

Finding a Match in Mobile

Globecomm Hosts Cellular Service for Indigo Wireless

For telephone companies, doing business once meant hanging a wire on a pole and charging customers to use it for the next half century.

Today, that phone is more likely to be wireless. The UN estimated that there were 4.1 billion mobile phone subscriptions worldwide at the end of 2009, up from 1 billion in 2002, enough for 6 out of every 10 people on earth.

Communications technology is also changing at lightning speed, with text messaging, mobile Internet access and mobile video growing wildly. The good news for today's telephone companies, however, is that they don't actually need to own any of the costly technology in order to deliver outstanding service. In fact, some think they are better off not to.

Indigo Wireless is a rural GSM mobile carrier with service areas in the US states of Pennsylvania and Nebraska. In business since 1991, the company has always found it makes more sense to put its money into attracting and serving customers than into communications technology. Instead of buying a base station controller (BSC) and switch, Indigo entered the market by contracting with one of the major wireless technology companies to provide hosted services on that company's BSC and Mobile Switching Center. All Indigo chose to own were the base stations and its customer service and billing operation.

Technology outsourcing is a proven business strategy that continues to grow in popularity. It gives customers access to skills and state-of-the-art technology that they frequently cannot justify maintaining in-house. It substitutes predictable service costs for large capital expenditures, which reduces business risks. But it is not without risks of its own, as Indigo Wireless found out.

Dancing With Elephants

The longer that Indigo Wireless worked with its hosted services provider, the more it realized how mismatched they were. The wireless technology company was a multi-billion-dollar global giant. Indigo Wireless was an agile, fast-moving small company. It did not have a big engineering department because its business model did not require one. Instead, it had Paul Korn, Director of Engineering.

Indigo was generally quite satisfied with the services it was receiving – but when inevitable

issues arose, when there were questions about interoperability and how to make systems work together, Indigo found it hard to get the answers it needed. The technology company's 24x7 global Network Operations Center was configured to meet the needs of Tier 1 and Tier 2 carriers, not nimble entrepreneurs in rural Pennsylvania.



Could another vendor do better, and was it worth the risks of the cutover? Should Indigo change its business model and invest in technology that it could control? Not if Vice President Dave Tews had anything to say about it. "When I look at the true cost of running a network," he said, "I have to include the people, benefits, training, the power and the high-quality technical infrastructure required. For a company our size – and for companies quite a bit larger than ours – if you really look at the numbers, you find that the hosted solution is the way to go."

The questions took on new urgency when the technology vendor announced that it was exiting the hosted services business. Suddenly, Indigo needed a solution – fast. Fortunately, the company had been exploring its options. When its provider called it quits, Indigo made its decision. The choice was to go with another hosted service provider: Globecomm.

Finding a Match

The experience with its old provider had made Indigo Wireless justifiably skeptical about its new one. But unlike its old provider, "managing networks is what we do for a living," said Andrew Silberstein, Globecomm's Vice President and General Manager, Services. "We have a team of dedicated engineers working one-on-one with our customers every day." And compared to that global giant, Globecomm is a small company, even its stock trades on NASDAQ.

A visit by Indigo's Paul Korn to Globecomm sealed the deal. He toured the Network Operations Center, the Mobile Switching Center, and the broadcast center at Globecomm where a major cable channel originates its content. "I told Dave," Mr. Korn said, "that if they could handle those customers, they could take care of us."



Moving Parts

Getting from agreement to startup, however, was not so simple. It is no small matter to move a live service from one provider to another. Making matters more interesting, Globecomm was in the process of upgrading its switching capability with a new, state-of-the-art GSM/WCDMA core switch from Ericsson. The carrier-class switch provides 100% IP-based softswitch architecture with the capacity to service over one million subscribers, and supports 2G (GSM), 2.5G (GPRS/EDGE) and 3G (WCDMA) services including voice, high-speed Internet, SMS, MMS, voicemail, prepaid and post-paid billing, E911 and CALEA. It also provides Globecomm customers, including Indigo Wireless, with a clear forward path to 4G and LTE.

"There were a lot of moving pieces to manage," said Globecomm's Silberstein. "Indigo's old provider was hosting not only its core switch but the Base Station Controller. Indigo decided that they wanted to own that piece of equipment, so we provisioned a new BSC at their facility and arranged for its installation."

Indigo also wanted to begin introducing new value-added services, including medium message service (MMS) and a new prepaid billing system. To meet the need, Globecomm began hosting value-added services from its mobile switch while voice and data were still being routed through the old provider's switch. As a result, the cutover of service was not one big, anxiety-producing event. It was a series of smaller, anxiety-producing

events, each having to be executed perfectly before the next one began. From ordering the new BSC to the final cutover of voice and data services to Globecomm's Mobile Switching Center, the transition took months.

"It was a lot slower than we wanted it to be," said Indigo's Dave Tews. "But the Globecomm project team was phenomenal. There was never a day when there wasn't progress, and our company didn't have to drive it. In most projects, you have to stay on top of your vendor and keep pushing, but Globecomm didn't have to be reminded and didn't drop the ball."

Multiple Handoffs

In the final network configuration, traffic flows over fiber-optic lines between Indigo's base stations in Pennsylvania and Nebraska to its base station controller in Pennsylvania, which in turn links to the Globecomm Mobile Switching Center that provides all switching and services. Indigo Wireless customer service representatives provision and maintain services on the switch using a Web interface provided by Globecomm. The MSC also automatically hands off call duration, service and billing data to the Indigo Wireless billing system.

"I have been doing this for 20 years and have been through a lot of cutovers," said Dave Tews. "After this one, we had the usual list of issues that had to be ironed out. After three months, everything important was taken care of. We're very satisfied. The level of persistence and oversight we saw in the cutover continues to be there, day in and day out."

"Indigo Wireless is the model for modern mobile communications carriers serving regional markets," said Globecomm Chairman & CEO David Hershberg. "As a hosted service provider, Globecomm invests in technology and in people who know how to get the most out of it, so that Indigo can focus on service to their customers. We're proud to make that possible." ■



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