What is 2020 bringing us, in home devices and applications?
By Charles Cheevers

We have just started 2020 and at CommScope we believe this year will mark a tipping point for key network, customer premise equipment, and smart home technology that’s been in the works for years.

The confluence of technologies such as DOCSIS 4.0, 6GHz spectrum and Wi-Fi 6 are pushing a range of new services in the realm of reality. Whether it’s 10Gbps access speeds, more pervasive and powerful home networks, or visual assistants—a range of exciting trends are emerging to improve the customer experience and drive new levels of service capability for Internet service providers.

Let’s talk about some of the most important changes that we expect to see this year and next:

Smart connected home
One trend I believe the service providers need to pay attention to during 2020 and 2021 is the home of the future. Multi-gigabit broadband home getaways with high-performance, whole-home Wi-Fi are just the first steps for creating the smart connected home. With the introduction of Wi-Fi 6 capable devices, we are now going one step further and accelerating the huge performance gains of Wi-Fi 6 with the introduction of the new 6GHz spectrum potential. This new capability will be called Wi-Fi 6E and will ensure the 4x speed boost and scheduled lower latency services are enjoyed by consumers in 2021 Wi-Fi solution offerings. Wireless connectivity needs lower latency to support time-sensitive applications like ultimate gaming and VR/AR immersion. It also needs secure deterministic connectivity to provide the platform for new home services that drive new business opportunities and new levels of engagement with subscribers.

Smart Media Device
We will also see the residential set-top evolve to include far field voice, speakers and visual assistants, leveraging the demarcation of this device in heavy-trafficked rooms and capitalising on the trend of visual assistance. This new class of device is something CommScope has termed the ‘smart media device’ (SMD).

The SMD combines the functionality of the most important gadgets in the connected home to create a single touch point for consumers’ digital lives. It’s a set-top, smart speaker, visual smart assistant, IoT hub, voice & video conference, and remote control—all in one. This combination allows the device to offer a more personalised, connected, and convenient way to enjoy all the media, services, and applications in the digital home.

The SMD provides multiple functionalities to offer a connected home experience to subscribers. Far-field voice command technology, compatible with both Amazon Alexa and service provider voice control applications, delivers smart assistant services via the subscriber’s television screen. A software solution developed by Wiztivi, means that users can control and interact with the television through voice commands – with no need for a physical television remote control. The SMD also features a high-quality connected speaker to deliver an enhanced audio experience that operates across entertainment, smart assistant and control scenarios. Subscribers can also access IPTV and OTT services through the SMD.

By becoming a ‘super aggregator’, SPs (service providers) may increase ARPU by offering differentiated services that consumers are willing to pay for such as e-health, education, home security, utilities management, entertainment management and productivity tools. Just as the smartphone became a device that people cannot
What is 2020 bringing us, in home devices and applications?

live without, SMD products – with their high-quality audio experience, together with the additional services they empower SPs to create – are set to transform the traditional set-top into a much-loved device.

5G to the home, and within the home

FWA (Fixed Wireless Access) solutions for 5G NR (New Radio) across the sub 6GHz and millimeter wave bands will grow in adoption. There will be more innovation around the ability to self-install FWA equipment on windows to allow rapid overlay of FWA services in MDU (multi-dwelling unit) and dense population areas.

While Wi-Fi will remain the predominant home attach LAN solution, more innovation will centre on increasing the % of time smartphone users tap into 5G vs LTE in the home for consumer satisfaction on 5G smart phone purchases.

We’ll see innovation around millimeter wave 5G repeater and beamforming technology, not only to the home but throughout the home, with the emergence of new generation internal 5G repeaters or 5G femto cells.

As you can see, the next two years will be packed, as we see the real-world deployment of our industry’s most exciting technologies get underway. The big question for vendors and operators is how to make smart investments to capitalise on these large technology shifts.