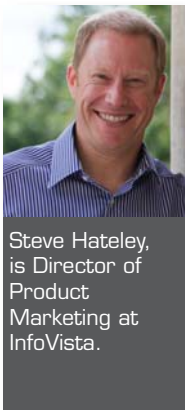




INTERVIEW:

Is the iPad a blessing or a curse when managing mobile data service quality?

With an explosion in data traffic and rising subscriber expectations, mobile service providers (MSPs) have to ensure consistent performance for a growing array of mobile services. All-IP mobile networks mean that existing OAM techniques and instrumentation can now be leveraged to assess data quality – but it needs to be seen holistically across all the domains and equipments that the service can transition. VanillaPlus talks to Steve Hateley about the challenge.



Steve Hateley, is Director of Product Marketing at InfoVista.

VanillaPlus: What is the biggest challenge now facing mobile service providers (MSPs) in delivering consistent and reliable data services?

Steve Hateley: Service providers, in the UK in particular like O2, who took on the iPhone were very forward thinking because of its massive uptake, but what they hadn't anticipated was the massive amount of capacity it was going to require from their network. I recently spoke with a network engineer from Vodafone UK who mentioned that since taking the iPhone onto their network the additional capacity and re-engineering necessary had been tremendous – in order to cope with the influx of new application-based traffic.

Moving on from that is the question of the iPad. Will it be a blessing or a curse to these operators? If the Apple "tablet" takes off with the popularity of the iPhone – and users aren't tempted to just buy the product for its WiFi access – what additional load is going to be put on the network and its resources? The iPhone offers some great applications that will no doubt be available to the iPad but the new device is especially suited to multimedia and an increase in streaming services.

This increase could either bring 3G networks to a point of saturation, or at the very least help to justify accelerated deployment of LTE and 4G services.

So will operators be hesitant in taking on the

iPad or welcome it as a real opportunity to grow?

VP: I was talking to someone who is involved in network caching, and he'd been told by an Australian operator that their network nearly crashed when Michael Jackson died.

SH: Yes, this is it. But we were not expecting this massive increase of data on networks five years ago, and service providers weren't ready for it. Capacity or bandwidth is rapidly becoming both an expectation and a commodity so providers need to be innovative in the way they now start bundling services. I mean I get 1,200 voice minutes a month in my package, and I think I use about 50 of them. Are users really bothered if they get 1,000 or 2,000 SMSs? What they're really interested in is "Can I get unlimited browsing, unlimited data?" and – for business customers – "What package can I get if I'm travelling internationally with work?"

Also, service providers no longer face the choice of, "Do I or don't I evolve my network to a next generation environment?" If they want to move forward and compete in the mobile data services space, they've got to go to 3G+, and plan for 4G/LTE. A key consideration is handling the traffic increase in the backhaul where it's widely acknowledged that it's going to be totally unviable to buy E1s and E3s to backhaul their traffic. Reports from Infonetics say that most service providers have short term plans to move towards an Ethernet-based backhaul environment. ►



VP: Are there common failings in the responses by MSPs to rapidly rising data traffic and customer expectations?

SH: What most MSPs should do is look at the way they operationally handle these data services. If they are moving to an end-to-end mobile data environment underpinned by IP MPLS technology they need to be looking at the silo-focused manner in which they have built their operations teams. At the moment there tends to be a team that looks after mobile data and they're purely responsible for the Mobile Packet Core domain of GGSN and SGSN devices. They'll also have a team that looks after their IP MPLS transport network and a team focused on the Radio Access Network – but never the twain shall meet.

The forecasted growth in service management for mobile, supports the idea that maintaining quality in application delivery is becoming more and more critical.

Application quality is dependant upon performance across the multiple domains that a service will cross, hence providers should be employing a more holistic approach in operational environments.

Taking this holistic approach to mobile data quality or service performance assurance will allow for collective use of infrastructure performance monitoring, existing IP OAM instrumentation and DPI – and that's where we come in.

VP: So, how should MSPs achieve this holistic view?

SH: InfoVista began by selling performance management solutions to mobile operators to monitor their IP transport networks. We found that in most cases these operators would have vendor-specific solutions to monitor the mobile data environment plus alternative OSS tools for monitoring the radio access – RNC, BTS, etc.

To achieve the holistic view, the choice would be to conduct a large scale integration project leveraging the recommended frameworks of the TMF or to organically grow single-silo solutions into other domains with patchwork-style extensions.

The alternative is to centralise specific key performance indicators from the end-to-end IP mobile service infrastructure, the radio access network, backhaul and mobile data core on a single platform.


Couple this with DPI level subscriber service information and user flexibility to extend visibility into key voice domain resources, and you would not only create a holistic multi-domain view but significantly improve the efficiency of operations and engineering teams who would be synchronised around a common view of customer mobile data service performance.

Essentially it's an approach that enhances the speed and efficiency of troubleshooting mobile service performance between the domains and layers of the network – improving the ability to keep customer service satisfaction high.

VP: What differentiates InfoVista's response to this problem?

SH: Essentially it's our ability to pull together the multiple domains of the mobile data service under a single platform, tied together with application perspectives and voice core equipment extensions, where we feel other solutions on the market focus on either a probe or domain specific viewpoint.

Either of these approaches will involve a dual investment in solutions and an expensive integration project to achieve the holistic view needed to support true end to end performance assurance.

We've not only combined the application, service and network performance management into this single platform. We have also created a new dashboard called Vista360 for operations teams. Service assurance is important but up to now fault management has taken the lead in the service assurance space. We've built a performance-centric service operations centre dashboard to troubleshoot and drill down into the quality of the mobile data service, as opposed to just responding to failures in domains or root cause. 

VanillaPlus Jargon Buster

DPI: Deep Packet Inspection

GGSN: Gateway GPRS Service Node

GPRS: General Packet Radio Service

OAM: Operations, Administration & Maintenance

NOC/SOC: Network/Service Operations Centre

RAN: Radio Access Network

SGSN: Serving GPRS Support Node

TMF: TeleManagement Forum

What impact will the iPad have on networks?

