



# Quality of experience will be next service differentiator, says Tekelec's new CMO

Since founding Camiant in 2003, Susie Kim Riley has been recognised as a thought leader and key advocate for policy control. She can call on 20 years of technology innovation and development experience, focused primarily around quality of service and networking. Here, VanillaPlus brings you Susie Kim Riley's first in-depth interview since the acquisition of Camiant by Tekelec in May and her appointment as Tekelec's Chief Marketing Officer.

**VanillaPlus: Service providers have been struggling to escape from 'one-size-fits-all' data pricing plans. In the wireless space flat-rate data pricing plans are being replaced, but is tiering the answer for profitable web-based services of the future? If not, why not?**

**Susie Kim Riley:** Tiering is one step to achieving profitable mobile data plans, but it also requires new levels of transparency for subscribers.

The fact is that most operators simply can't afford the 'all-you-can-eat' plans that subscribers are accustomed to. KPN's CEO recently said there would have to be "sanity in terms of pricing" with the growth of data in networks. As more subscribers sign up with new data plans – smartphones, mobile broadband cards, netbooks, iPads and more – the cost per megabyte will decline and operators will carry more data per user for less revenue. The result is that operators are seeing economics and delivery architectures falling behind the pace of the demand for mobile broadband access.

Tiered pricing is one key to solving these problems by linking usage and cost with a utility type of pricing model. For one, tiered pricing creates a lower price point that appeals to a new range of subscribers – possibly millions more who will now select an entry-level plan. They may not be familiar with the world of app stores or download videos on their smartphones, but they're willing to spend a small monthly amount to check email, read maps and send photos to friends and family. And two, operators will stop losing money on the small percentage of users that used the most bandwidth. They're now welcomed to use all the bandwidth they'd like. Tiered pricing now fundamentally shifts operators' view of data consumption as a cost centre to a revenue generator.

The catch, though, is that operators have to communicate usage to subscribers so they feel as though they're in control of their usage and have the ability to stop before causing overage charges. This is, of course, in operators' best interests, too, but it does require a new level of engagement to succeed.

**VP: What is the optimum business model for future internet-based services?**

**SKR:** The first step is to make tiering even more sophisticated. Subscribers want to personalise all aspects of their experience – whether it's the apps or iTunes, for example – and that includes pricing. In our conversations with customers, they say it's inevitable that we'll see more data plans priced around other variables including time of day, network speed, weekend/weekday usage and across multiple devices.

Operators have made a good start with a two-pronged, tiered pricing model, but competitors will try new approaches to slice and dice the subscriber base further to achieve a balance of network usage and profitability.

I expect we'll also see some innovative one-time services introduced, too. For example, service providers could offer an on-demand service such as a 'turbo boost' to enable a subscriber to accelerate a movie download before boarding a plane or photo uploads to a social media site. Or subscribers may pay a few extra pounds to see video in high-definition on their iPads but wouldn't on a smaller device.

I think we'll also see some innovative new services available by next year through partnerships between service providers and over-the-top (OTT) players. Operators will look beyond subscriber-based revenue for additional growth, and content providers are the first logical choice.

**VP: How can service providers ensure that web-based applications (including those from third parties) adhere to appropriate quality of service, bandwidth and charging rules?**

**SKR:** That's the challenge and the opportunity, and is another driver for over-the-top partnerships.

Operators are investigating ways to create two-sided business models with application providers and third parties that need the bandwidth. This would create an open environment where anyone



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could work with the service provider to improve the customer experience, while again linking bandwidth usage to pricing.

Video is a good example. A content provider could offer its customers a gold plan that gives faster movie or TV show downloads for a higher price, and a slower download speed for a cheaper price. The content provider may work with the service provider to potentially offer more compelling content for services over the infrastructure, in exchange for a better end user experience. Many interesting business models could arise, and ultimately this leads to more choice and customisation possibilities for the consumer.

Other examples could be that an application could appear as 'free' data usage to the end subscriber to help drive adoption and build a base of downloads and users. So, while app usage wouldn't count against a subscriber's data usage cap, the application provider would pay the operator for the data consumed over the app. We're seeing a similar model on the device side with e-readers, where subscribers pay the device manufacturer a flat rate for network access but don't pay per use.

**VP: How easy is it to track application usage, service reliability and subscriber billing for multimedia applications?**

**SKR:** Operators have sophisticated solutions to analyse these elements, but are still searching for the nirvana of consolidated subscriber usage information across all applications, services and bandwidth types. Operators capture much information today – about the application usage across the network, but information is spread out across several siloed databases in an operator's network. One needs to start thinking about how to consolidate the information into one repository so operators can more easily operationalise the access to this information.

However, the piece of information that operators are missing is the ability to measure the quality of experience (QoE) of these applications throughout their network. This will require additional work and investment as it is not an easy problem to solve.

This type of information is important as operators look at ultimately delivering the best quality of experience for their subscribers, and use this as their differentiator. This provides the feedback loop required in order for the operator to best 'tune' the network and services and achieve the necessary balance between network cost, service delivery and quality of experience.

**VP: Are wireless service providers damaging their customer relations by just throttling bandwidth in order to curb service abuse? Should the focus have shifted by now to understanding subscriber usage patterns in order to sell them more personalised and profitable service bundles?**

**SKR:** This is a common concern, but the reality is that throttling actually improves customer

relations and is a first step toward more sophisticated offerings.

Throttling bandwidth is one way operators can both increase adoption and maintain profitability of 'unlimited' broadband plans. This approach typically only affects the heaviest of users when they exceed a set amount of data during a billing cycle. At that point, operators can send them to a lower bandwidth tier only during peak hours and/or until their next monthly billing cycle.

The win for customers is that their service is never cut off, and they're never charged more. So operators maintain subscriber satisfaction and reduce risk of churn. The networks are a shared resource – this means if you bandwidth-control the heaviest of users, the rest of the subscriber base receives more resources, and thus better service. It is a win win.

Throttling often works best when operators do have additional plans to offer. With insight into how often subscribers exceed the cap, how quickly this happens in each billing period, and how often they're throttled down to a lower bandwidth, operators can justify offering a more expensive service because the subscriber can see that operators know their habits and can show how their data usage would be improved on another plan.

**VP: How are operators being affected by the issues surrounding Net Neutrality?**

**SKR:** We're asked about Net Neutrality with nearly every policy conversation we have with customers.

The issue is that it is easy to apply academic, theoretical rules to how enterprises may operate under certain circumstances, but if you take the free market and the reality of the competitive environment operators face, one will find that the free market will drive operators to ultimately do what consumers want – because if they don't, they will lose customers. If for example, an operator blocks a popular video site, because it competes with their own video content – consumers will end up moving to another provider who provides access to the popular content.

Operators do not want to lose customers. Network neutrality creates the fear that operators will act against the interest of the general public. The reality is that operators will inevitably do what makes sense, which is to do as much as they can for their customers, within the bounds of what they can spend and deliver as a business. This makes business sense. Happy customers, better bottom line.

If network neutrality, in its more stringent form were to be passed and enforced, this means limiting choice for the consumer. It would be like relegating everybody to the five day mail service, with no ability to overnight or accelerate delivery of packages. One needs to very carefully analyse the potential negative consequences of such rules. I do believe there are some positive signs in this

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area. Lawmakers and many in the net neutrality debate are also beginning to realise that, in many instances, one does have to discriminate, or prioritise certain types of traffic – otherwise the service or application will not perform and will disappoint customers. Most people don't realise this today, but the reason why many voice over IP and video services actually perform as well as they do is because such prioritisation is already out there in the network. Because of this reality, many are coming together and setting some common guidelines and recommendations to the FCC. An example of this is the recent **Google-Verizon** announcement regarding net neutrality.

Ultimately, consumers want more choices and to personalise their services. In order to do this, operators must be able to control their network, track usage, control application prioritisation, etc. Any network neutrality laws must ensure operators are not discouraged from making the necessary innovations in the network. Otherwise, consumers will be hurt.

**VP: Should North American and other communications regulators follow EU policies aimed at curbing 'bill shock'? Are there better ways of protecting subscribers and avoiding churn?**

**SKR:** Tiered pricing is creating a *de facto* 'bill shock' type of alerting system where operators give subscribers several ways to monitor their usage. These are critical for tiered pricing plans to succeed, so subscribers feel that operators are working with them to understand their usage and what plan is best for their needs.

Regulators' and operators' decisions about bill shock policies are largely dependent on the regional issues. The EU, for instance, has higher roaming fees as a result of the inter-country travel many Europeans do. This is far less of an issue in North America. US customers are getting their first taste of data tiers, and operators should be given the opportunity to demonstrate that they will proactively address bill shock issues.

**VP: Following Tekelec's May acquisition of Camiant and Blueslice Networks, how will product synergies benefit your operator customers and end users?**

**SKR:** The combination of technologies and philosophies between the three companies gives service providers a unique set of solutions to address the mobile data explosion and evolution to broadband networks. Customers can expect integrated technologies that will enable them to accelerate their move towards providing higher levels of intelligence and controls in their networks. For example, integration of subscriber data management facilitates the scaling of large policy deployments and consolidation of disparate siloed subscriber databases.

Integration with performance management provides operators with the necessary network visibility and real-time performance intelligence on their systems and services. This is a key operational tool to manage next-generation deployments of IP-based services. 



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