Enhancing Customer Care

Make purchasing broadband services a frictionless activity.

By Pete Koat / *Incognito Software Systems*

Operators are redefining the traditional broadband services catalog as well as the ways customers subscribe to service packages. What used to be a tiered list of bandwidth speeds and data caps is transitioning to flexible, personalized service options that subscribers can choose as separate items at any time. Some call this "à la carte" services.

Instead of making a phone call to a customer service agent – typically including a period of waiting on hold while listening to elevator music – a subscriber can now access an intuitive self-service portal, select services and have a technician arrive at the door with the proper device in hand.

How can operators take this evolution a step further?

Expediting service purchasing and activation requires operators to support true zero-touch provisioning. This requires harnessing solutions to quickly and accurately provision devices with the services a subscriber wants without any need for manual touches from a technician or call center agent. Ideally, a subscriber should be able to purchase any gateway device from any third-party distributor, such as eBay or Amazon, plug in the device, enter a captive portal, subscribe to a services package and then have the services initiated quickly. On paper, this seems simple, but in reality, operators must consider a number of technical challenges before they can bring this scenario to an eager market.

Not all gateway devices are created equal, and today their differences have a direct impact on the services a subscriber can receive. With the dawn of network function virtualization (NFV), operators can reduce the restrictions on subscriber services by hosting device configurations in the virtual plane rather than within the actual (often limited) device. This offers a way for operators to enable new services without having to ensure that a subscriber is using the latest piece of gateway hardware.

Ensuring device firmware version compatibility or service capabilities is a considerable problem for operators that want to give subscribers more choice over which gateways they purchase and which services they select. If a gateway comes from a third-party distributor, there is absolutely no way for an operator to predict what version of firmware the device will have installed when it's connected to the network.

A proactive device firmware solution that enables operators to roll out new services can help tackle this challenge. Operators can preload their provisioning solutions with out-of-the-box device information, including multiple firmware upgrade paths. As soon as a gateway connects to an operator's network, the provisioning solution communicates with the device to establish which firmware version is currently installed and then automatically updates and reboots the device, ensuring compatibility.

Realizing true zero-touch provisioning requires operators to create intuitive captive portals for new users entering their networks. These portals should include a way for users to create an account, select flexible services from an à la carte services catalog and then enter billing details, including a term of service. Once the payment is authorized, the

operator's provisioning solution does the remainder of the work, dynamically updating configuration files and activating services. As these pieces work together, customers receive the frictionless service activation they desire. For operators that have deployed such solutions, customer feedback is very favorable, and operational expenses are significantly reduced because the need for administrative interaction is eliminated.

SERVICE ASSURANCE: A SOLUTION FOR FRICTIONLESS ORDER MANAGEMENT AND ACTIVATION

Making a good first impression on customers is vital. That's why routine service assurance and rapid error handling during the order management process is essential to the success of a zero-touch provisioning solution.

Seamless order management and activation require several important validations:

• **Feasibility validation** – Feasibility validation ensures that services are available in the region from which a subscriber is attempting to access the network. The feasibility check should take place right away so subscribers are not disappointed by failed services promises.
• **Order validation** – Upon capturing a new subscriber's order, an integrated resource facing service (RFS) validation system should provide the information a service activation platform needs to understand how to provision the customer's device with the proper parameters and services.
• **Activation validation** – Once services are provisioned, it's crucial to ensure they are working as expected. For data services, this means that a solution should check to see whether the internet connection is available and then verify assurance parameters, including signal-to-noise ratio, power levels and Wi-Fi radios.

These automated validation steps will ensure that services are activated properly and working as intended.

But what if something goes wrong? Errors can occur at numerous points along the service fulfillment process, and responding to them as quickly as possible helps avoid negative user experiences.

One essential consideration, especially for large Tier 1 operators, is centralizing service activation audit logs so any errors in the activation and fulfillment process can be resolved at rapid speed. If administrators and call center agents are forced to look through multiple systems and siloed information, the customer – who already expected frictionless service purchasing and activation – is likely to move on to a new provider, resulting in lost opportunity.

CREATING NEW MONETIZATION OPPORTUNITIES

By enabling frictionless purchasing with zero-touch provisioning, an operator puts itself in a strong market position. Customers can now onboard themselves, tailor their service offerings and increase the operator's bottom line without raising opex in the process. In addition to these fundamental monetary benefits, captive portals can be utilized to target existing subscribers with new options such as speed boosts, prepaid services or even temporary packages for one-time users. These all contribute to optimizing the customer experience. Purchase, the second stage in the customer life cycle, is as important to an operator's bottom line and to the customer experience as any other stage in the life cycle. ❖

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