Kelley Blue Book
THE TRUSTED RESOURCE

Pioneer Provider of Vehicle-Pricing Information Uses Technology to Expand Reach

Overview

Country or Region: United States
Industry: Media and entertainment

Customer Profile
Established in 1926 and based in Irvine, California, Kelley Blue Book is the largest vehicle valuation company in the United States. It employs 400 people.

Business Situation
To maintain its leadership position in an increasingly competitive market, Kelley Blue Book needed to build new Internet-based solutions and enhance existing ones in a rapid and cost-effective manner.

Solution
With a technology platform based entirely on Microsoft® development tools, Kelley Blue Book is able to rapidly deliver its car-valuation products as software as a service, with more dynamic and compelling graphics, over a variety of mobile devices and bandwidth speeds.

Benefits
- More compelling, accessible solutions
- Reduced time-to-market
- Tenfold increase in page views per visit

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>
> Andy Lapin, Director, Enterprise Architecture, Kelley Blue Book

For many decades, the *Kelley Blue Book* has served as the leading source of vehicle-pricing information for car buyers, sellers, manufacturers, dealers, and financial institutions. Since the mid-1990s, the company behind that publication has used the Internet to deliver its much-sought-after information. To do this successfully, Kelley Blue Book recently implemented a development environment consisting of the Microsoft® .NET Framework 3.5, Visual Studio® 2008, Silverlight™, Windows® Presentation Foundation, and ASP.NET Model-View-Controller. With these technologies, Kelley Blue Book is automating user-interface testing, deploying a single code set for business logic across multiple user interfaces, implementing powerful zoom capabilities, and customizing solutions for a variety of mobile devices.

NEUDESIC

Microsoft®
.NET
Framework

Situation

Since 1926, Kelley Blue Book has served as the authoritative source of vehicle-pricing information for car manufacturers, dealers, financial institutions, and, more recently, individual buyers and sellers. In most of its years in business, Kelley Blue Book information was published in an actual blue book, starting out as a leaflet and later hardbound with a royal-blue cover. Today, the company provides information on vehicle pricing and much more to most of its audience through Internet-based solutions. One in three vehicle sellers or buyers consults the company's flagship solution, www.kbb.com, before making a transaction decision.

"While the book remains a vital part of our legacy, our future lies in the electronic information age," says Justin Yaros, Executive Vice President, Product Design and Development, Kelley Blue Book.

Ironically, however, the future of Kelley Blue Book's competitors also lies in the electronic information age, which gives them the potential to carve into the company's long-standing market leadership. "We need to work hard to stay number one in the minds of consumers, dealers, and individual sellers and buyers, to continue being the first place that automobile manufacturers go to introduce new products," Yaros adds. "We need to offer solutions that are not only high performing, scalable, and available, but also highly innovative."

Recently, Andy Lapin, Director of Enterprise Architecture at Kelley Blue Book, and his colleagues recognized that to maintain the company's growth and competitiveness, particularly during stressful economic periods, they also needed to make the company's solutions seamlessly functional on a variety of mobile devices.

"Perhaps a potential car-buyer is researching options from a desktop or laptop computer during the week, and then visiting dealers on the weekend," Lapin suggests. "From the dealership, that buyer must be able to access our solutions through a smartphone, so as to continue his or her research right there in the showroom. Or consider a car dealer, who might want to access inventory information from an office desktop and continue accessing the information from a mobile device while walking through the lot. We want our solutions to be the ones these people are accessing, whenever and from wherever they want to do so."

Solution

To maintain their competitive position and expand the utility of their solutions, particularly for mobile users, Yaros, Lapin, and their colleagues began work on a major expansion of and enhancement to the Kelley Blue Book Internet offerings. They made information presentation far more dynamic and made information more easily accessible over a range of mobile devices and bandwidth speeds. They did this with the help of Microsoft® .NET Framework version 3.5 Service Pack 1, the Microsoft Silverlight™ browser plug-in, the Microsoft Visual Studio® 2008 Professional Edition development system, and Windows® Presentation Foundation. And to optimize the use of those technologies, Kelley Blue Book enlisted the support of Microsoft Gold Certified Partner Neudesic and used the Microsoft Technology Center for architecture design and system prototyping.

Benefits

Today, Kelley Blue Book is able to offer vehicle buyers, sellers, and manufacturers a richer, more visually appealing, and more accessible set of online offerings than ever before. In addition, the company developed

and delivered these solutions in a rapid and cost-effective manner that will help the company continue to build on its success.

"Microsoft technology has served our purposes very well, enabling us to build a scalable, common infrastructure for delivering innovative products, reducing costs, and trimming time-to-market," says Lapin.

More Compelling, Accessible Solutions

The latest release of a Kelley Blue Book solution known as Perfect Car Finder: Photo Edition is presenting information in an unusually dynamic way, enabling buyers to learn about a vehicle's fuel efficiency, body style, price, customer ratings over time, and so forth simply by zooming in and out. "Buyers can sort different vehicles according to these criteria and view the availability of different kinds of vehicles in a given geographical area, among other options," Yaros explains. "And they can do all of this with more ease and efficiency thanks to the work we did with the Silverlight Deep Zoom technology."

Another enhancement makes Kelley Blue Book solutions more accessible from a range of mobile devices, a key advantage to the audience that Kelley Blue Book serves. "Think back to that car shopper who has done some initial research from his or her home desktop or laptop computer and now has arrived at the dealer's to take a closer look," Lapin says. "From a smartphone or other mobile device, that buyer can be reviewing the day's current price for a vehicle even before the salesperson comes out to talk. Similarly, they can find out the current expected trade-in value of their old vehicle. Having that information can be worth thousands of dollars to a buyer during negotiations for the transaction."

Or consider the dealer who needs access to inventory information not only from his or her desktop computer, but also while walking the lot and inspecting the cars there.

"Think of the productivity advantages of that dealer being able to view and update information regarding cars on the lot while actually inspecting the cars, instead of having to take notes by hand and then enter the notes into the system later," Yaros says. "Anybody can access Kelley Blue Book information in the same clear, compelling, and engaging way—whether buyer or seller, sitting in an office or anywhere else, and using whatever kind of device and virtually whatever kind of connection."

As Lapin explains, this versatility is largely because he and his colleagues were able to limit the size of the code base, with the help of the Microsoft ASP.NET Model-View-Controller (MVC) architecture pattern. "With MVC, we had more precise control over the HTML code that is output from Web applications," he says. "This is an important advantage when you're delivering solutions to people who are using mobile devices with connections that may be slower than broadband. For people who are using better connections, the images and data are delivered that much faster."

Faster Solution Delivery

Kelley Blue Book developers also used MVC to help them bring enhancements to market while targeting a variety of mobile devices, sooner than they could have otherwise. "We were able to automate our testing and easily pair a single instance of business logic with different UIs by using MVC to separate the business-logic code from the UI code," Lapin explains. "This is the ideal scenario for the rapid, cost-effective delivery of solutions suited to a range of different mobile devices."

Development was easier in general, Lapin adds, thanks not only to MVC but to all the Microsoft technologies that his team used. "Because the Microsoft tools share a common development language, developers who are accustomed to Web Forms programming in Visual Studio 2008 and the .NET Framework find it relatively easy to use Silverlight programming and Windows Presentation Foundation to build rich, data-driven applications," he reports. "This means we are delivering solutions to market faster than we might have using another design technology—Flash, for example, which would have required finding developers skilled both in that environment and in using Adobe Flex."

The Right Business Choice

According to Lapin, the support of the Microsoft technologies for software as a service made developers' jobs that much easier—and still does. "To avoid having to build the same functionality over and over while helping to ensure that Kelley Blue Book products work together, we are delivering all these products as software as a service," he reports. "We can do this largely because Microsoft is such a strong supporter of the software-plus-services philosophy."

Yaros points out that the response from vehicle buyers and sellers indicates Kelley Blue Book has made not only the right technology choice, but also the right business choice in its move to an all-Microsoft development environment. "Since introducing one of our mobile products developed with the help of the Microsoft .NET Framework, we have tallied monthly page views of 1.5 million, a nearly tenfold increase in page views per visit," he says. "This is a huge boost to our appeal in the eyes of our advertisers, which is absolutely essential in this tough economic climate."

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:
www.microsoft.com

For more information about Kelley Blue Book products and services, visit the Web site at:
www.kbb.com

For more information about Neudesic products and services, call (800) 805-1805 or visit the Web site at:
www.neudesic.com

Microsoft .NET Framework

The .NET Framework version 3.5 is the Microsoft managed-code programming model for developing software on the Windows operating system platform. The .NET Framework 3.5 includes Windows Presentation Foundation, Windows Communication Foundation, Windows Workflow Foundation, Windows CardSpace™ identity selector, and other technologies. It provides a consistent and familiar development experience, bringing new technology to the millions of developers programming in managed code today.

For more information about the .NET Framework 3.5, please go to:
www.microsoft.com/netframework

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