

The Customer Experience Imperative

Providers must amplify subscriber experiences to support connected homes and monetize gigabit broadband.

By Kurt Raafflaub / *ADTRAN*

As software-driven, API-centric architectures grow to dominate service delivery, service providers need to focus on delivering simple, intuitive, high-quality user experiences to differentiate themselves and win subscribers.

Because operators today face more demanding service expectations from customers than they did in the past, they recognize the need to improve network scalability and flexibility on the access infrastructure side of their business. However, the quality of experience they provide subscribers is equally critical. Ultimately, it is a determining factor in making or breaking customer loyalty.

Meeting these customer broadband demands comes with its own set of challenges. Human error, manual operations, provisioning across multiple organizations, tightly coupled systems that are not easily modified, lengthy installation times and customer service issues are all roadblocks in the broadband delivery race. What is the key to overcoming these hurdles and winning the race?

UBER, AMAZON, HULU AND... BROADBAND?

In this digital age, transactions ranging from hailing a cab to watching TV shows and movies are on-demand, user-driven and available at the click of a button. It's only natural that consumers would expect the same type of

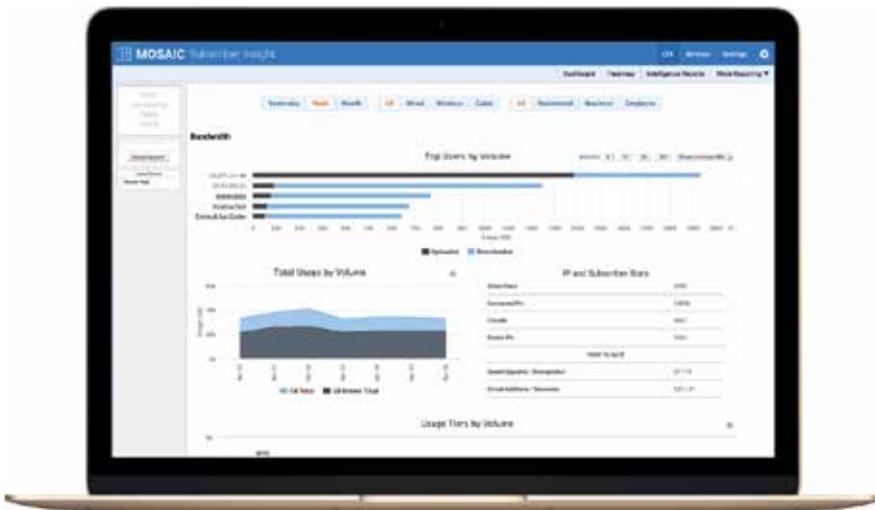
service from their broadband service providers. However, many traditional service providers do not provide broadband delivery services that fit this model. For today's operators to compete with cloud-based providers, self-provisioning services are quickly becoming a necessity.

Providers must adopt a service model that utilizes microservices with open APIs to provide advanced analytics, software-centric operations and virtualized service delivery. In doing this, they will shorten installation and activation times and improve the overall quality of service.

Deploying broadband solutions that are purpose-built to operate in a software-defined broadband access architecture allows for operation in a highly inclusive, open, multivendor environment. This capability reduces the risk in purchase decisions and advances the value proposition roadmap via crowdsourcing.

PROACTIVELY MEET AND EXCEED CUSTOMER NEEDS

Every subscriber uses his or her network differently. Therefore, effectively determining what affects individual broadband experiences is vital. Gaining real-time insight into subscriber usage, application and network status can enable a provider to actively troubleshoot problems and eliminate truck rolls. Providers have the ability to simplify service delivery with one-



Insights into subscriber usage patterns help providers personalize subscriber experiences.

click service activation, increasing service velocity while decreasing the cost of adding subscribers. Think about the value of identifying billing system inconsistencies or improperly provisioned circuits that are cutting into revenue. Imagine having a global view of network and traffic patterns to plan network upgrades before bottlenecks happen.

Understanding subscriber needs and ensuring customer satisfaction has never been more important. According to Accenture, the cost of poor customer service can be as high as \$1.6 trillion.

Service providers should look to use as much data as possible about their networks and subscribers to constantly improve their business operations and reduce customer churn. Ensuring that residential gateways have the ability to view beyond demarcation points and into home networks allows the analysis of application usage to personalize subscriber experience and streamline troubleshooting. When providers dedicate the resources and applications to discover what their subscribers really want, they can ensure improved business operations.

Proactively alleviating customer service issues through network analysis and subscriber insight enables service providers to increasingly personalize subscribers' experiences.

PUTTING THE "WHOLE" IN "WHOLE HOME WI-FI"

Because Wi-Fi is the primary means of residential access to the internet through smartphones, laptops and other devices, superior residential subscriber experience requires Wi-Fi capacity that can adapt to every need. A whole-home mesh Wi-Fi solution enables ubiquitous coverage, Wi-Fi performance enhancements and improved security. No more Wi-Fi dead spots in the backyard or back bedroom.

Providing a seamless Wi-Fi experience requires quality managed

devices that feature technologies such as self-installation, self-healing mesh capabilities and self-forming connections with other devices. These kinds of devices are paramount in ensuring high-quality residential connectivity. When coupled with the management capabilities described above, such devices present operators with a new world of revenue opportunities for connected homes.

Whether customers connect their homes by installing a series of applications or just yell out to Alexa, smart home technologies are transforming the ways homeowners use their Wi-Fi networks. If not managed effectively, applications for home security and automation, 4K content streaming or gaming can lead to bad subscriber experiences. Subscribers simply want things to work at the touch of a button or a verbal command, and a provider's job is to deliver the seamless connectivity to support these applications.

Though "broken Wi-Fi" is often the first and most common complaint from a subscriber, a host of issues can cause faulty connectivity. Service providers are left trying to diagnose problems remotely, spending countless phone time with the homeowner, or sending



A device manager solution enables visibility into a connected home.

The key to delivering effective Wi-Fi in MDUs is radio resource management, which automatically selects the right Wi-Fi channel settings and power levels.

trucks out to check and possibly swap out devices unnecessarily. The bottom line is that when subscribers report issues with their home networks, it can be difficult for operators to properly identify what the issue may be.

Service providers must control the Wi-Fi experience by deploying residential gateways over ONTs, thus enabling them to “own” the Wi-Fi. Wi-Fi, especially in dense urban/suburban and multiple-dwelling-unit (MDU) environments can often be problematic because of signal

interference from neighboring living units, signal bleed and slow Internet connections.

A next-generation wireless architecture – one that employs management through the use of self-forming and self-healing algorithms – is required to service MDUs. The key to delivering effective Wi-Fi in MDUs is radio resource management – an enterprise-grade, self-organizing network technology that automatically selects the right Wi-Fi channel setting and power transmit to maximize

coverage across the MDU while eliminating interference.

Seamless roaming is another requirement, as residents expect connectivity whether they are in the living units, hallways or common areas without having to repeatedly log in to access the network. Subscribers will no longer settle for Wi-Fi that does not support their connectivity needs and is not simple, easy to use and customizable. To ensure that subscriber needs are exceeded, providers must take a new approach to Wi-Fi delivery that ensures the best Wi-Fi experience for subscribers’ needs. ❖

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