THE ECONOMICS OF ALL-YOU-CAN-CONSUME BANDWIDTH: ARE OPERATORS STILL MAKING MONEY?



KEY FIGURES

- ☐ SUBSCRIBERS 2.6 million
- SERVICES OFFERED Mobile internet access. mobile portal services and international roaming. SMS, MMS
- ☐ TELIASONERA OWNERSHIP 76.6%
- ☐ REVENUE GROWTH 63% in 2010
- ☐ EBITDA Breakeven in Q4 2010
- ☐ CASH FLOW Positive by end of 2011

"[Yoigo] has experienced a 72 percent acceptance rate of the mobile data up-sell option since the launch...The cost of implementing this project was paid back within three weeks."*

-Johan Andsjö CEO, Yoigo

YOIGO - A CHALLENGER IN THE SPANISH MOBILE MARKET

TeliaSonera's Spanish mobile operator, Yoigo, is the fastest growing mobile network operator in the region. Yoigo has seen exponential subscriber growth with its easy-to-use mobile services. The service it offers is based on honesty, transparency, simplicity and the streamlining of internal resources enabling it to pass on savings directly to its customers and to offer lower prices. Yoigo's strategy is to keep it simple-people should be able to understand what they are paying for. It has a strong loyal base of postpaid as well as prepaid subscribers.

"Yoigo has very ambitious growth plans, but in order to compete effectively we have to ensure that we maximize the return on our infrastructure investment," said Johan Andsjö, Yoigo's CEO. "We needed a solution that could seamlessly integrate with our existing network infrastructure, deliver the performance we need to keep our customers happy, scale with our rapidly growing subscriber base and be up and running in a production environment in a matter of weeks. Procera Networks delivered on all of this and even beat our aggressive time plan for integration and installation."

BUSINESS CHALLENGES

There is fierce competition in Spain with three mobile operators having monopolized the Spanish mobile telecommunications industry by exorbitantly charging for their data plans. Yoigo entered the market as the first low-cost operator in Spain. The goal was to attain the country's best coverage.

The following Yoigo solutions highlight the policy management and enforcement capabilities of the PacketLogic solution by empowering smaller operators to compete with larger competitors.

^{*}Source: Light Reading Mobile

MULTI-DEVICE DATA PLAN USAGE



MOBILE VoIP SERVICE



MOBILE DATA TOP UP SERVICE



CHALLENGE: Subscribers with Multiple Devices

Data services usage has exploded with the advent of various mobile network uses like Facebook, Twitter, online gaming and real time video streaming. A wide variety of affordable internet-ready tablets and smartphones have stormed the market giving rise to more devices in use by individual subscribers or family members tied to captive mobile data plan limits. Typically a family of four on average has five to six mobile devices connected to the internet. Each device has a quota allocated and it often happens that one device uses more than the allocated bandwidth while the others consume less. The challenge that subscribers face today is the inability of aggregating the bandwidth quotas allocated to each device in the same plan associated with the MSISDN.

SOLUTION

A new service offering targeting mobile internet savvy subscribers has been created on the PacketLogic platform enabling sharing of data across devices belonging to the same account or plan. Thereby as part of a "multidevice plan" different devices can aggregate quota subscriptions and share data usage as if all devices were on one plan. When multiple devices are active simultaneously, the volume limit applied is the sum of the individual device's data plans, even if the devices are connected through different locations. A huge increase in this cost-effective and deviceagnostic data traffic plan adoption is expected as more consumers jump onto the mobile broadband bandwagon.

CHALLENGE: OTT Mobile VolP Usage

Yoigo subscribers were using OTT mobile VoIP clients such as Skype or Viber for some of their voice communications but these OTT services were impacting the profitability of their service plans given Yoigo's highly competitive pricing. Yoigo's service plan contract was modified to require that new subscribers acknowledge up front that Yoigo would block VoIP calls but feedback from their subscribers indicated they were still looking for a solution. Yoigo wanted to open up use of mobile VoIP to their subscribers but understood the challenges of accurately identifying VoIP traffic in their network so that it could be made accessible and affordable to their subscribers. Yoigo took this requirement to their partner Procera Networks to see if there was a solution. Solving this and embracing OTT VoIP was the key to improving customer satisfaction and lowering subscriber churn.

SOLUTION

Yoigo introduced VoIP Bono, a mobile VoIP add-on plan to their standard mobile data offerings. This service embraced OTT VoIP services such as Skype, Viber, and other VoIP clients from their phone or other device. Yoigo VoIP Bono customers get about 600 minutes of talk time with the 100 MB allowance devoted exclusively to VoIP calls. At 6 euros per month, this translates to an average cost of 1 cent per minute for mobile VoIP usage. VoIP Bono is powered by Procera's PacketLogic products that Yoigo has had deployed in their network since 2007.

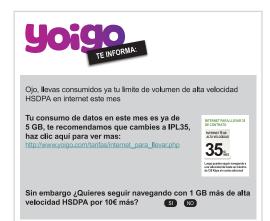


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CHALLENGE: Subscribers Reaching Data Plan Limits

Subscribers often maxed out their data plan limits before the month's end, which resulted in traffic shaping to lower bandwidth. Even though they were willing to spend more money to purchase additional data plan capacity, it was restricted due to the inability of the existing provisioning system to offer the service. This resulted in loss of incremental revenue



SOLUTION

Yoigo launched a mobile data up-sell option, the Top Up, whereby the subscribers could seamlessly recharge their mobile broadband data accounts using a Top Up portal. A landing page is presented if the subscriber is surfing the web or an SMS is sent when their data plan limit is reached.

Once the monthly volume limit is reached, they are given the option to continue browsing at lower speeds with no incremental charge or purchase additional data. This can be achieved with the user authorizing additional data volume using the Top Up portal that provisions the PacketLogic platform's policy settings with this volume for the subscriber to use in real-time

The Top Up offering is empowered by PacketLogic Real-Time Enforcement (PRE) systems and the PacketLogic Subscriber Manager (PSM) deployed in the Yoigo network. This platform implements a usage monitoring system, enforces policies in real-time and integrates into the BSS/OSS systems.

CHALLENGE: Subscribers Incurring High Roaming Data Costs

Yoigo has 3G coverage across Spain, but in places where there is no 3G network, users switch to national roaming using Movistar's GSM and 2G networks. It was negatively impacting service margins when subscribers were roaming since higher roaming data costs were getting paid to partner service providers when this occurred.

SOLUTION

Traffic shaping was successfully introduced in the roaming areas where Yoigo didn't have 3G coverage. This resulted in lower costs associated with subscribers roaming. The turnaround was very quick and return on investment was a couple of months due to the quick implementation of the service provided by the PacketLogic platform.



"Visionary mobile broadband operators like Yoigo are using powerful new business models to make costeffective wireless broadband a ubiquitous reality."

-James F. Brear President & CEO, Procera

BENEFITS

The new Yoigo offerings that were introduced were immensely popular, generated new revenue streams and increased customer acquisition and retention resulting in quick return on investment. There has been a 50% year-on-year increase in subscriber base since the launch of PacketLogic platform-supported services.

Yoigo has created a mobile app for smartphones powered by PacketLogic's platform that enables subscribers to get real-time consumption information and manage their accounts proactively. This leads to better customer satisfaction and loyalty to Yoigo.

The PacketLogic solution provides real-time analytics and enhanced business intelligence insights and reporting. It also drives the Policy and Charging Control (PCC) ecosystem by enforcing advanced network and service policies. This empowers, service providers to improve the subscriber's quality of experience, better monetize their infrastructure investments, contain costs, and create attractive services for their users by making qualified business decisions based on granular user and traffic intelligence.

"Visionary mobile broadband operators like Yoigo are using powerful new business models to make cost-effective wireless broadband a ubiquitous reality," said James F. Brear, Procera's president and CEO. "In order to make these models work, the operators need to make intelligent business decisions, deploy new services and effectively manage and control their network traffic. PacketLogic is designed to give these operators the performance and accurate visibility they need to succeed."

RESULTS

- Monetization of service offerings and drive new revenue streams
- Increase in loyal subscriber base by 50% year-on-year
- Operational cost savings and reduction in revenue outflows
- Traffic shaping on roaming subscribers
- Top Up portal for additional usage
- Cost-effective shared data across devices in same plan
- Mobile app for checking balance integrated with PSM
- Powerful network and business analytics
- Ease of integration and interface to BSS/OSS systems
- Roaming usage notification for outbound roaming subscribers

ABOUT PROCERA NETWORKS, INC.

Procera Networks, Inc. (NASDAQ: PKT), the global Subscriber Experience company, is revolutionizing the way operators and vendors monitor, manage and monetize their network traffic. Elevate your business value and improve customer experience with Procera's sophisticated intelligence solutions. For more information, visit proceranetworks.com or follow Procera on Twitter at @ProceraNetworks.

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