Telefónica transforms its video services, enabling an optimized customer experience

Who?

Telefónica

Tecnotree

What?

Implemented Tecnotree’s Surge digital accelerator platform, which simplified Telefónica’s architecture by providing a full-lifecycle solution for all Movistar Play video services.

How?

Using TM Forum’s Open APIs, Business Process Framework and toolkits, all part of the Open Digital Framework.

Results

Migrated over 40 business and service processes, which need information from legacy platforms such as charging and CRM, to a new, unified platform that also enables faster turn-up for new customers and faster rollout of new video services.

Faster is better in telecoms—and not just in terms of gigabit connections and terabit routers. Speed is equally important for getting new services to market, activating new customers and resolving problems. One example is over-the-top (OTT) video services such as Netflix, which service providers can partner with to increase revenue and improve customer retention.

Telefónica is Peru’s largest mobile operator, with over 16 million customers, as well as large fixed broadband customers. Over 2.5 million customers subscribe to its Movistar Play video service, which initially was available only to mobile customers.

Telefónica wanted to deliver it faster, including digital and rapid onboarding of new customers and quick rollouts of new products in an agile manner.

In April 2019, Telefónica began a six month project with Tecnotree to make its infrastructure more agile, which set the stage for expanding Movistar Play to its entire customer base. The project included migrating some existing services and launching new services, which required incremental service creation and deployment to enable quicker time to market and to mitigate business risks.

Another key aspect was unification of several legacy services, such as unified balance query and management, as well as accommodating different integration needs to support multiple channels such as IVR, customer care, SMS and a digital channel.

Called APPOLO, the project leveraged Tecnotree’s Surge digital accelerator platform, an open source, containerized, cloud native platform, designed and integrated with DevOps principles. Surge was deployed using the continuous improvement/continuous deployment (CI/CD) model to ensure new functionalities are continuously integrated, tested and deployed for Movistar Play.

The digital accelerator platform enabled creation and orchestration of microservices and business processes, and wizard-driven integration of services. Surge also includes an API gateway and an API adapter to connect legacy platforms that haven’t been migrated, enabling a seamless integration across legacy and digital platforms.
“Quick and improved application deployment speed are helping Telefónica deploy apps in minutes now, rather than hours or days,” says Marco Vidal Huamán, IT Director, Telefónica.

“As a result, more than 20 services could be deployed in just three months, enabling faster time to value. Additionally, Telefónica has been able to incrementally migrate more than 40 applications from legacy platforms in less than six months.”

The first phase of the project culminated in a commercial launch in October 2019. Telefónica achieved several major business benefits:

- **Increased revenue**: Telefónica is now able to provide subscription lifecycle management and event-based charging capabilities to allow broadband and other subscribers to add Movistar Play to their service bundle, or to add applications such as HBO and Netflix. “We’re also able to automate campaign scenarios for customer retention at the same time, providing upselling and cross-selling offers,” Vidal Huamán says. “As a part of the second phase, we are looking to implement a ‘virtual recharge’ channel, which will handle account payments for 100% of Telefónica customers.”

- **Speed of delivery and agility**: Telefónica now has network microservices capabilities that enable integrated, unified services between network and IT. “We can add new business processes and rules dynamically on-demand and expose a flexible and configurable digital layer that facilitates the creation and launching of new services based on RESTful Open APIs, as well as abstracting the back-end complexity,” Vidal Huamán says. “Additionally, with the CI/CD and phased approach for digital transformation, Telefónica is able to achieve seamless interworking of legacy systems and new applications while having the flexibility of adding new functionalities on need basis. The low-code platform from Tecnotree allows the creation of new APIs with microservices and created a business process/service by configuring integrated reusable services which can be implemented by solution integration team who are the SMEs for analyzing, optimizing and implementing business process. This ensures optimum processes are developed quickly by SMEs by leveraging reusable platform components through an intuitive business process modeler included in Surge.”

- **Reduced cost**: With the consolidation of three business units onto a single infrastructure, Telefónica is able to drastically reduce cost. “An important objective for Telefónica is the simplification of its network,” Vidal Huamán says. “The Tecnotree solution will allow shutting down of more than 15 platforms, making a considerable simplification.” Leveraging open source software also saves money.
Telefónica simplifies architecture to provide a full-lifecycle solution for its video services

**Key Business Benefits**

- **Increased revenue** through subscription lifecycle management and event-based charging capabilities
- **Speed of delivery and agility** through network microservices capabilities that enable integrated, unified services between network and IT
- **Reduced cost** through simplification (consolidating 3 business units on a single infrastructure and shutting down more than 15 platforms)
- **Incremental migration of** more than 40 applications from legacy platforms in less than 6 months

**Delivering a superior customer experience**

With APPOLO, Telefónica wanted to provide a better customer experience by eliminating back-end inconsistencies, starting with account balance management. Before the project, customers didn’t have a single, consolidated view of all their packages and promotions. Some customers had up to a dozen packages and promotional plans, each of which had different balances, business rules and other attributes. Every update would trigger a message that was sent on its own, instead of customers getting a single message with a rundown of all changes to their plan.

“This resulted in confusion, delivering a bad customer experience,” Vidal Huamán says. “Tecnotree simplified the architecture by providing a centralized solution to orchestrate different channels. It provided connectivity among different data sources, guaranteeing the correct delivery of each requested data to a specific application in the correct time. The new solution also centralized the management of different packages and promotions, and consolidating all notifications.”
“TM Forum’s Open APIs and Business Process Framework were the guiding points to standardize not only the interfaces and applications, but also business and service processes across the complete vendor and operator organization,” says Armando Martínez, Vice President, Latam, Tecnotree.

“Additionally, in order to achieve the successful migration of application and business processes, TM Forum’s principles were leveraged to build the migration framework.”

Standards-based Open APIs—used by Surge’s API gateway—and business process modeling notation enabled simplified and optimized adoption. The Business Process Framework (eTOM), helped define end-to-end business processes.

“Tecnotree used the Business Process Framework mainly in the services layer, where its workflow creation environment fits inside the model to speed up and simplify new business service launches by integrating with current IT systems,” Martínez says. “Open standards and open source tools enabled the development and delivery of a cloud native solution quickly and incrementally through CI/CD. Additionally, TM Forum’s Agile Operations and DevOps Toolkits provided the guiding principles in Tecnotree Surge to achieve CI/CD way of working. Since micro services could be independently developed and tested, different teams could progress the development in parallel in conjunction with continuous integration through automated Jenkins pipeline.”

Turning that vision into reality wasn’t easy. For example, the CI/CD aspect highlights how the Telefónica and Tecnotree teams had to learn on the fly throughout the project and make changes daily.

“It wasn’t a typical product deployment”

Vidal Huamán says.

“In fact, deploying Tecnotree’s Surge was just the first and foundational step in our digital transformation. CI/CD and teamwork are critical for successfully migrating applications and all of the other technological and business changes that Surge enables.”