



THE NETWORK IMPACT OF CONNECTED CONSUMER ELECTRONICS

Connected products are developing at a rapid pace across a number of geographic regions and countries, greatly impacting the market for new consumer applications and services.

The consumer electronics (CE) industry has migrated from producing and distributing hardware to distributing OTT content, providing intelligent home function and control services, programming and licensing software, and leveraging advertising models to connect consumers with desired products and services.

Research by Parks Associates shows that the average UK broadband household now has 8.3 connected devices, compared to 8.4 in 2018. This slight decline in ownership is mainly due to decreasing ownership of video entertainment products such as personal video recorders, Blu-ray players, and gaming consoles. Meanwhile, connected audio devices, led by smart speakers, have seen enormous growth.

However, in 2019, over 36% of UK broadband households owned at least 1 smart speaker and 16% owned at least one smart display. Adoption of smart speakers with personal assistants such as the Amazon Echo and Google Home has tripled since 2016, and adoption of smart displays has more than quadrupled since 2017.

Consumers of all age levels and levels of technological adeptness are purchasing these products — Parks Associates consumer surveys found that almost one quarter of heads of UK broadband households aged 65 and older owned at least one smart speaker or display. This number rose to roughly half among millennial heads of households.

The rise in smart speakers comes alongside a trend of flagship smartphones losing the headphone jack. Consumers must now decide as to whether or not they should purchase new headphones or transition their music listening to a new device. The only unaffected products are those that are not typically used to listen to music, such as those that interface to televisions.

Everything's connected now, even your vacuum cleaner

In the exercise world, companies such as Flywheel and Peloton are pioneering a new business model combining exercise equipment ownership and subscription to online fitness classes. Parks Associates consumer surveys found that 8% of UK broadband households owned at least one piece of fitness equipment — such as a treadmill, elliptical, rowing machine, exercise bike, or bike trainer — with built-in app support.

wifinity

An increasing number of products are gaining voice control functionality as well as integration with voice assistants. As a result, the smart home and connected consumer electronics spaces are converging, with everything from WiFi printers to robotic vacuums now integrated with Amazon Alexa and Google Assistant.

Data volumes continue to grow

From a network perspective, this growth in the number of devices and the data which they consume is putting networks under greater pressure than ever before. Networks that were thought to have spare capacity for years to come when they were built just a few years ago are already starting to hit capacity.

The limitation on future growth of legacy networks is proving particularly problematic. The trouble is that these cable systems simply don't have an excess of capacity to keep up with the continued growth.

The opportunity

However, this continued demand for increased bandwidth provides an exciting opportunity for providers to fill the void.

Full fibre networks are the only true way to guarantee future capacity for many years to come. 1Gbps, full fibre deployments today are built to provide 10 Gbps speeds and beyond, without the need to re-cable a property.