



Legacy Integrator™ Solutions

EchoStar Communications Corp. / Dish Network Significant and Measurable Return on Investment via Online Customer Care Technology

An extremely lean organization with a fast-growing subscriber base, DISH Network, a U.S.-based, direct broadcast satellite television products and service provider owned by EchoStar Communications Corp., needed to be able to grow quickly, minimizing overhead and expenses while maintaining exceptional levels of customer experience. The company enjoyed per-subscriber costs lower than those of competitors, yet the fast-growing subscriber base required new technical architecture to manage increasing numbers of customers and provide continued excellent customer service.

Ownership of the entire horizontal business – broadcast service, customer service centers, design and manufacture of set top boxes, the operation of uplink facilities, launching and flying satellites and ownership of the satellites – is critical to the DISH Network business model. Such ownership has allowed DISH Network to focus completely on the customer, and customers are considered the company's most important asset. This attitude resulted in the company being ranked #1 in Customer Satisfaction Among Satellite / Cable TV Subscribers by J.D. Power and Associates, receiving the prestigious J.D. Powers Award for customer service in Satellite and Cable Television in both 1999 and 2000.

A best-in-class combination of the BEA WebLogic E-Business Platform, webMethods Enterprise and Red Oak Software Legacy Integrator allowed DISH Network to quickly gain access to proprietary customer billing system legacy applications, enabling a timely and significant return on investment (ROI), improved customer access, enhanced employee proficiency and independent use of the new technology.

Situation

By Fall 2000, DISH Network had over 5 million subscribers and a customer base that was growing at about 150,000 customers each month. The company needed solutions to service their customer base in a simple, cost-effective manner that would work almost immediately and could offer the benefit of future-proofing their business.

At that time, the only way customers could contact the company was via phone, requiring that Customer Service Representatives access a proprietary CSG billing system running on a legacy mainframe IBM System 3090, to extract and insert back modified data. Because call volume was running at an exceptionally high rate, with the cost of an individual call ranging between \$5 and \$15, DISH Network wanted to use technology as an alternative to the construction of more and more call centers, while managing exploding customer demand. Without a suitable technology alternative, DISH Network faced annual construction of two or three call centers per year, at a cost of millions of dollars each, plus the use of extensive IT resources – a significant financial expenditure. DISH Network was finding that the problems associated with success were beginning to affect their bottom line.

The company wanted to offer customers more modes of contact, but a consistently excellent experience -- whether they chose to contact a DISH Network customer service representative in person, via the Internet, using an automated voice response system or through the set top box.

Need

DISH Network needed to create a technology solution providing a customer care application that could span several deployment targets (web, set-top box, etc.) and needed to select an application server with proven volume capability to manage customer service and sales calls. Because this new customer care application would be a "bet-your-business" implementation, DISH Network had to ensure the solution would be both highly stable and built on a platform that had a track record of successful, referenceable deployments. Due to the close relationship the company fostered with its users, customer satisfaction had to be maintained.

“This project was a very high priority for the corporation and required full implementation within four months.” according to IT Director Curtis Elswick. “We needed to provide millions of customers with real time access to account information contained in proprietary CRM applications, housed on IBM System 3090.

Solution

WebLogic Server from BEA, the webMethods Enterprise integration platform and Red Oak Software's Legacy Integrator business objects for legacy integration were all part of the all-Java solution chosen to handle the current transaction volume and scale to meet on-going demand from new customers. DISH Network had confidence that these vendors could build an architecture flexible enough to deploy to both the Internet and their set-top boxes. Because failure would mean alienating the customer base, risk minimization was key. The standards-based, open environment of Java made it easy for employees to work on and equally easy to outsource projects to third-party developers if DISH Network chose to do so in the future.

Figure 1:

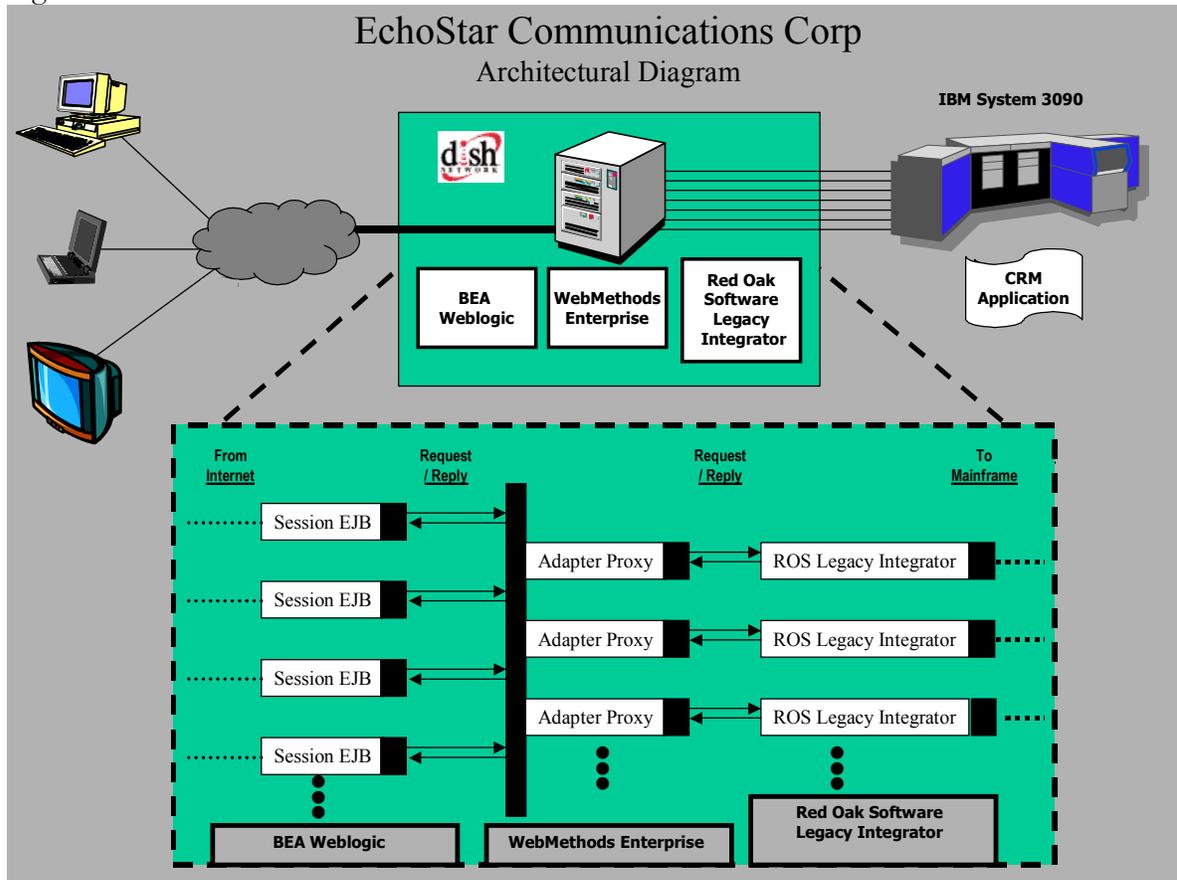


Figure 1 – EchoStar designed and built a java-based system that allowed the web-enabled user to access the appropriate mainframe-based information. As figure 1 shows, they built a series of Session EJBs that provide a request/reply access to a pooled group of Red Oak Legacy Integrator Adapters, managed through an adapter proxy. The proxy manages access to the Legacy Integrator Adapters, which then access the mainframe application, navigate through the necessary screens, and deliver the required information back to the Session EJB through the Legacy Integrator java bean and the adapter proxy. This design allows the entire system to scale, and to easily handle the necessary traffic.

Results

DISH Network's goals were exceeded. Even with the extremely aggressive four-month timeline, deployment occurred within two weeks of the goal date. All of the major vendors provided highly quantifiable standards and clearly defined metrics to describe success.

As Elswick also noted, "Red Oak's Legacy Integrator was a real find. It was very easy for our team to pick up and use, and not only did it do what it was supposed to do, it was very reliable and highly scalable. Usually, we expect to run into bugs with a new implementation, but this has been very refreshing. We haven't had issues, and we were able to cut the integration segment of the project implementation timeline by 50%!"

One of the significant ROI measurements was the subscriber programming upgrade rate. DISH Network realizes a higher profit margin on upgrades, and if these upgrades are ordered online, the profit margin is even higher. When DISH Network offered customers the ability to upgrade via their Customer Care application online, the upgrade rate went well beyond the usual 1.5% experienced via direct marketing. The upgrade continues to climb. The DISH Network IT team is able to develop and provide new technical solutions in less time, now providing fully developed solutions with real returns in only four to eight weeks.

Another measure of ROI is in the reduction of phone calls into the DISH Network Customer Support Center. The new communication channels offered via the Customer Care Website are so simple for customers that DISH Network has had a pronounced reduction in the number of customer phone calls as customers use alternative modes of communication. Call center costs are down significantly, while the Web site provides immediate information and enhances customer satisfaction. Call center volume has been so reduced that DISH Network believes they will be able to reduce the number of new customer service centers needed.

Finally, and most importantly, time to achieve ROI was a critical metric. The world-class technology and support provided by each of these vendors helped DISH Network exceed their goal by enabling the company to recover its investment in both product and services, in less than three months.