European Operator sets the stage with Nokia Bell Labs Consulting to achieve market leadership in fixed ultra-broadband services

Nokia Bell Labs Consulting worked closely with The Operator to plan the migration of legacy services and transform its business strategy to succeed in the race for convergence leadership in this highly competitive environment.

Tier 1 Eastern European Operator is one of the largest telecommunications service providers in region, operating in all segments of the communications industry in country. The company owns the largest network infrastructure, with operations in fixed-line voice, data and mobile networks. At the end of 2012, Operator had almost half of country customers for its various services (mobile, fixed voice, broadband, TV), and was the leading fixed broadband and mobile service provider in the market. It achieved revenues on the level of almost 5 billion United States dollars, EBITDA margin over 29 percent and net free cash flows on the level of 500 million United States dollars.
Challenges

- A highly competitive environment making global market value to decline, and a legacy network not allowing to reduce costs proportionally
- To fight churn and return to a leading position in the broadband market

Solutions

- The Operator worked closely with Nokia Bell Labs Consulting to develop the blueprint strategy and high-level design for the fixed network transformation — which is expected to take until 2020 — focusing on migrating legacy services to next-generation IP technologies, as well as expanding Very High Speed Broadband (VHSB) coverage.
- After the study, Operator’s top management decided to launch a proof of concept pilot to verify the blueprint’s assumptions in the real world and fine tune network migration assumptions.

Benefits

- Today’s networks cannot be dissected independently; services, customer experience and networks are profoundly interconnected, and the Nokia Bell Labs methodology provided The Operator a precise, comprehensive and truly convergent approach.
- Leveraging the Nokia portfolio capabilities and resources from Nokia Bell Labs Consulting allowed the Operator to take the next steps without delay and start to recover profitability as fast as possible.
- Building for long-term value: by 2020, more than half country population will have access to VHSB, bringing them the ultimate quality of experience in VoIP, TV and data services.

The challenges

**Reduction in Global Market Value**

The region is a significant communications services market in Europe, with 12 million households base. Its economy is growing, albeit more slowly than in the past. The Operator is not immune to the effects of this economic cooling, experiencing a decline in EBITDA of 27 percent in 2012, brought on by three main factors:

- Fierce price competition across all market segments.
- Consumers migrating from fixed voice service to mobile or VoIP, which is offered at lower prices.
- The regulating authority set mobile termination rates (MTR) and wholesale rates that are among the lowest in Europe. More reductions to MTR are scheduled for coming years. As the leading mobile service provider in the market, The Operator is most affected by these cuts.

On the cost side of the equation, the service provider’s legacy network and services did not allow costs to be reduced proportionally, leading to a decline in profits. Furthermore, the investment required for 4G and very-high speed broadband were not in line with the expected low average revenue per user (ARPU). The Operator needed to find a way to optimize its infrastructure and operations costs as the network and services grow to cope with the predicted continuous explosion of mobile data volumes.

**Fight fixed line-churn and lead the broadband market**

The Operator has over 4 million fixed voice, over 2 million broadband and several million mobile subscribers, but is experiencing double-digit churn in its fixed voice customers while the evolution of its broadband lines stagnates. This is partly because most of the urban broadband growth has been captured by cable operators (unregulated rivals), while mobile internet pricing puts pressure on fixed broadband in rural areas.

The strategy announced by the company in recent years, established converged services as the best means of competing: By bundling its services together, The Operator can offer lower prices on individual services and compete with service providers that only offer one service. Based on this strategy, The Operator intends to increase subscriptions to the ultra-broadband triple- and quadruple-play offer — from 1 percent of its total post-paid customer base in 2012, to approximately 50 percent by 2016.
This ambitious target requires significant portfolio, operations and network transformation to optimize the total cost of ownership (TCO) of their infrastructure and to support service bundling. With the backing of their senior management team, (CFO, CMO, COO), The Operator launched a project to define the transformation blueprint and turned to Nokia and Bell Labs, its longstanding partner in fixed and broadband access technology, as a trusted advisor in this crucial analysis and decision process.

The transformation blueprint project

The Operator worked closely with Nokia Bell Labs Consulting to develop the blueprint strategy and high-level design for the fixed network transformation — which is expected to take until 2020 — focusing on migrating legacy services (e.g., PSTN, ISDN, ATM/Frame Relay) to next-generation IP technologies, as well as expanding Very High Speed Broadband (VHSB) coverage. Nokia Bell Labs Consulting was tasked with providing recommendations in three main areas:

- How to protect legacy services revenue streams by commercial substitution to new Operator’s offerings and/or seamless technical migration.
- How to create a positive business case aligned with Operator’s mid-term capital expenditure (CAPEX) and strategic objectives, and in line with long-term projections (until 2020), which included EU digital agenda goals, market trends and industry evolution.
- How to achieve cost efficiencies in network operations, and IT and OSS systems, while finding a win-win proposal with regulator.

The Operator worked with a cross-domain team from Nokia and Bell Labs, which included experts in mobile and fixed markets, technology, operations, products, and business modeling. This team provided a realistic analysis of several technological scenarios and migration options, using inputs that included Operator’s marketing and operations requirements for legacy services migration, and best practices from selected European and global incumbent services providers. The blueprint project took place between November, 2012, and July, 2013, and resulted in Operator’s top management deciding to launch a proof of concept pilot project to migrate up to 20,000 subscribers in selected locations (metropolitan and suburban) from legacy services to next-generation IP technologies. The pilot will verify the blueprint’s assumptions in the real world and use the experience to fine-tune the design of planned mass migration.

Why Nokia Bell Labs

Global leadership in fixed broadband and legacy transformation domain

Nokia and Bell Labs worldwide market leadership in fixed access — ranked number one in copper and fiber technologies by leading technology consulting firms, including Gartner, Infonetics and Broadbandtrends — made it the natural choice for this network transformation project. The company’s innovation leadership and deployment experience in all access technologies, including copper, fiber and LTE, ensure that recommendations on final services, migration path and cost optimization will lead to the creation of a feasible plan.

The Operator also valued Nokia Bell Labs Consulting experience in legacy network transformation and its ability to draw upon past projects, such as KPN. The most relevant best practices from other fixed transformation projects with global operators that were applicable to the service provider’s specific situation were analyzed together with The Operator.

Finally, Nokia Bell Labs has established a reputation as a trusted partner for The Operator through several fixed voice and broadband projects, as well as transport and IP routing, and VoIP. The Nokia Bell Labs Consulting methodology and capabilities for convergent transformation Today’s networks cannot be dissected independently; services, customer experience and networks are profoundly interconnected, and the Nokia methodology provides a precise and comprehensive approach. The methodology used to design network transformation blueprint is focused on a truly convergent, end-to-end approach.
"I am pleased to confirm that Nokia has been a reliable and trustworthy partner to deliver on the agreed scope for this engagement."

VP Technology and Operations Strategy

It enabled synergies between various domains — such as fixed and mobile, voice and broadband — to improve the transformation business case. The approach also coordinated all departments, including marketing, technology, operations, government relations and finance, resulting in cross-silo alignment and dialogue.

Within the framework of a convergent transformation methodology, the Nokia Bell Labs Consulting team leveraged relevant consulting tools, benchmarks and models developed in the course of supporting and implementing transformation projects around the world, such as:

• A transformation best practices tool to share benchmarks from other services providers.
• A capability reference operating model to design operations and OSS transformation.
• Network deployment models to shape optimal deployment scenarios.

Excellent team performance

The level of cooperation between Nokia Bell Labs Consulting and the The Operator teams, as well as Bell Labs professionalism and deep understanding of the telecom business and technology were recognized as key to this project’s success.

Director of Technology and Operations Strategy in the COO of The Operator, said, “We are very satisfied with the Nokia methodology and team performance in approaching this challenging topic of legacy services migration. Leveraging vast experience from other transformation projects, the recommendations developed by Nokia in close cooperation with the operator team have been well received by our management as very pragmatic and have triggered an immediate decision to launch a pilot migration.”

The benefits

Revenue potential with a convergent ultra-broadband

The Nokia Bell Labs Consulting study provided a clear path for The Operator to ensure a high quality, ultra-broadband connectivity experience coordinated with legacy technology migration. This was possible thanks to a widely available convergent network. At the same time, the blueprint paved the way for The Operator to successfully migrate over 1.7 million subscribers to a next-generation network in five years within budgeted CAPEX, while achieving profitability targets.

The recommendation proposed an optimal mix of technologies (VDSL2+, FTTH, LTE), focused on select locations and markets, leading to CAPEX streamlining. Savings on operational efficiencies resulting from reducing the legacy TDM footprint (power supply, operations and maintenance, real estate) are to be redirected to support ultra-broadband growth and customer experience improvement.

A step ahead in the leadership race

The successful completion of this project represented a milestone for The Operator within its overarching business, technology and market leadership strategy between now and 2017. Nokia Bell Labs Consulting identified a path for the operator to become in the market leader in the broadband domain, with over 30 percent market share in mobile and over 50 percent in fixed.

Next steps

Confidence to move fast

The Nokia Bell Labs Consulting study, combined with its capabilities and resources, provided The Operator with the confidence to take the next steps without delay. The execution of a proof of concept will confirm the blueprint assumptions, set the stage for a proactive dialogue with the regulator, and design a migration program. The sooner it is started, the sooner the financial and market-share benefits start to accrue for The Operator.

Building for long-term value

According to the blueprint projections, by 2020, more than half of country consumers will have access to VHSB, bringing them the ultimate quality of experience in VoIP, TV and data services. By offering convergent services, The Operator will have the tools to preserve value in a highly price-sensitive market. End-user will benefit from a cost-optimized offer that provides simplicity, quality of experience and seamless connectivity, regardless of the end-user devices. At the same time, The Operator can protect ARPU by up-selling to single service subscribers and by boosting usage and data monetization for all subscribers.

Summary

Nokia Bell Labs Consulting was able to assume the role of trusted advisor for The Operator as they faced the difficult prospect of a fixed services and infrastructure transformation. Drawing on Bell Labs Consulting expertise in multiple domains, the jointly created blueprint document set the direction for Operator’s strategy to lead in the broadband services domain with both a better cost structure and improved market share. With well-researched and comprehensive short- and medium-term strategies in place, the future for The Operator looks very bright.