Modernising Legacy Infrastructure in Africa

Cataleya has delivered a complete turnkey solution for rolling out IP infrastructure across Liberia.

Liberia's national operator Liberia Telecommunication Corporation (Libtelco) and Cataleya have modernised the country's communications infrastructure and ushered in a new era of IP networking in Liberia. Reliant for years on legacy TDM infrastructure, Libtelco has transformed its network in order to deliver advanced communications services and applications to local service providers, businesses and communities.

Libtelco serves local consumers and businesses with fixed-line services, as well as leasing network capacity to Liberia's four competitive domestic mobile network operators (MNOs). It has over 2.4 million mobile subscribers of its own, amounting to a mobile penetration rate of 78%, according to analyst firm Buddecomm.

As its business has grown, Libtelco recognised that it needed to migrate its infrastructure from TDM to IP and they needed a party that could make this transition seamless. To help bring its network into an IP world, Libtelco chose Cataleya to create and deliver fully integrated turnkey solution for IP networking that includes interconnection, billing, and session and application management.

The Challenge

Libtelco had limit experience in IP services but knew it needed to begin its migration and modernise its network infrastructure. Its users did not have access to VoIP calling or international dialling from a fixed-line phones so knew it could expand its service offering and offer greater choice for customers.

The challenge was to migrate to IP with quality of service (QoS) and experience (QoE) that matched or exceeded TDM while expanding its IP services capabilities. They could see the potential in IP but needed a solution that could be rolled out quickly and did not require a lot of time consuming and resource-intensive in-house integration. Solutions from multiple vendors would require a dedicated team focused on integration with no guaranteed timelines for delivery.

Libtelco wanted to move quickly to realise the advantages of IP without needing to manage multiple vendor relationships or go through a long procurement process with different vendors. They needed a way to adopt IP that was simple, powerful and ready to make a difference in their business.

The Solution

Cataleya created and deliver a complete solution for the migration from TDM to IP covering multiple aspects of Libtelco's IP roll out. It took 'Best of Breed' interconnection and billing solutions and matched them with its Orchard One, session and application manager. The result was a seamless roll out of IP infrastructure with Libtelco fully equipped with the tools it takes to monetise IP services.

As the foundation of the solution Orchid One has been used to ensure that Libtelco customers receive guaranteed QoS and QoE and are able to enjoy IP services with the highest possible performance. Orchid One gives Libtelco full end-to-end visibility into network performance with near real-time analytics related to session, service, application, MOS/R-factor scores, network and end-to-end SLAs. These are used to troubleshoot network issues as they happen and ensure call and session quality.

To create a complete solution, Cataleya used its experience in integrating multiple components of an overall solution, including switching, media gateways and BSS elements, to bring interconnection and billing together in a bespoke turnkey solution for Libtelco. It was able to create a full IP ecosystem to accelerate Libtelco's adoption of IP.

The end result will be the full modernisation of Liberia's communications infrastructure and a wealth of new IP services at the disposal of consumers and business.

The first phase of the network modernisation process will enable the delivery of both domestic and international VoIP services to local enterprises and government, and allow international calling from fixed line phones for the first time in Liberia. A second phase will support the delivery of cloud services and Unified Communications as a Service (UCaaS) to Liberia's growing small and medium businesses (SMBs).

> "This project represents a major step forward for the communications market in Liberia and is helping to support the IP innovations of the future. QoE monitoring is key to delivering voice services in Liberia and Cataleya brings that monitoring into an IP environment. It has enabled us to migrate to IP while guaranteeing call quality for our customers. We have a level of quality assurance that ensures the success of our business in the long term.

Sebastian Muah, CEO and Managing Director at Libtelco.

Benefits

A Complete Solution

Libtelco benefits from a single relationship with one vendor and a fully integrated solution delivering IP services

Rapid Roll Out

Using a fully integrated solution from Cataleya Libtelco was able to adopt IP quickly and create new IP revenue streams

New Services

Libtelco can offer IP services including VoIP and UCaaS to its users base expanding its portfolio

QoE Monitoring

Orchid One enables guaranteed QoS and QoE on IP that matches or exceeds TDM

IP Expertise

Libtelco was able to efficiently access Cataley's IP expertise and use it to develop their knowledge base

Innovation

With Orchid One, Libtelco has platform to grow its IP services and deliver new and innovative solutions in the future

The Future

Cataleya is providing Libtelco with the fastest and most efficient way to modernise its network and deliver high-quality IP services. Next generation technologies like Orchid One will help to safeguard and guarantee the long-term success of the communications market in Liberia, leapfrogging it into a pace-setting position in its region and paying dividends in a challenging market.

With Phase 1 of the project complete, Libtelco will use its IP infrastructure to offer triple play services on its fibre network as well as UCaaS to the local business community. Libtelco has a base to deliver an increasing number of IP services and develop new revenue streams while offering end users a superior QoE.

Sales Contacts:

Headquarters
New Tech Park #06-01A, Lobby A
151 Lorong Chuan Singapore 556741
Telephone: +65 3106 4020

Research and Development Center
1900 McCarthy Blvd, Suite 204
Milpitas, CA 95035 USA
Telephone: +1 408 571 2200

Email: info@cataleya.com

> "Network modernisation can be daunting task for any operator. They can be complex and complicated. What we have done at Cataleya is simplified the process and created complete solutions for the migration from TDM to IP. This opens the door to delivering VoIP, unified communications and other IP services with flexibility, scalability and most importantly quality.

Jay Jayasimha, CEO, Cataleya