# Bridging Siloed Services for a Seamless Customer Experience

By: Becky Bracken

Convergence is a tired old term that sounds deceptively simple. In fact, bringing together silo-ed services, like voice, data and IP across different networks so that the customer seamlessly moves within a multi-play environment, requires both deep technical acumen and a deft touch from organizational leadership.

Quad-play, while it first grabbed hold in Europe, is catching fire in the U.S. By 2016, 13 percent of U.S. households will have a quad-play service, and 57 percent of households currently take multiple services from the same provider, according to a report from Strategy Analytics from July 2011. Even more encouraging is that the AT&T U-verse ARPU has increased 8 percent year-over-year to $170, according to a report from Strategic Analytics.

From a pure technology standpoint, there's a dizzying array of data and analytics that must be processed and move between networks in real time in order to give customers the expected level of service. But, what's also required of operators is a real gut-check about what services they are good at delivering and how their organization will adapt to managing varying services, networks, devices and applications.

## The Customization Quandary

Even those touted as off-the-shelf OSS/BSS systems require a significant amount of customization to fit into a CSP's environment. Certainly the level of customization an operator looks for in these systems has to be balanced between efficiency savings and implementation costs.

"Some Tier 1 carriers can justify the cost of a fully custom system from Amdocs," Dan Baker, an industry analyst with the Technology Research Institute said. "But most operators are strapped for cash."

Baker said that smaller operators who are acquiring additional network assets are more likely to be willing to adjust their internal processes to work with an off-the-shelf solution.

But this too presents a problem. There is a cost in shifting entire processes of an organization. So CSPs really need to look at the ability of their operations to be flexible and adapt to new systems, services, networks, applications, and devices. This goes well beyond billing procedures.

As Mark Sylor, Consulting Engineer for New Technology, EXFO Service Assurance points out these systems also impact how an operator's brand is presented to the customer through a customer portal or interface. Even how that information is presented to the customer will be affected. Integrated OSS/BSS systems, by virtue of their ubiquity, will touch every aspect of a customer's experience, so getting it right couldn't be more important.

Finally, each operator has different organizational configurations that require varying access points to the network and the data. Less customizable solutions might not offer the flexibility and availability a particular operator's organization requires.

"There's no doubt that the hardest problem [for quad-play service providers] is organizational," Sylor said. "Service providers have grown up with different organizational teams, one for each service they offer. It is hard to get them to work together and hard to reorganize them. Unifying around a single tool for a function like service assurance can help. But for that to succeed you also have to recognize that these organizations have developed expertise and knowledge that must be maintained."

### Test the Service, Not the Server

While convergence promises the customer a one-size-fits-all solution, that's hardly the case for CSPs. Silos and Siloed services will continue to exist and operate, but the differentiator will be the ability of the OSS/BSS to collectively leverage the strength of each silo to allow additional services to come online to provide a truly unique customer experience and added value for customers on top of their existing services.

Silo-ed services, on their own, will already have many of the OSS/BSS systems in place because these networks are already set up to handle provisioning, billing and

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service assurance. But Sylor points out that that networks shouldn't ignore the service layer.

"Previously, knowing that the equipment was up and running was enough in order to know that the service it was dedicated to providing was up and performing well," Sylor said. "Today, that's not enough. You need what is sometimes called an end-to-end view but it is really a view of the service as a whole. My advice is to test the service, not the server. Monitor the service, not the circuit."

Sylor added secondly, you need a multi-play service assurance system that monitors all services, not just one or two.

"Just because you can deliver good Broadcast Video does not mean web browsing will work as well on the same network - or even work at all," Sylor said.

### Integration ROI

While integration of quad-play services can be a painful and expensive undertaking for operators, Baker points out that integration is precisely what makes quad-play services profitable.

First, if each network and service is running independently with independent OSS/BSS solutions, it requires redundant teams and systems to maintain that service. Implementing a singleOSS/BSS solution across several siloed services and networks, allows a provider to effectively manage services together, which reduces operating costs.

Second, customers want a price-break on bundled services and being able to engage them with value-added services can make all the difference on an operator's bottom line. Bundles are nothing more than profit erosion mechanisms if operational efficiencies and

seamless integration aren't first achieved. It also doesn't do a provider any good just to offer multiple services if the data and analytics can't be captured in an effort to sell additional location-based or "lifestyle" services like restaurant recommendations near the concert you just bought tickets for. Once networks can seamlessly handle those types of services and applications, the true return on quad-play services delivered over converged networks can truly be realized and reflected in a service provider's bottom line.

Carriers have an opportunity now, according to Sheryl Kingstone, a Yankee Group analyst, in leveraging customer data in cooperation with OTT players like Google and Apple, to provide location-based services, particularly mobile couponing and mobile promotions. And, we've already begun to see the pressure start to mount with OTT players such as Skype. "Over-the-top players are the ones who have really delivered on convergence," Kingstone said. "They (operators) really need to open up their assets and leverage what they know about their customers."

The real trick for CSPs will be convincing OTT players to help subsidize their networks for QoS and sharing customer analytics. Collecting and aggregating QoS metrics and customer analytics from multiple silos is challenging enough by itself, but sharing that information with third-parties raises a number of technical, security, and even legal issues. Pulling that off, without making

**It's the providers that recognize the opportunity to personalize a customer's experience and roll out the most flexible and responsive OSS/BSS systems to constantly update the level and quality of service will win in the marketplace.**

the customer feel their privacy is being violated, won't be an easy feat.

"There are tons of opportunities for customer push-back," Kingstone adds. "Customers have to opt-in to any location-based service, so they don't feel you're breaking their trust."

In the end, silos (read: networks) are the DNA of the service providers and what uniquely differentiates them from their competition. By leveraging their collective strength in creating unique, converged service offerings and collaborative agreements with OTT players –they stand to create a truly unique experience that will differentiate them beyond the connectivity itself (read: commodity).

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