Realising the potential of telecoms through next-gen OSS

As telecom networks grow in complexity and sophistication, and new technologies emerge, Telcordia continues to place its bets on delivering the highest standard of next-generation OSS and service delivery for global communications service providers (CSPs). Bill Wanke runs Telcordia's OSS business, helping to keep the world's largest operators running fast and lean. He was previously responsible for Telcordia's service delivery business, so he has an excellent knowledge of a broad range of service provider challenges and responses. Here, he shares that with VanillaPlus.

VanillaPlus: Everyone recognises that Telcordia has a unique position in supporting the operations of the US RBOCs, thanks to its lineage from Bell Labs. But to what extent has that evolved due to the demands of next generation, mobile and non-US business?

Bill Wanke: It's true that Telcordia is best known within the OSS market for its support of the US RBOCs. That support extends back even further than the formation of Telcordia, more than 25 years ago. Historically, that's given Telcordia a unique insight into running large-scale telecom operations. The need to operate efficiently, at scale, is a constant requirement that Telcordia was addressing on Day One, and continues to address today in all sorts of new ways.

But those businesses have been continuously changing, in response to new technologies and market opportunities. Telcordia has steadily evolved, in three main areas: first, within the RBOCs themselves; second, beyond the domestic US market; and third, within the wireless market.

The RBOCs have continued to grow and invest in new technology, especially in IP and fibre. Some of Telcordia's largest initiatives last year were for supporting next-generation programmes for the RBOCs. Their scale represents a huge advantage for them, but also it means the potential for huge expense. The cost of errors and inefficiencies gets magnified. It's critical that they can achieve consistency in their processes for new offerings. This includes getting it right from planning and engineering of their networks in the field to assuring services once they are deployed. The RBOCs have been extremely successful in doing that. We've continued to work on ensuring that our systems reach across multiple generations of technology to ensure economies of scale.

Over time, mergers and acquisitions by the RBOCs have created new requirements to understand how best to manage operation and systems change as well as how to achieve synergies 'against the clock', balancing quick wins against long-term sustainability.

Our core expertise has proved to be very repeatable. Beyond North America, deregulation and economic change has created new, large market players with RBOC-sized challenges, and Telcordia is rightly regarded as an expert in those situations. Our Consulting group has been working in the Middle East and Europe focused on establishing coherent and efficient operations for large CSPs. Similarly, we've seen our Next-Gen OSS portfolio embraced by global service providers looking for complete OSS coverage.

Finally in the wireless space, we are experiencing considerable growth and adoption. This is being driven by a series of factors. Mobile broadband

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has driven whole raft of network upgrade programmes, impacting not only the mobile access network, but also the backhaul network. Now, we're seeing network and service development programs happening much more in parallel, rather than in series. The best example of that is what we're doing in support of our customer Telenor in Norway.

Telcordia today continues to expand its global footprint serving critical needs of service providers addressing the most complex OSS challenges.

VP: There is a perception that the OSS sector is now more or less stably fragmented. What are the significant new opportunities for Telcordia? How does Telcordia stand out?

BW: OSS really isn't a single market. While there are common functional requirements, and some degree of standardisation about how they are described, there are many more differences than similarities between buyers of OSS. Beyond a certain point, you're into quite fine but critical details of operations and services, policies and priorities. And an understanding of those is something that Telcordia has in spades.

With our breadth, the continuous emergence of new problems to solve definitely offers opportunities for Telcordia, especially as those problems can be at any level – from new commercial models right down to modelling new LTE devices, or new ways to enhance the customer experience.

The level of complexity will jump dramatically with personalised services and wide, open supply chains. IP on its own doesn't solve that problem. In fact, it may add to the problem by opening doors to new and over-the-top players – for example, content providers – and may add to operations and OSS challenges. But that's the sort of complex, multi-dimensional problem we thrive on. We're good at dealing with the complexity that others struggle with.

VP: To what extent is automation still a primary focus of service providers and their OSS, relative to the simple need for speed?

BW: Increased automation remains a top priority as a strategy to reduce or avoid increasing costs, as well as ensure a high-quality customer experience. CSPs recognise that the rate of take-up of new services can be extremely fast, but getting to market first cannot override the need to sustain high growth rates. That means automation. What is continuing to change, though, is the scope of that automation. There is now a greater drive to automate across the enterprise, say between engineering and marketing departments, and even across collaborative business partners. How can an operator streamline the process of interacting with third-party application developers to drive high-value services? That's the focus of a project where we're working with Portugal Telecom and Microsoft, to be showcased at the upcoming TM Forum Management World event in Dublin.

Now that a good proportion of telecom operations have been automated, our customers are looking again at the parts that have been more difficult to automate, such as enterprise service design, for example.

VP: Does cloud have a silver lining, and if so – does OSS get the benefit of it?

BW: We're trying to move the industry beyond the hype around cloud services. There are a number of critical hurdles, such as scalability, availability, reliability, security, authentication and privacy that must be addressed before there is enough industry adoption to make the cloud truly economically viable. CSPs can help overcome those hurdles, and OSS will be a key enabler to creating confidence in the cloud.

We see the provision of cloud services as requiring a much more direct interface into the OSS, bypassing the traditional front-facing systems to provide a kind of brokering capability between players in the cloud value chain. That is an exciting possibility, since it may genuinely turn the OSS into a profit centre, a value-creator, rather than a cost centre for a business. That would be a huge change.

VP: To what extent are service providers still pursuing strategies of rapid transformation?

BW: CSPs still want the benefits of the transformation that was promised a few years ago. However, at that time and increasingly so now, most were pursuing more incremental programmes of change, versus large-scale change. Programmes driven by a key metric, such as cutting the IT systems estate by 90%, found that the process of transformation was very difficult to drive from a high-level management position. The changes required down in the operations level have taken longer to make, and in some cases, CSPs have found a viable alternative to ‘rip and replace’ in the form of federation of platforms, a staged migration, or ring-fencing systems to prolong their value but steadily reduce their cost.

For transformation, rather than going ‘all in’ – to use a poker reference – on a large-scale project, Telcordia has long proposed a ‘managed evolution’ approach, in which we identify both the changes needed to systems and processes, and the optimal way to make those changes over time. To continue the poker analogy, you make smaller bets, thereby lowering your risk. And the goal is to reduce transformation risk and keep the business running while still delivering incremental changes and benefits. It’s an approach that holds a lot of appeal for CSPs that value pragmatic, rather than dogmatic, change.

Some carriers have also experienced a sort of ‘enforced transformation’ as a result of mergers and acquisitions. That’s a whole different scenario, but has lots of the same characteristics: assessing current operating processes and systems, evaluating the options, looking to reduce complexity, gaining operating synergies and consistency across businesses, and delivering customers a better experience. Those are all things Telcordia knows how to manage well.

VP: Telcordia has been talking a lot about the potential of telecom recently. What does that mean, and how does Telcordia help realize it?

BW: A lot of our projects are still about applying new ideas – technology and services as well as business models. And they are driven by national and regional initiatives and emerging territories. What’s been made possible already will be taken for granted – everything needs to become easier to use; seamlessly mobile; cheaper; and more reliable. The potential of telecom really is about enabling economic growth, more fulfilling business and personal relationships, more fun, as well as empowering a better response to unforeseen events. Despite our passion for technology and complexity, it’s important from time to time for us to keep sight of why we do what we do in the industry. Telcordia really is all about helping our customers and their customers to realize the potential of telecom by making operations faster, slicker, and smarter.