



Client Profile

Our client is the leading service provider of wireless telephony in Latin America, and the fourth largest in the World in terms of subscribers with:

- Operations in 18 countries in the Americas.
- More than 182 million mobile users.
- More than 3.8 million land lines in Central America and the Caribbean.
- Coverage for a combined population of 800 million people.
- State of the art products and services.

Of the 18 countries in which our client operates, it is represented by two affiliates in Panamá and Colombia. The latter is the largest wireless services provider in the country, with a market share of 58.9% and more than 32 million customers.

Business Situation

In July 2008, PSL was contacted by one of SUN Microsystems' top executives, and a former IBM Sr. Executive. Due to his previous experience in a successful joint project between PSL and IBM (An asset laundering control system, funded by the US government and developed for the Colombian government), SUN considered PSL as the right company to solve an urgent problem for one of its main clients in the region.

Our client's parent company commissioned its Colombian subsidiary to deploy the same prepaid services it provided in Colombia for a recently acquired company in neighboring Panamá. The prepaid service platform, which represent the largest chunk of the company's business, is composed of clients (salespeople, supermarkets, dealers, mobile users, etc.), one or several proxies, and a platform that manages the services and its billing.

The Proxy our client used in Colombia could not be used in Panamá for two reasons: 1) The Colombian subsidiary and the Panamá one had different backend platforms, and 2) the proxy used in Colombia was highly inflexible. Each new service offering had to be hard-coded, since the proxy --an in-house development project-- was not developed to support new conditions, messages, formats, workflows and, in general, any change determined by the business environment. Besides overloading the company's technical resources, the lack of flexibility, performance and efficiency of the old solution demanded the development of a new proxy from scratch in the short period of two

months, given that the newly acquired affiliate in Panamá had a hard date to start operations.

Business solution

PSL studied the platform installed in Panamá, both client and backend, in order to design, develop and deploy a proxy solution that provided the same prepaid services offered in Colombia but with improved flexibility, efficiency and performance. Working closely with platform providers and SUN Microsystems, PSL was successful in providing a completely new proxy within the tight deadline. The client was so satisfied with the quality of the proxy solution it selected PSL to develop a new proxy to replace the one installed in Colombia's significantly larger operation.

Due to the success in these two projects, as well as our proven record of quality, productivity and timely delivery, our client decided to extend its relationship with PSL. We were subsequently assigned to develop a new solution to manage, control and monitor prepaid sales, promotions and rebates, a very high demand market in the mobile phone business in Latin America. For this project Business Process Model guidelines and PSL's CMMI level 5 – Agile practices were used. Starting with a new, redesigned business model, PSL proposed, designed and deployed a new software solution, called PRECOM.

The system:

- Replaced almost 60 non-integrated systems in the prepaid area.
- Provides a robust and flexible platform for the management of any number of sales and rebates, each one with different specific conditions. It also defines those conditions and parameters in an user-friendly and efficient manner.
- Integrates via web and other type of services, in real-time, with several systems available at the client.
- Stores all the current and historical information for every user and specializes in the management of this information within the database, an essential function for the prepaid mobile phone services.

Technical specifications:

The systems exhibit the following characteristics:

- Built on J2EE. Installed in SUN computer, SOLARIS.
- Developed under SOA practices and techniques.
- Panamá's platform: TECNOMEN
- Colombia's platform for the prepaid billing: Nokia – Siemens.
- ITEL, the proxy developed for the Colombian affiliate uses IBM's Workflow engine and WebSphere Process Server.
- PRECOM uses the Oracle 11g database, Oracle Warehouse Builder (OWB), which is ETL's management tool, and IBM's Service Integration bus.

Benefits

The PSL-led design of the Panamá and Colombia proxies, as well as the subsequent development of a new software solution for the client, produced substantial benefits:

- Improved performance in terms of agility with a proxy that currently handles approximately 1,000 transactions per second.
- Improved processes. Replaced independent and unorganized processes with an integrated process for each connection between the clients and the backend platform, providing increased efficiency and performance.
- Improved management of historical operations, tracking each transmission and parameter definition.
- Drastically lowered operating load in the larger Colombian affiliate and solved all data veracity problems previously generated by manual operation.

Due to the success of these projects, our client and SUN Microsystems have expanded their relationships with PSL and has subsequently hired the company to work on several other software initiatives.