



Client



CALIFORNIA
ASSOCIATION
OF REALTORS®

Challenge

Automate correct selection of complex and changing real-estate transaction forms

Solution

Progress® Corticon® BRMS

Benefit

- Risk reduction—decreasing the costly litigation from errors for realtors
- Higher level of realtor service to clients
- Tenfold improvement in developer productivity
- Lower hardware cost
- Faster, easier maintenance and change management

Challenge

One of the most complex parts of a realtor's job is determining what forms to use for what transaction. There are approximately 150 C.A.R.-approved real estate forms (e.g., contact, offer, agreement, disclosure, etc.). These forms are used across a variety of real estate transactions (e.g., purchase of residential property, lease of apartment, etc.).

The number of possible combinations of forms is mind-boggling. Also the failure to complete a single mandated form can subject a realtor to liability and/or sanctions, including fines, loss of license and damaged reputation. The worst part is that the requirements change all the time, due to changing regulations and best practices.

One of the most important services delivered by C.A.R. is advising its membership about the correct set of forms to use for any given real estate transaction. This guidance has been provided by a legal staff via a member hotline which fields approximately 60,000 unique calls per year.

“The rules governing which forms to use change frequently in response to changes in the law, best practices and changes in the text of the forms themselves,” said C.A.R. President William E. Brown. “Some forms apply state-wide, while others are specific to regions, geographies or local associations. Brokers also have their own specific forms and rules, some of which override the local or statewide forms.”

C.A.R. recognized that providing forms advice was an ongoing challenge and one that continues to grow more complicated with time. To help address these challenges, C.A.R. looked at RE FormsNet (REFN), the creator of ZipForm, the exclusive and official forms software of the NATIONAL ASSOCIATION OF REALTORS® (NAR). REFN, a joint venture of NAR and C.A.R., has been in the electronic forms business for 15 years and knew that there had to be an easier way. REFN's leaders envisioned a web-based advisory service that would leverage technology to guide members through the most common consultations. They believed that it was possible to embody relevant knowledge from C.A.R.'s legal staff into a software application and to deliver that knowledge over the web to members when and where needed.

At the same time, REFN's IT staff realized the magnitude of the challenge. They knew that due to both the complexity and the rate of change of legal knowledge, traditional software development techniques would fail. "It's not so much building the system. With enough people and time it could be done," said Joshua Sharfman, C.A.R. CTO. "But, maintaining the system would be problematic."

Key Requirements

REFN hoped to find a solution in the domain of rule-based systems. Prior research indicated that Business Rules Management Systems (BRMS) are designed to encode complex rules and regulations and to allow easier maintenance of such logic.

When looking for a BRMS, REFN had a few key requirements in mind. The new system needed to be:

- **User-friendly**—to empower business analysts to directly manage the rules without programming
- **Flexible**—to enable rapid and frequent change of the rules without breaking the system
- **Modular**—to cleanly separate rules modeling from implementation
- **Fast and scalable**—to accommodate significant use today, while supporting future growth

Selection

REFN evaluated three leading BRMS vendors, including Progress® Corticon® BRMS. "Upon seeing the products in action, it was immediately clear that Corticon presented the closest match to our requirements," said Sharfman. With no formal training, Sharfman downloaded the Corticon software and built a prototype of his system to demonstrate to management that that Corticon could meet the company's requirements.

REFN selected the Progress Corticon BRMS, which included the Progress Corticon Business Rules Modeling Studio to create, validate and test the business rules, the Progress Corticon Business Rules Server to execute the rules in a SOA environment and the Progress Corticon Enterprise Data Connector to directly connect the rules engine to a relational database, eliminating the need for integration code.

REFN found several unique capabilities in the Progress Corticon solution:

- **Simple and comprehensive rule modeling**—The Corticon solution was unique in enabling even the most complex rules to be described as business-friendly models.
- **Automated quality assurance**—The unique Corticon analysis tools helped to ensure the rules were right in a way that was understandable to REFN business people.
- **Auto-generation of web services**—The simple Corticon deployment model accelerated development and helped to provide a distinct separation of responsibility between rule modelers (business) and integration and deployment (IT).
- **Direct database access**—Data access in Corticon enabled rapid prototyping, accelerated development and superior performance for data-intensive processing.

Implementation

Within one week of starting the project, REFN was up and running with the Corticon products. They started by interviewing C.A.R.'s legal staff, capturing their rules and vocabulary directly into the Corticon Studio and then deploying the rules as web services using the Corticon Server. Last, they integrated the rule services into a web-based UI for data collection.

Development included three staff, plus a manager (one UI developer, one database developer and one rule modeler). The full project took approximately five months, including a beta test of nearly 200 users. When completed, it was rolled out to nearly 200,000 users.

Future Growth

Not far off the horizon is the extension of this application, which also assists with local- and broker-specific forms and one that supports other states. This is a simple matter of incorporating the appropriate business rules in the application that has been developed and deployed. In addition, REFN is looking to leverage Corticon to assist realtors in other areas of regulatory compliance and financial reporting.

About Progress

Progress (NASDAQ: PRGS) is a global software company that simplifies the development, deployment and management of business applications on-premise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership. Progress can be reached at www.progress.com or 1-781-280-4000.

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In California, Forms Advisor is to serve as the anchor for other computer-based risk mitigation tools which include:

- **WINForms**—electronic forms
- **Forms Advisor**—specifies which forms a realtor needs and which are mandatory and which are recommended
- **Forms Tutor**—provides educational information on how to fill out the form
- **Legal Q&As**—provides legal information from the car.org website

“The ease of implementation demonstrated that Corticon successfully provided the agility and flexibility to scale within our organization,” says Sharfman.

About the California Association of Realtors

The California Association of Realtors (C.A.R.) is a California-based association with nearly 175,000 member agents and brokers in more than 115 California local member associations. For more than 100 years, C.A.R. has been dedicated to the advancement of professionalism in real estate. Through a variety of member services, C.A.R. helps real estate professionals, collectively referred to as “realtors,” increase quality of service and mitigate risks.

About RE FormsNet

RE FormsNet (REFN), the creator of ZipForm, is the exclusive and official forms software of the NATIONAL ASSOCIATION OF REALTORS. REFN also offers RELAY, the web-based transaction management system/Internet tool.

REFN is a subsidiary of Real Estate Business Services, Inc. (REBS), and is a joint venture between REBS and the NATIONAL ASSOCIATION OF REALTORS® (NAR).

Real Estate Business Services, Inc. (REBS), is a subsidiary of the CALIFORNIA ASSOCIATION OF REALTORS®.

