Keane
enabling transformation

Automotive Financing Company Preserves Vital Revenue Stream by Replatforming Business-Critical Application

Keane Helps Increase Quoting Ability by 3–5 Times, While Saving Development Costs and Creating Migration Path to Web-Based Solution

Abstract

At risk of losing millions of dollars per day if its proprietary business-critical quoting application became inoperable, this automotive financing company had to act quickly. Third-party vendors no longer supported software and hardware components that comprised the application. Having attempted to rewrite the application, the company turned to Keane for a solution. Keane recommended the client "replatform" — preserve the business logic of the application while upgrading the hardware, software, and third-party components on which the application runs. This multi-phased solution strategy addressed the client's immediate needs first and created a transition path to a Web-based solution.

In seven months, and for a fraction of what it had spent rewriting code, the client was running a fully supported application — improving the speed, reliability, and stability that the company required to run its business.

Results That Stand Up

- Replatformed application increased quote processing ability by three to five times.
- No disruption to business operation during roll out.
- Application experienced zero defects in production.

Business Challenge

The automotive financing division of a large automaker needed to upgrade its proprietary "quoting" application, which enables the company to maximize revenue from the vehicles it makes available for resale to automotive dealers, auction houses, and others in the secondary market. The application, which determines the residual value for vehicles whose leases have terminated, had become obsolete — licenses were expiring and third-party components were no longer supported.

At risk were millions of dollars in revenue per day if the application were to become inoperable. Yet, the company had strict requirements. Topping the list was the need to retain the application's business rules, speed, and reliability. Second, the upgrade had to be completed without disruption to the company's business operations. Third, the solution needed to be rolled out in a timely manner.

Moreover, the company's ultimate goal was to move its multi-tiered, client-server environment to a Web-based platform.

The company had previously attempted to replace the application entirely. It rewrote the existing business code using J2EE in an effort to upgrade the quoting application while moving the company to a Web-based environment. However, this strategy was fraught with risk and expense. The project was dropped after three years because the application's business logic failed to work correctly. With nearly $3 million lost, the company turned to Keane for a solution.

Quoting Success

- At an estimated 25% of the cost to rewrite, replatforming provided a migration path to a next-generation, Web-based solution.
- Multi-phased "replatforming" strategy reduced client's risk exposure compared to the "rewrite" approach.
- Using a nearshore delivery model, the project was completed in 7 months, versus typical 18- to 24-month timeframe for rewriting the application.

Solution

Keane presented a multi-phased solution strategy that addressed the client's immediate needs first and created a transition path to a Web-based platform.

This "replatforming" solution moved the client to a stable, vendor-supported infrastructure quickly, while maintaining the business logic and functionality of the application. Keane's strategy was to preserve the business code on the server, which was written in C++ — a preferred development language for the business layer of the application because of its maturity, speed, and stability — while upgrading the hardware, software, and third-party components on which the application runs. Keane's replatforming

approach held far less risk than the rewriting option because the integrity of the business code was not compromised.

In phase one of the project, Keane's nearshore team of developers in Halifax, Canada, upgraded or replaced the client's infrastructure-dependent components — the hardware and software on which the quoting application runs. In phase two, Keane upgraded the third-party components within the application itself — the development tools and middleware tools that enable the application to communicate with the client, server, and other applications.

By using standards that were compatible with the client's existing technologies, Keane ensured a migration path to a Web-enabled environment.

Results

In only seven months, the client was running an application that met desired standards: it was fully supported with a visible migration path to future releases of third-party products, and maintained the speed, reliability, and stability that the company required to run its business. In fact, with the upgraded hardware, the system, which typically processed 60,000 to 70,000 quotes per week, could now handle three to five times more requests.

The application experienced no defects going into production, with the business algorithms — which enable the application to accurately and quickly calculate the value of a vehicle — operating flawlessly.

The client experienced no disruption in operations during the replatforming process. And the replatforming project was completed at a fraction of the cost of the previously attempted rewriting solution.

What's Next

In order to move the client to a Web-based environment, Keane has proposed a third phase. This phase would rewrite only the presentation layer of the application using a J2EE solution. This would enable the client to take advantage of Web-based functionality while preserving the integrity of the application's business logic.

Keane is a global services firm that specializes in enabling transformation of its clients' business and IT functions.