IBM

eProduction delivers qualified car buyers to insurer's door.

Overview

- **Challenge**

  Help car insurance company improve its customer conversion rate

- **Solution: Early Stage**

  Carfinder, a Web-based application that connects used-car buyers with sellers and with insurance company Zurich Switzerland

- **Benefits**

  Deployment in 2 months; completion of front end in 8 days; savings in total cost of ownership when DB2® is compared with Oracle; exceptional stability and availability of Linux® servers; projected market expansion with minimal investment

- **Software**

  IBM WebSphere® Application Server, Advanced Edition for Linux, Version 4.0; IBM DB2 Universal Database™ Workgroup Edition, Version 7.2.3; IBM WebSphere Studio Application Developer

- **Server**

  IBM @server xSeries™
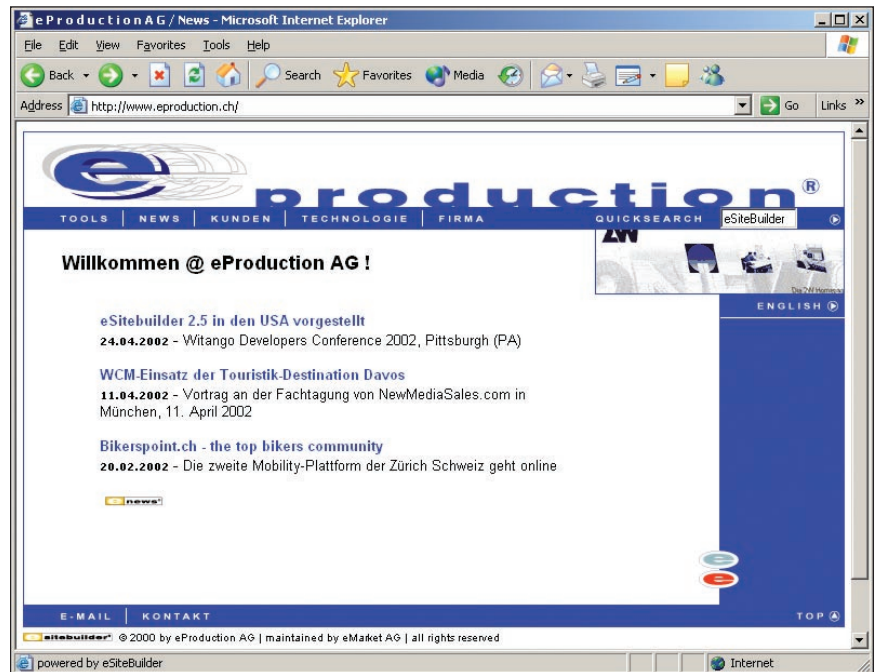
eProduction develops software applications around its proprietary content management system, eSiteBuilder. Companies use eSiteBuilder to create their own Web sites.

The Internet not only enables marketers to reach customers directly, it also helps companies reach their customers at the optimum moment. Consider insurance giant Zurich Switzerland (Zurich), which sought a way to improve its success rate for selling car insurance directly online. For help, Zurich turned to Frauenfeld, Switzerland-based eProduction, a 30-employee Web solution developer that had the perfect answer—simply tap into the captive audience of used-car buyers.

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—Balthasar Glättli, Lead Architect and Head, R&D Department, eProduction AG

e business

Buyers of used cars often need new car insurance (or take advantage of the opportunity to switch insurance providers), so they comprise an ideal market segment for Zurich. To maximize Zurich's reach as cost-effectively as possible, eProduction created an application that retrieves information on 120,000 used cars from the existing Web sites of the largest online used-car sellers in Switzerland. The solution makes this car information available from a single Web site at *www.carfinder.ch*. Shoppers search for the car they want, and when they click for more information on the car, eProduction's Carfinder application provides a quote for car insurance. When customers click on the quote to buy the insurance, Carfinder provides an automatic link to the Zurich Web site.

To create Carfinder, eProduction relied on its strategic Web development platform, consisting of IBM WebSphere Application Server, Advanced Edition for Linux, Version 4.0 and IBM DB2 Universal Database

Workgroup Edition for Linux, Version 7.2.3. Using IBM WebSphere Studio Application Developer, eProduction created the front end for its new Carfinder application in just eight days and the search engine component in only eight weeks.

Now live for two months, Carfinder has attracted the interest of car buyers, as well as potential customers for search engines like the one that powers Carfinder. "Although Carfinder looks simple, it's a highly complex application," comments Balthasar Glättli, lead architect and head of eProduction's R&D department. "Thanks to the outstanding performance of WebSphere Application Server, DB2 Universal Database and the Linux operating system, Carfinder runs smoothly and reliably while handling vast amounts of data and complex algorithms."

eProduction's Carfinder application enables shoppers to find the car they want and buy insurance for it on the same Web site.

"WebSphere software from IBM enables us to program at an extremely sophisticated level compliant with J2EE technology."

— Roman Gerteis, Senior Software Engineer, eProduction

Follow that car buyer

Insurance contracts in Switzerland—for their first 30 days—are binding only for the company. Thus, a used-car shopper can "buy" insurance for a car he or she does not end up buying and simply cancel the contract. For this reason, it makes sense for Zurich to offer insurance to car shoppers who have not yet committed to a car.

Using the site to shop for a car is as simple as using parameters from a search engine to narrow down the type of car desired. The search result lists cars with vital statistics such as price, color, mileage, the Web site where the listing appeared—plus an insurance quote. To provide the quote, eProduction uses a calculator application developed by Zurich and the vehicle's Eurotax number. Clicking on the quote delivers the car buyer to the Zurich Web site to complete the insurance application. Clicking on the car listing takes the buyer to the Web site where the listing originated.

Shoppers can find the used car they're looking for by logging onto the Carfinder Web site and browsing the largest used car selection in Switzerland.

Choosing the right database and operating system

Carfinder retrieves data from five used-car Web sites by directing more than 20,000 queries daily at each of the sites, effectively retrieving all the meta data from their databases. The search engine, a proprietary program, deposits the data in DB2 Universal Database running on IBM @server xSeries, using the random access memories (RAMs) of the servers only. Each day, the database is erased and a new one is built to comply with Swiss regulations prohibiting disk storage of data retrieved from third-party Web sites without permission.

To effectively handle the continuous heavy traffic generated by the search engine, Carfinder relies on the speed and scalability of DB2 Universal Database. "DB2 can flawlessly handle heavy usage without requiring the special upkeep that Oracle demands," says Glättli. "We already considered DB2 to be the ideal database for us. But when it became the first enterprise-worthy database to support Linux, we found another reason to like DB2."

Early in its first year, eProduction migrated to the Linux operating system after trying Microsoft® Windows® for six months with unsatisfactory results. The company considers Linux far more reliable and easier to configure than Windows. "We cannot live with the idea of having to reboot a server once a day because it's leaking memory or is unstable," comments Glättli. "Fortunately, with Linux we don't have to. We have continuous availability for as long as 45 days despite heavy traffic. And we can put larger loads on Linux machines than we can on Windows."

Fast, powerful application server

WebSphere Application Server retrieves data from DB2 and manages the Java™ technology-based business logic that provides the car information requested by the shopper. "WebSphere Application Server is the fastest and most reliable application server we could find," says Roman Gerteis, senior software engineer of eProduction. "It provides outstanding connection pooling and optimization. It also enables us to disconnect from the database in order to perform administrative tasks. Then it rolls back and commits the database transaction—all at tremendous speeds. WebSphere software from IBM enables us to program at an extremely sophisticated level compliant with Java 2 Platform, Enterprise Edition (J2EE) technology."

Before eProduction's choice of WebSphere, the company decided its former third-party application server provided insufficient support for industry standards—considering the robust, platform-independent applications, like Carfinder, which eProduction wanted to create. The company evaluated J2EE-compliant application servers, focusing on BEA WebLogic Server and WebSphere Application Server, Advanced Edition, Version 3.5. BEA made it clear that in future releases of WebLogic, the Linux version would lag by six months. In contrast, IBM promised to release all platforms on the same day. In order not to fall behind on new technology, eProduction chose WebSphere Application Server as its strategic development and runtime environment.

"Our IBM platform is our strategic choice for all our new applications going forward," Glättli remarks. "For instance, we are making a generic version of Carfinder available for other industries. With WebSphere and DB2 software and the Linux operating environment, our applications can be adapted easily at minimal cost, which helps us maximize our return on investment."

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