

Winning Subscribers with a 3 "M" Strategy: MEDIA, MOBILITY & MANAGEMENT

78% of consumers multi-task with multiple devices and over 90% of them are watching video on one of those devices, according to Google research. For device-attached subscribers, who desire 24-7 connectivity, Wi-Fi is synonymous with Internet. Average digital homes have an upward of 6 connected devices, and the flood of smart home and wearable devices is showing no signs of slowing down; thus making visibility and control into the full-home network essential for both subscribers and carriers.



MEDIA ACCESS

Video is a killer application with video streaming being one of the top three online activities for subscribers. Streaming video makes reliable broadband performance as important as fast broadband. Add to that the penchant for accessing content and connectivity on every device, all the time, and full-home Internet access becomes table stakes for competitive service offering. With parameterized QoS (PQoS) technology built into newer gateways, operators can offer performance guarantees as compared to the older, best-effort priority-based technology. This makes it an essential feature for the multi-tasking, app-obsessed consumers.

Changing consumer behavior with the addiction to technology and video has made full-home Wi-Fi performance the litmus test for service satisfaction; and consequently a handy tool for competition to snag away customers with the promise of premium Wi-Fi. Subscribers going out and buying the biggest, baddest retail router that may not do the trick can be a support nightmare for operators.



Retail-grade vs. Carrier-grade

The Wave 2 iteration of 802.11ac technology brings faster speeds and better bandwidth utilization with Multi-User MIMO capabilities. However MU-MIMO comes with a caveat – all clients on the Wi-Fi network have to support MU-MIMO for the network to operate in high-performance mode. Aggressive adoption of Wave 2, 11ac technology will result in better interoperability, raising the level of network performance. Misguided promises on speed and performance by retail vendors however generate false expectations for consumers and leave operators' tech support answering tough questions.

Similarly, other sophisticated technologies that are part of the 802.11ac standard include Explicit Beamforming, Band Steering and Airtime Fairness, which, while significantly improve performance, are similarly limited by interoperability and chipset support. Operators can prevent headaches by offering subscribers a choice of premium, carrier-grade Wi-Fi equipment; Wi-Fi devices that favor reliable, stable Wi-Fi performance in line with the latest industry standards as opposed to proprietary hacks that are designed to inflate the numbers for quick marketing impact. Carrier-grade equipment are also thoroughly tested for interoperability with a wide range of client devices running different Wi-Fi chipsets. Another important feature of carrier-grade devices is support for the TR-069 standard for remote configuration management.





MANAGEMENT Visibility and Control of the full-Home Network

As home networks grow in size, they also grow in complexity. With lack of awareness being a well-known source of dissatisfaction, users and operators alike can benefit immensely from more visibility and control of home networks.

For Subscribers

Applications based on the IEEE1905.1 standard allow entire home network control and visibility. Such applications, capable of being operated through a mobile device, enable residents to monitor, view and label devices on their home network, monitor device diagnostic information including Internet connectivity status, link rate and signal strength for Wi-Fi clients and easily set up guest Wi-Fi and parental controls. Providing end-users with a means of which to monitor networks benefits service providers as subscribers will gain a deeper understanding of the overall network and be less likely to immediately blame providers.

For Service Providers

The same IEEE1905.1 applications on carrier-grade broadband gateways also integrate with standard- based TR-069 ACS servers. This enables them to relay back all device and diagnostic information about the full-home network back to service providers. The application can also provide insight on subscriber usage behavior including the number of devices, peak usage times, and how they affect overall network performance. This information along with Wi-Fi diagnostics can facilitate anticipating and resolving issues quickly and economically prior to subscribers even being aware of any issues. Service providers can also offer service and upgrade recommendations based on usage behavior. With studies reporting 89% of customers churned following poor customer experience, these efforts stand to improve customer satisfaction, reduce churn as well as add new revenue streams.