

Telecel S.A.

South American wireless telecommunications provider leverages Sun solution to stay connected with soaring subscriber base



Company/Organization

Telecel S.A.

<http://www.telecel.com.py>

Vertical Market

Telecommunications

Key Challenges

- Improve performance of IT resources that support billing and value-added customer services for growing subscriber base.
- Migrate back-office applications to more efficient infrastructure to improve customer service.

Solution

- Server solution that supports IT provisioning and business intelligence and data warehouse applications.

Business Results

- Ability to support 25% growth in customer base.
- 98% system availability, supporting between 2-3 million searches per day.
- 100% improvement in billing transactions processed per second.
- No server downtime for past two years.
- Increased revenues of \$US3 million per year from improved ability to deliver value-added services.

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Paraguay’s Cellular Leader Witnesses Soaring Growth

Established in 1992, Telecel S.A. is the largest cellular telephone operator in Paraguay. Since its inception, Telecel has grown its customer base to more than 700,000 subscribers. The company is also a leader in delivering value-added multimedia GSM service under its Tigo brand, as well as offering Telesurf—a wireless Internet service—and its Tele2 TDMA bulk service for voice and text messaging. By 2000, Telecel’s value-added service offerings had enabled the company to achieve a 52 percent share of Paraguay’s highly competitive voice market.

However, continued growth for Telecel would be hard to accomplish since the market was nearing saturation for voice services. And with other cellular providers eager to capture market share, Telecel recognized that it needed to bolster its value-added customer service and support capabilities in order to maintain industry leadership. At that point, Telecel decided to shift its strategy to emphasize its high-quality customer service and support, and also to market more aggressively to small and medium businesses.

Managing Hyper-Growth Environment

Originally, Telecel’s customer-facing applications were fairly straightforward, with cellular phone service as the primary offering. With Telecel’s expansion into data and Internet access, its main-stream customer-related activities, such as processing new service orders and issuing billing statements, became much more complex. Also, the new services were projected to create growth rates in excess of 25 percent per year as well as spur an expansion in the Telecel workforce, putting additional strains on internal applications such as human resources and job scheduling.

By bolstering the company's IT capabilities with Sun servers, Telecel S.A. is able to support a burgeoning annual growth rate of 25 percent in its subscriber base.

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Telecel's legacy back-office and customer support system, as well as the company's Oracle 9i database, ran on an IBM AS/400 mainframe. As the volume of data continued to grow, Telecel decided to load balance some of its provisioning and value-added services off of the legacy mainframe in order to prevent an over-reliance on one platform. In addition, Telecel needed enterprise-class business intelligence and data warehousing capabilities to provide quality customer service, as well as to support the anticipated growth in its subscriber base. Telecel was also determined to develop an open standards infrastructure that would not need to rely on a proprietary vendor like IBM.

As a result, Telecel decided to migrate its provisioning and value-added services to a dedicated "farm server, open system, multi-brand structure." By breaking out these applications from the AS/400, Telecel wanted to improve response times to customers and employees while providing a scalable platform to support future growth. According to Miguel Garay, IT Director for Telecel, it was an easy choice. "We needed a reliable server for supporting our rapidly growing billing, provisioning and value-added services. That's why we chose an open system like Sun."

Sun Solution Delivers Smooth Migration

Telecel selected four Sun Fire™ 280R Servers, each with two UltraSPARC® III processors running the Solaris™ 8 Operating System, as its key migration platform from the existing IBM AS/400 mainframe. It made this decision because of the Sun Fire's proven reliability and scalability, as well as its open platform flexibility. Telecel also chose the Sun Fire 280R because it was ideal for addressing the company's data center requirements for continuous availability. According to Garay, "Our Sun Fire 280R servers delivered the performance we needed to make our provisioning migration successful."

In addition, Telecel was convinced that Sun would be the best choice for assuring a smooth migration and integration with the company's legacy business intelligence and data warehousing platform. Finally, Telecel selected the Sun Fire because of its price/performance advantage over competitive offerings from IBM. From a reliability standpoint,

Garay was impressed with the Sun Fire 280R's ability to support functions like provisioning that require exceptional power and reliability. In addition, the compact, highly available Sun Fire 280R fits neatly into standard 19-inch racks, which provided Telecel with a smaller compute density for its growing data center.

With its Sun-powered provisioning and value-added services capabilities, the Telecel system can now handle over two million queries a day with no degradation in performance. That translates into a 98 percent system availability, which supports between 2-3 million searches per day. Billing transaction times are now twice as fast at 40 transactions per second from the previous 20 transactions per second, for a 100 percent improvement. The Sun platforms now provide Telecel customer service representatives with access to more information, which enables them to provide a higher quality of service, as well as to cross-sell and up-sell existing customers with new and special offers. This improved capability has resulted in an increase of revenues from Telecel's value-added services of more than \$US3 million per year.

Anticipating the Future with Sun

Telecel is so pleased with their Sun solution for data warehousing that they intend to standardize on the Solaris Operating System as the AS/400 nears end of life. In addition, Telecel has purchased a Sun Fire V120 server for Web serving, statistical analysis and system monitoring. And Telecel is happy to report that its Sun platforms have not had any downtime in over two years. Garay concluded that, "We made the right choice by selecting Sun, as part of our technology partner solution for this migration. And I'm confident we can leverage our investment in Sun technologies to manage the rapid growth of our customer base, now and into the future."

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Telecel leveraged its investment in Sun servers to support the company's 25% growth rate in subscribers.

Sun Technology

- Sun Fire™ 280R Server
- Sun Fire V120
- Solaris™ 8 Operating System

Third-party Products

- Oracle® *gi*
- IBM AS/400

Get the details.

For more information on Telecel, visit telecel.com.py. And for more information on Sun Microsystems, please visit sun.com/bidw

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