outdated, and the only reliable source of record was the application code.

This became a huge problem when the business needed to change the rules. The code implementing the rules had to be found, then it had to be changed (often in several places) and then the impact of those changes had to be understood. Even simple changes often reverberated across the system. Changes which could take minutes to describe from a business perspective, commonly took weeks of developer time to properly implement and test. The business suffered from a loss of agility and business people and IT alike had to deal with lots of frustration.

“We were drowning in code” said Julie Gross “and we needed something more structured and easy to change.”

Key Requirements

Unum had come across business-rules engines as a way to manage business logic in a simpler and more structured way. When looking for a BRE, Unum identified some key requirements:

- Business rules must be externalized from the applications and application code
- Business rules must be represented in a form that was manageable by business analysts and technical support resources (those who understood the business problems, and not only programmers)
- Business rules must be delivered to other IT systems as web services within their SOA
- The solution must fit with the other components of Unum’s Enterprise Architecture, especially Microsoft® BizTalk and Tibco iProcess. Enterprise Architecture is a corporate mandate at Unum and the selected business rules engine would become a standard component of the Enterprise Architecture.

For Unum, though, business-rules management was more than just a systems or architectural issue. Adopting a business-rules engine to manage business rules was a key component of the company-wide Simply Unum initiative.

Selection

Unum's selection process was designed to find a business-rules engine suitable for widespread deployment – a true enterprise-class, business-rules engine – as well as one that would meet their key requirements. Unum looked at seven vendors and asked several to implement specific rules as a proof of concept. With all the other vendors Unum evaluated, "rules still looked like code" and they found they had to invest hours in setup before they could even begin to implement rules. Based on their evaluation, Unum selected Corticon BRMS for the Simply Unum project. Unum found a number of unique features in Corticon BRMS:

- Automated Quality Assurance – Corticon's unique analysis tools helped to ensure the rules were right, in a way that was understandable to business people.
- Integrated Design Time Testing – Corticon's business-friendly testing environment enables non-technical rule authors to verify the business intent of rules
- Automated Generation of Deployment Artifacts – Corticon's model-driven architecture automatically generates executable decision services from rule models and other supporting deployment artifacts such as WSDLs, supporting Unum's vision of separate business and IT roles.
- Streamlined Rule Authoring – Corticon's 100% declarative, spreadsheet-easy rule modeling, one-click analysis tools and business-friendly testing eliminated hand-offs and made development and maintenance faster

Implementation

Unum found that business systems architects and analysts were productive with the Corticon Studio immediately after Corticon's standard 3-day training. Rule authoring involved identifying rules through facilitated sessions with multiple users and capturing the business rule logic directly in the Corticon Studio. This was a big improvement for Unum as they previously had serious problems expressing rules.

In the past Unum had built various tools to collect business rules and terms, including Microsoft® Excel, Microsoft® Word and even custom-developed Use Case templates and an Enterprise Data Model for terms. None of these tools worked well and the Enterprise Data Model remains foreign to many on the business side of the organization. The ease with which rules could be documented and managed in Corticon contrasted strongly with this previous experience.

Solution

Unum purchased Corticon BRMS and rolled-out the first production applications in mid 2007. In addition to Corticon BRMS for rules, Unum's SOA architecture includes: Tibco's iProcess for workflow, Exstream Dialogue for managing interactive documents, Microsoft BizTalk for integration to legacy systems, and Microsoft .NET for code-based customization. Unum's architecture delivers a unified, model-driven, service-oriented architecture that supports all their enterprise IT systems.

Using Corticon BRMS, Unum has developed true application-agnostic decision services, thus maximizing reuse and agility. With 63 decision services now in production, Unum reuses Corticon BRMS within TIBCO iProcess for process-based decisions, as well as directly with .NET applications and Microsoft BizTalk.

Business decisions from a number of domains have been automated using the Corticon BRMS. Customer acquisition, self-service, contact management, benefit administration and product specification have already been implemented, with benefits (claims) underway. In addition, decisions for some technical domains such as workflow, orchestration and document generation have also been automated. For instance, business rules are applied to workflow data and case data to make decisions to route an application to an auto enrollment process or an interactive enrollment process.

Corticon-managed decision services support many business functions across the Unum group of companies and Unum has been delighted with the system to date. Corticon's ease of use and transparency means that business analysts are fully empowered to manage business rules that comprise business decisions, leading to much faster turnaround on changes. For instance, one rule change had been estimated at 40 hours of development effort using the old approach. The whole change was complete and in production in 1 day using Corticon. This involved just 15 minutes of rule authoring, complete with logical analysis that highlighted 3 incomplete scenarios in the rule definition. Using Corticon eliminated a costly rework cycle had these problems not been found at rule authoring time.

Before the Simply Unum project, a customer could wait eight weeks after a price quote was accepted before their policy was issued; now it takes as little as a week. Changes that would have taken weeks can be made in days even including all the necessary IT governance and controls. And changes are made with accuracy and confidence now, thanks to the model-driven approach and rule verification built into Corticon.

The Corticon Experience

Working with Corticon has been a very positive experience for Unum.

"The tool is easy to learn and easy to use" said John Pennoyer, the System Consultant and Rules Architect who led the project. "And when we did have issues, Corticon was right there to help us. Throughout the project Corticon showed great commitment to its product and its customers".

In the past, Unum's business-rule authors had challenges with managing business rules. In contrast, they find Corticon's one-click rule integrity analysis and user-friendly modeling capabilities extremely effective. Corticon makes it easy for the business rule authors to specify the rules and easy for them to get the rules right – they can see all the gaps, overlaps and problems that they would otherwise have missed. All those missed problems would have shown up as erroneous results in the past, but with Corticon the business-rule authors can catch them and fix them proactively, prior to deployment.

"Using Corticon to manage our business rules lets us adapt and evolve rather than having to reinvent everything for each new product or service," says Rick Klausner, VP of IT enterprise architecture. "We have realized a strong ROI with respect to Corticon."

Future Growth

Unum is exploring an expanded use of business rules by adding business intelligence. They are considering using Corticon to help them define their BI platform and eliminate redundant logic – in their Extract-Transform-Load routines, for example, or in reporting. They are also actively considering replacing their underwriting rating calculations – currently implemented on the mainframe, in XML files, in SQL Server, in DB2 and in C# - with a single, manageable set of business rules.

For more information, call Corticon today at +1.888.619.2424 or email us at info@corticon.com

Corticon Global

Corporate Headquarters

1000 Bridge Parkway
Redwood City, CA 94065
Telephone: +1 888.619.2424
Fax: +1 650.212.2727
Email: info@corticon.com

Corticon Europe

Limesstraat 5
4007 LA Tiel
The Netherlands
Telephone : +31 (0) 344 785570
Fax: +31 (0) 84 719 2974

Sales

sales@corticon.com

Investors

investors@corticon.com

Public Relations

pr@corticon.com

Partnerships

alliances@corticon.com

Technical Support

support@corticon.com