

O2 Ireland: The great network overhaul explained

Telefónica o2 Ireland took a daring step in 2006 when it launched a radical transformation program that **swapped out its entire live network**, including the packet and circuit core and 2,500 2G and 3G base stations. This turned O2 into a fully fledged mobile broadband operator – and the move has already **paid off**.

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► **BEHIND THE DECISION** to execute the dramatic swap-out, O2 Ireland’s Advisor to CTO & CEO Office, Karim Benabdallah explains, was the recognition of the untapped opportunities presented by mobile broadband in a saturated mobile-voice market.



Karim Benabdallah

“Prior to the network transformation, O2 was Ireland’s second-largest mobile operator with a loyal customer base and a solid reputation for reliability and quality. We never believed the 384Kbps service had mass-market appeal for broadband services; that’s why we kept a low profile on 3G at the time. Nevertheless, through these experiences, we shaped our vision and began to assess the potential higher speeds and mass-market devices.

“To get there we realized that we needed to tackle some issues head-on. There were growing costs with an older network. We also had serious concerns about the future capability of one of our network vendors. Finally, we had end-of-life issues on the horizon on some key network platforms.”

The decision was made somewhat easier by the fact that the network technology had moved up several levels. O2 Ireland could also quantify the financial benefits of this new technology in terms of lower costs and future revenue potential.

AN UNPRECEDENTED DECISION

“All these factors together led us to an unprecedented decision within the history of the company – to go through a complete network transformation with the clear objective of becoming Ireland’s leading provider of high-speed mobile broadband, while significantly cutting costs.”

The decision has already yielded results. “In terms of network quality, we are first on the market, with the best performance by far compared to our competitors,” Benabdallah says. “We are 2.5 times better than the nearest competitor in the market and three or four times better than the third. We achieved or exceeded all our tar-

gets in terms of capital and operational expenditure, network quality, and service performance.

“Our network architecture is simpler to manage. It is greener to operate thanks to the reduction in electricity consumption and we have a leaner organization capable of sustainable leadership in the market. These results have helped us to grow stronger in the Irish market.”

As a result, despite having launched its mobile broadband as recently as mid-2007, O2 has quickly gained ground as a mobile broadband player.

O2 also opted unusually for a single vendor to carry out the various stages of the network overhaul. Having a single vendor helped O2 to address some pressing concerns, including challenges it had with interoperability among different vendors.

So far operators in Western Europe have tended to focus on maximizing the potential of mobile broadband through long-term contract offerings with the view that a customer locked into a contract provides a more stable revenue stream.

However, as mobile broadband is most likely used in addition to a fixed broadband service (home or office), and as the pool of customers willing to tie themselves down to a long-term contract is bound to decrease over time, many telecom researchers predict that the next opportunity for mobile broadband in Western Europe lies in prepaid offerings.

NOT JUST A BIT-PIPE

“It is nice of course to settle for 20 or 30 euros per month in subscription revenue but this is not going to be sustainable in the future; however a lot can be done to address this business issue,” Benabdallah says. “We are interested in finding ways to develop revenue-rich services rather than simply remaining a ‘pipe’ for the consumer.”

It is for this reason that O2 saw business value in investing in a complete network overhaul.

“When we initiated the network trans-

formation in year 2006, the aim was to offer customers access to previously unavailable services and experiences – so they could browse the internet, watch video streams and do so while having greater control over what they want to do, and the timing and costs,” Benabdallah says.

“This is what we were addressing by carrying out the network transformation,” he says.

Benabdallah says O2 sees considerable business potential in mobile broadband. “There is a huge potential, especially here in Ireland, because it enables an array of new services we can charge for. However, to make the most of these opportunities we also plan to look at ways of improving the capabilities of our service layers by addressing our legacy systems to make them more efficient with data propositions,” he says.

At the same time, O2 is developing its IT systems.

“Having strong and flexible IT systems will ensure that we can adequately support the new capabilities, whether they are new models of advertising, mobile TV propositions delivered by Multimedia Broadcast Multicast Service and DVB-H, or new customer propositions centered around Near Field Communication technologies. The future lies in our ability to customize third-party business models that will bring benefits to the customers, the service providers, and to us.”

Benabdallah says O2 is determined to maintain its market lead as it seeks to enhance and develop the IT capability to support these services, but requires new business models along with them. The confidence the operator feels in the future prospects of mobile broadband comes from its conviction of how customer behavior will evolve.

“We are certain that customers will be consuming more and more data over the coming years. Usage will be driven by the availability of high-speed, ready-to-use broadband on the go, which in turn will

facilitate internet browsing and video streaming, for example.

“And as the quality of video streaming improves over time, so will usage,” Benabdallah says.

“Today, customers use over 1GB of data per month – next year this could be 3GB. And this increase will be fueled in great part by customer behavioral changes, illustrated by the increasing popularity of social networks such as Facebook, which make users want to be online nearly all the time wherever they are.”

BRINGING NETWORK COSTS DOWN

The one challenge that Benabdallah admits all operators face as data traffic increases is the absence of a proportional increase in revenue, as for voice and text services. “As the bits carried by the network generate less and less value over time, revenue ceases to grow with increase in data. The ‘pay-as-you-grow’ traffic business model is simply not answering the problem facing the operators today.

“This is why we need to explore all avenues for bringing down the costs of building the ever-faster networks of the future, including initiatives to share costs, risks and rewards. In this regard, vendors have an important role to play in developing the high-capacity systems to support network sharing that enable operators to deliver their unique market propositions at sustainable cost levels.”

Benabdallah says vendors also need to cooperate with the operators to create new business models such as “pay-as-you-earn” for innovative services in which suppliers are encouraged to invest and take risks together with operators in return for a percentage of the future revenues for those services. ●

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