

South American operator first to market with 5G, **launches several initiatives to drive digitization of business**

Alepo's digital transformation provided a converged platform for LTE, 5G, IPTV, and fixed broadband services.

Project Background

Established in 2013, the operator is a leading triple-play provider known for its high-quality fiber broadband and digital TV services. The service provider wanted to stay ahead of its competition by offering innovative new products with improved quality of service to its customers, including the launch of LTE and 5G networks.

The operator also wanted to offer a compelling digital customer experience in the heavily cash-based economy in which it operates, hoping to encourage users to make more online payments. It selected Alepo to undertake a phased digital transformation to help support these new offerings.

The first phase focused on enabling delivery, monetization, and management of fiber, IPTV, and LTE services from a single platform. Alepo facilitated this by replacing the legacy BSS with its Digital BSS, including CRM, convergent charging and billing, revenue management, PCRF, AAA, DHCP, product catalog, provisioning, and more.

Pleased with the success of this project, the operator green-lighted the second phase, which included implementing a WhatsApp chatbot for customer support as part of an expansive self-care offering, along with Alepo's Order Management System (OMS) to automate and track work orders and send notifications. It also integrated payment gateways that support currency conversion.

Next, the operator introduced the first 5G network in its country, offering ultra-fast internet speeds for homes and

Operator Requirements

The operator primarily wanted to modernize its network, digitize workflows, and improve overall customer experience. It wanted Alepo to:

- Deploy LTE and 5G networks and manage all services through a converged billing platform
- Migrate IPTV and fiber/GPON services from the legacy system to Alepo Digital BSS with zero downtime
- Automate workflow management to eliminate the traditional file- or paper-based approach through better service creation and orchestration
- Integrate online payment gateways to enable cashless payments
- Provide omnichannel customer self-care, including a chatbot, to lower dependence on support staff and reduce wait times

businesses. The non-standalone deployment (5G NSA) leveraged the existing evolved packet core (EPC) infrastructure.

Alepo Solution

Alepo helped seamlessly launch the LTE and 5G networks and automate and integrate provisioning of the satellite, wireless, and IPTV services. Its workflow automation helped the operator rapidly launch services, perform quick troubleshooting, reduce operating costs, and eliminate revenue leaks.

Alepo OMS helped automate work orders, replacing the existing paper-based approach. The operator can now track daily orders, access reports with reasons for delays, and receive work-order notifications through WhatsApp or email.

Alepo's Digital CRM provides a framework for provisioning customers into external systems, and its Omnichannel Self-Care enables 24x7x365 remote support for customers. The automated customer interaction system, which includes web self-care, mobile app, and WhatsApp bots, lets customers receive automated payment reminders, view their current balance, and make swift and secured payments. Payment gateways have been integrated to enable currency conversions.

Key modules include:

- Digital CRM agent portal and affiliate management
- Policy control and rules function (PCRF)
- Online charging system (OCS) and convergent billing and invoicing
- BI reporting
- Omnichannel self-care
- Inventory management and product catalog
- Fulfillment manager and provisioning module
- Order management system
- API gateway

Solution Highlights

Rolling out in phases, Alepo's solution helped the operator launch LTE and 5G in the country. Its key offerings include converged billing and charging for all of the operator's networks, along with work order automation and enhanced digitalization of the platform for improved customer experience.

Robust billing and CRM platform

Alepo automated the operator's processes and seamlessly migrated IPTV- and GPON-related services

to the Digital BSS with zero downtime, no customer complaints, and the elimination of revenue leakage. The CRM system provides an intuitive 360-degree view of customers, including account information, product and package details, history, trouble tickets, and more, streamlining sales and support.

WhatsApp chatbot integration

The WhatsApp chatbot was flawlessly integrated into the existing system, instantly improving CX. Customers can interact with the bot to check their last payment, previous and current bill amounts, current balance, raise tickets, and view the status of the last raised ticket. They also receive notifications, payment reminders, details of current plans, broadcast messages, and more.

Work order automation with OMS

The OMS automates work orders, eliminating the need for traditional filing and paperwork. The operator can now track daily orders, delay reports, and work-order notifications over WhatsApp or email.

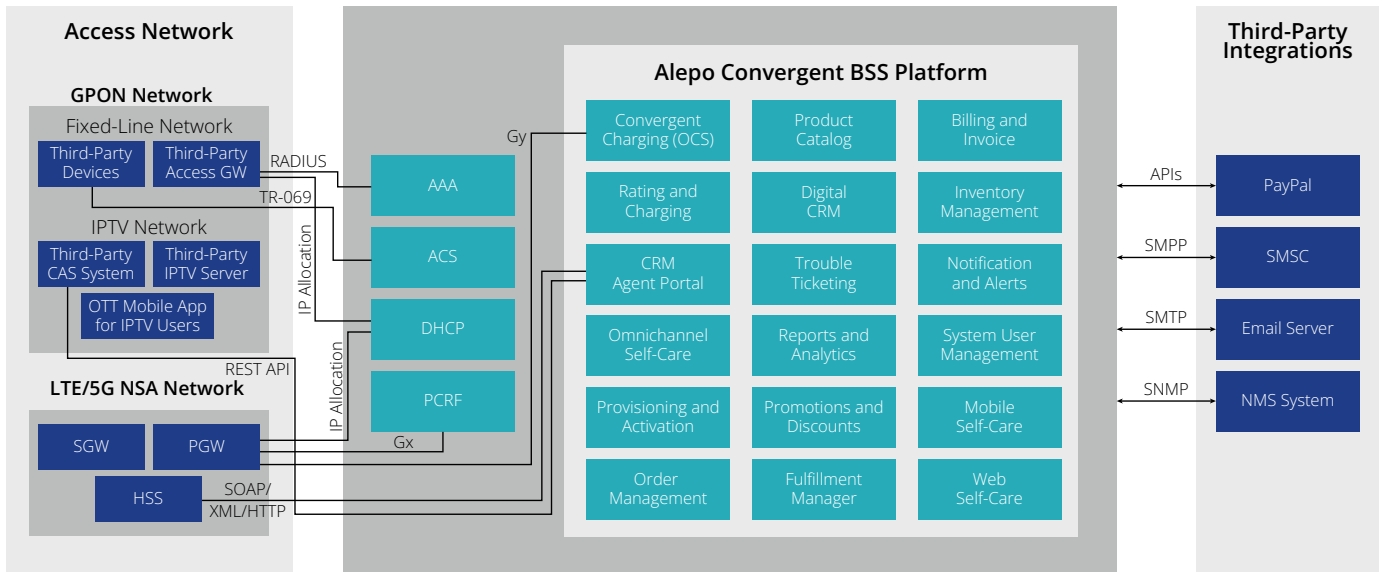
Automated omnichannel experience

The Omnichannel Self-Care solution is focused on increasing customer engagement through various channels. It helps easily manage functions like recharge, subscription management, plan changes, renewals, raising issues, and more. The mobile app and web self-care help manage profiles, view session history, refill accounts, raise trouble tickets, and so on, with low data use and faster response time.

Robust payment security

PayPal and WiPay payment gateways have been integrated with web self-care and the companion mobile app for secure, hassle-free, and cashless payments.





Network Architecture

Business Use Cases

Whatsapp chatbot integration

- Enables the operator to send broadcast messages
- Enables customers to:
 - View details of their last payment, last bill amount, and current balance
 - Raise new tickets and view the status of the last raised ticket
 - Receive ticket notifications, payment reminders, and plan expiration notifications

5G and LTE plans

- Updated speeds for QoS-based 5G plans
- Single billing platform for both networks

Order management

- Automated work orders
- Order tracking reports with causes for any delays
- Work order notifications via Whatsapp and email

Mobile app features

- Payment gateway integrations for PayPal and Wipay
- USD to GYD conversion for PayPal
- Enables customers to raise and view tickets with an integrated WhatsApp chat trigger via the app
- Default web self-care features

Project Outcome

Launch of the country's first 5G network

Alepo's phase-by-phase digital transformation first enabled the operator to introduce a new LTE network, quickly followed by 5G services for residential and business wireless broadband. Both networks use the same policy and billing platform. The 5G service delivers some of the fastest internet speeds in the country, and is available in the same coverage area as the LTE network. Alepo's platform sends an updated QoS and profile to support the higher 5G speeds for high-frequency-compatible devices on the network.

The services have seen rapid uptake. Within a few months of deployment, online subscriber sessions doubled for the LTE network and a significant number of new users signed up for the 5G network.

Improved revenue

Personalized, automated, and customer-driven services helped deliver innovative and advanced offerings, driving brand loyalty. Alepo's 5G-ready Digital BSS, with several innovative business use cases and integrations, enabled rapid service monetization and increased overall revenue after the deployment.

Decreased OPEX

A single convergent platform for all services helped lower operational expenses along with automation of

workflows and processes; OPEX was lower shortly after the deployment.

Innovative customer experience

Alepo's solution enabled better customer service. The automated payment system, omnichannel self-care along with WhatsApp integration, and numerous other customer-oriented features help offer a modern and advanced customer experience. Customer complaints to the call center and support-related walk-ins at physical stores were drastically reduced post-deployment.

