



Islandssimi calls on IBM to capture new Web telco market.

Application	CRM Web self-service site for telco customers
Business Benefits	Projected 40% share of corporate data and voice services market; cost structure that is 30 times more efficient than traditional telco; improved customer service; 500% increase in simultaneous connectivity capability
Software	IBM DB2® Universal Database™ IBM WebSphere® Application Server, Standard Edition IBM VisualAge® for Java™ Lotus® Notes® Lotus Domino™
Servers	IBM Netfinity®

Iceland may well be a country geographically far removed from the dot-coms of Silicon Valley, but when it comes to the Internet, it's miles ahead of the rest of the world. With more than 80 percent of its 300,000 citizens online and a 70 percent mobile phone penetration — it becomes clear that Iceland is a ripe market for next-generation telecommunication services.

Still, it's never easy for a young company to break into the telecommunications market, which has long been dominated by large operators that control both the infrastructure and the customer base. A new provider's operational costs can drive it out of business before it can gain mindshare or market share.

“The solution that IBM provided us allows us to be a very lean organization. We're able to do everything automatically and at very low costs — thereby allowing us to reduce prices. IBM is the ideal long-term partner. We have faith in its ability to support us for the long haul.”

– Eythor Arnalds, Chief Executive Officer, Islandssimi



The Prime Minister of Iceland, Mr. David Oddson, made the first call through Islandssimi's network last year. By his side (in dark suit) stands Eythor Arnalds, CEO, Islandssimi.

e-business —redefining the competitive environment in your favor.



Customers can track usage and order new services through a Web browser using IBM WebSphere Application Server.

A new online company called Islandssimi may have found a way to break through this barrier. Headquartered in Reykjavik, Iceland with only 100 employees, Islandssimi provides full telecommunication services. The company sought to minimize its overhead costs by using the Internet to support its business and residential customers. Instead of relying on costly call centers and mass monthly mailings, Islandssimi's innovative infrastructure would enable customers to activate their service, track line usage and pay bills all through a Web browser — at their convenience.

But giving customers direct Internet-based access to what are traditionally a telco's back-end information systems required some careful thinking about how Islandssimi would store and deliver its voluminous — and sensitive — customer and traffic data. In searching for a customer relationship management e-business solution, Islandssimi knew that a robust data management system would be its first priority.

After careful consideration of product reviews, Islandssimi was drawn to IBM's strong reputation as an excellent e-business solution provider and its proven guideline for developing innovative infrastructures — the IBM Application Framework for e-business. Islandssimi compared offers from other leading e-business solution vendors — including Oracle — and found that IBM DB2 Universal Database provided a more cost-effective data management solution for its needs as a growing company. "Basically, the competition lost in pricing. Oracle's licensing fees were just too steep for a young company like us," explains Eythor Arnalds, chief executive officer of Islandssimi. "IBM also had a more open architecture and the perfect tools for integrating all of our different modules." The robustness of DB2 Universal Database gives Islandssimi the ability to support a large number of simultaneous connections, while preserving quick and efficient responses to customer inquiries. Arnalds explains, "We have been able to increase our multiple connectivity capabilities by 500 percent. We expect to reap a 40 percent share of Iceland's corporate data and voice services market with a cost structure that is 30 times more efficient than that of a traditional telco."

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Establishing an extensible infrastructure

Using a Web browser, a customer can activate services and view bills, payment status, subscription rates, phone usage costs and system status reports. The core customer service database, residing in DB2 Universal Database on a Sun® Solaris™ server, receives usage data from the voice and data switch management systems. A Lotus Domino workflow system also communicates with DB2, sending realtime contract and service request data from the company's Lotus Notes databases and back-end Navision financial systems—both of which reside on an IBM Netfinity server.

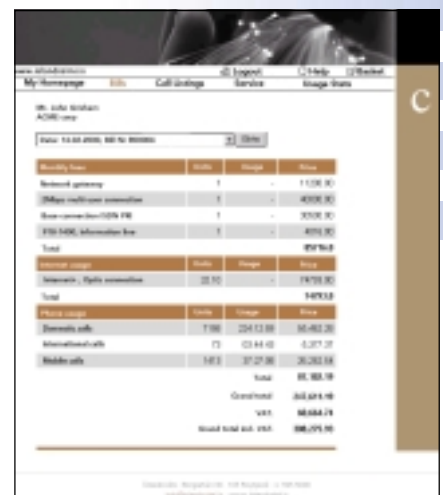
The requested information is brought to the customer in HTML by way of JavaServer Pages™ powered by IBM WebSphere Application Server residing on a Netfinity server running Linux®. While the company currently uses Java Database Connectivity (JDBC) to facilitate the data transfer, it is looking forward to the XML support in DB2 Universal Database Version 7. Arnalds explains, “This will provide a standard format for exchanging data between the Web-based applications and our networking devices and third-party business applications.”

Islandssimi used IBM VisualAge for Java to develop the Java servlets that enable the various customer care functions. Recognizing that Enterprise JavaBeans™ (EJB™) provides a more standardized way to develop reusable objects, the company plans to port the applications to WebSphere Application Server, Advanced Edition, which provides EJB support. “We love the object-oriented methodology,” says Arnalds. “A company can easily create JavaBeans in a very general way and then adopt them to fit specific needs. I think that every enterprise with a Web-based system should use Enterprise JavaBeans.”

Although some customers long accustomed to traditional telecommunications services may feel insecure transferring personal information across the Internet, the WebSphere software platform and the Application Framework for e-business give Islandssimi the tools and guidelines to build a reputation of being a well-managed telco. “It's very important that our customers have reliable and secure connections to our services,” explains Arnalds. “The WebSphere software platform gives us stable Web performance and gives our customers the confidence to do business with us through this channel.”

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The screenshot shows a web-based bill interface. At the top, there are navigation tabs: "My Homepage", "Calls", "Call Settings", "Support", "Service", and "Usage Status". Below the navigation, there is a search bar and a table of charges. The table has columns for "Category", "Units", "Usage", and "Price".

Category	Units	Usage	Price
Network gateway	1	-	1.1300 (K)
ISDN activation/termination	1	-	40000 (K)
Basic service/ISDN PM	1	-	35000 (K)
ISDN MCM, activation fee	1	-	40000 (K)
Total			80900 (K)
Network usage			
International - flight activation	20 (K)	-	18700 (K)
Total			18700 (K)
Phone usage			
Domestic calls	1780	254 (K) (K)	10482 (K)
International calls	173	123 (K) (K)	6217 (K)
Mobile calls	1483	377 (K) (K)	26282 (K)
Total			81481 (K)
Grandtotal			26282 (K)
Total			107763 (K)
Grand total incl. VAT			108479 (K)

Customers can get information on all aspects of their bill organized the way they want it.

IBM gives Islandssimi the tools for growth

Rather than resting on its laurels, Islandssimi has big plans for global expansion. To accommodate this, Islandssimi intends to migrate its applications from the Netfinity server to an IBM RS/6000® server. And because demand for new customer services is certain to tax the application development resources of this highly streamlined organization, Islandssimi is eagerly awaiting the latest release of IBM SanFrancisco™ (part of the IBM WebSphere Business Components family of products). “IBM has an excellent community of developers,” Arnalds says. “SanFrancisco will allow us to take advantage of the standard Java components they’ve created to get a headstart on delivering our customer service applications.”

Working with IBM, Islandssimi has excelled in its endeavor to cut its overhead costs. “The solution IBM provided allows us to be a very lean organization. We’re able to do everything automatically and at very low costs—thereby allowing us to further reduce prices,” explains Arnalds. IBM’s e-business solution has been so successful in cutting costs and streamlining operations that Islandssimi plans to package and license it to other small telecommunications companies. Explains Arnalds, “Our solution provides a way to eliminate much of the overhead and provides better service for customers.”

The short-term success of the solution is evident in Islandssimi’s increasing market share and operational efficiency. At the same time, Arnalds stresses that IBM is much more than a stepping stone for Islandssimi. “IBM is the ideal long-term partner,” he says. “We have faith in its ability to support us in the long haul.”

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