

BT Modern Families Report

Can wi-fi keep up with the demands of the modern family home?





Why modern families need a Complete Wi-Fi experience



Each day across the UK, families of all sizes rely on a strong and reliable connection to run, manage and enjoy so many significant aspects of everyday life. It has become a dominant thread in our days, connecting each device we own to the internet while offering us the freedom to study, work, relax and have fun in any room we choose.

Wi-fi is now so ingrained in our daily home experience that we'd be lost without it. We'd be unable to catch up with friends and family from afar, watch the latest episode of any of our favourite TV shows any time we choose, order new clothes while sitting on the couch or enjoy the wave of new technologies making our homes smart.

At BT, we connect more than six million homes to the internet with broadband – and an increasing number now have adult children living at home, grandparents helping out with childcare, or are comprised of step-families coming together. Many of these families have been customers for years, their different life stages and changing demands and dynamics enhanced and improved by the amazing products and services that have been enabled by superfast internet.

These experiences have given us a great deal of knowledge about how their need to stay connected has evolved over time. As technology develops and the number of wi-fienabled devices they own increases, the need for the strongest wireless connectivity has become ever more crucial. Wi-fi blackspots are no longer acceptable or something to just put up with, instead wi-fi must be able to reach the furthest corner in every home.

Since we launched the UK's most powerful wi-fi hub, we have moved towards the "convergence" of mobile and fixed line networks with the launch of BT Plus, bringing Fibre and 4G together to give customers our best connection in and out of the home.

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We want to ensure modern families always stay connected to the things and people that matter to them most.

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As our latest innovation in home broadband, Complete Wi-Fi will open up a world of

Now we are taking that one

step further as the first UK

broadband provider to

Fi for customers.

guarantee a strong wi-fi

connection in every room in

the home with Complete Wi-

possibilities for our customers and their families – allowing them to make the most of connected technology in every part of their home. To mark its launch, we have commissioned this first in-depth research study from Kantar TNS¹ into how the lives of modern families across the UK revolve around their wi-fi connection at home, and how the ways that they use their homes are changing as a result.

You will see in the following pages just how important it is, with more than half (56%) of those we questioned saying they valued being able to get online anywhere in the household. We also learned more about how important wi-fi is to keeping the peace in many households, allowing family members to spread out and find their own individual space for their own individual needs.

And as we move towards living in smarter homes, wi-fi is becoming critical to voice-assisted technology. We found a fifth (22%) of households already own a voice-assisted smart appliance and we know the average UK smart home will have 50 connected devices by 2023².

All of these findings show the reasons why we work hard every day to provide our customers with the best connections and the best customer experience in the UK. We want to ensure modern families always stay connected to the things and people that matter to them most.

A home's connectivity is now as important as its foundations

Charlie Luxton, Architectural Designer and TV Presenter



A strong reliable internet connection that can reach every inch of the home is now a pivotal aspect for my designs.

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Good connectivity has revolutionised our homes, so much so that it should now be seen as a central service for modern living.

In my own home, everyone has at least two connected devices from phones to computers to tablets. Then there's other wi-fi-enabled tech dotted around different rooms such as TVs, music systems and printers.

The freedom wireless connectivity gives us to move around our homes means enhanced family time and the chance to find our own spaces for privacy, to work or just to have fun.

Our homes are also getting smarter thanks to wi-fi. It has become the magic that opens and closes blinds, turns on our heating, controls individual radiators and my own favourite, helping me get hold of any album and blast music around the whole house. Making calls using wi-fi has also changed my life as I spent six years standing at the front gate whenever I wanted to use my mobile phone.

When I think about the spaces people will live in, a strong reliable internet connection that can reach every inch of the home is now a pivotal aspect for my designs. If everyone has to hang around the wi-fi router in one room to get a strong signal, I've failed. Whether it is traditional stone walls, metallic foils used in modern timber frame structures or mass objects such as chimneys, all can play mayhem with your wi-fi signal. If you needed more proof of just how important strong wi-fi is to families, then it lies in the fact BT's research found 52% of people would be put off living in, or buying, a house with lots of wi-fi blackspots. Connectivity should be planned for in the same way we think about where to put power sockets or lights.

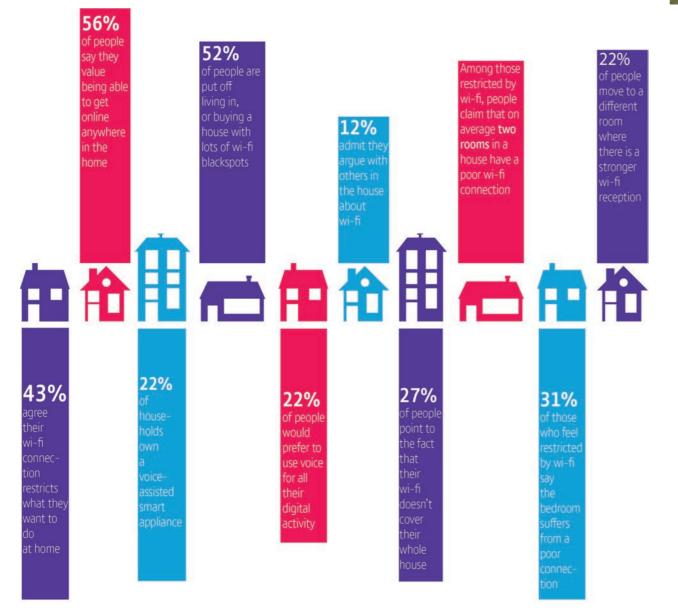
Good wi-fi coverage at home is now taken for granted. It is so embedded that we don't even realise how much we use it until we go somewhere it isn't as available. BT's research with UK families showed that bad wi-fi connections can also lead to family frustrations and the need to find compromises.

Wi-fi is also central to the future with so many opportunities for it to make our homes smarter, greener and warmer – and that really excites a sustainability geek like me.

2. https://www.totaltele.com/500103/EE-Average-UK-Smart-Home-will-have-50-connected-devices-by-2023

Quantitative research of a 5-minute 15 question interview of 1000 respondents living in a UK household of three or more occupants, at least one of whom is a child 15 or under along
with qualitative research based on six video interviews of people talking about their experience of wi-fi in their home for themselves and their families. This was supplemented by data
from the ONS and Kantar TNS's own Connected Life study.

10 reasons why modern families demand strong and reliable connectivity





Today's modern families are becoming increasingly dependent on wi-fi within homes that are often made up of multiple layers of people of all ages; from parents to younger children to grandparents to having adult children still living at home or returning to live there.

In fact, one in six (16%) of households questioned for our study contained an adult child aged 18+. According to ONS data, there has been an increase of 80,000 UK households (4.3%) containing an adult child since 2013.

Based on this, we believe it would be natural to see a growing demand for the wi-fi signal in many homes as the number of technology devices owned and used in these households increases.

It is also important to note that a younger generation aged 18–34 are the ones who appear to have a heightened dependence on such connectivity. They feel more strongly about being restricted by wi-fi around the home with 52% of that age group saying this affects them. It compares to 41% of people aged 35–54 who feel the same way.

This may be because a strong and reliable wi-fi connection is now needed to perform even simple daily functions, as well as satisfy the increasing use of connected devices around the home. Our research identified how each household now has four different types of device such as a mobile phone, computer, tablet or smart TV. Connected Life, Kantar's syndicated data, also shows adults owns three devices each.

Registered Psychologist Dr. Becky Spelman

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Going online, or rather being online all the time, has become a seamless aspect of our lives. Wi-fi has become so integrated that we only notice it when it is not working. We can feel bereft if we can't get online and find it impossible to settle.

How the modern family is connected right now

For those who own voice-assisted devices, our research showed 29% are using them to control their lights, 20% to control heating and 18% to connect to other connected devices. It can also be noted from Connected Life data that for individuals with access to the internet, 12% now have a smart home device.

Among the individuals we spoke to that owned connected devices, 66% said they valued being able to get online anywhere in the home. This compared to 56% of all individuals in general.

Looking at the ways in which the people we questioned spend family time together both offline and online, traditional pursuits such as having a meal together, catching up with each other or watching live TV come out on top. But it could be argued that wi-fi could have a role in augmenting so many of these experiences, for example, viewing recipe videos on a tablet while preparing dinner, being able to chat to relatives online or looking up programme and actor information on another screen while watching live TV.

But what was clear from our research and the case studies we spoke to was the need for wi-fi connections to work better – 43% of people were in agreement that their wi-fi connection restricted what they wanted to do at home. Perhaps families could spend more time offline together if their wi-fi worked better, ensuring their online lives are efficient.

How a strong reliable connection plays peacemaker for families



Being connected to wi-fi is a crucial aspect of family life today whether that's working from home, playing online games, doing homework or just relaxing with a new streamed series in front of the TV.

A strong and reliable wi-fi network that reaches upstairs into the furthest bedroom or study is vital so parents, children, adult children or grandparents can each enjoy their own activities in their own space.

A connection that always works is also an important peacemaker in families given our research showed one in eight (12%) of people argued with others around the home about the wi-fi.

Interior design expert and blogger Lisa Dawson says: "Our television and film watching habits as a family have also changed over the past few years as it's rare nowadays that we watch mainstream TV channels. We're ploughing our way through online box sets or movies but this in itself can be the cause of a few arguments as the choice of what to watch is so huge!"

Registered Psychologist Dr. Becky Spelman adds: "Having wi-fi that works throughout the home allows for individual downtime, both using connected technology and not, and maintains a level of harmony and peace within the home." It is also apparent from our study that while in the average household parents may be perceived to be the most frequent internet users at home (51%) compared to 11– 18s (29%) and under 10s (12%), that differs in households containing adult children over 18. Here they become the biggest perceived internet users (48%) with parents (12%) also left behind by children aged 11 to 18 (34%).

One of our respondents, Emma says: "We used to have a lot of problems (with wi-fi) as the kids have grown up to rely on it and they assume it is always going to be there."

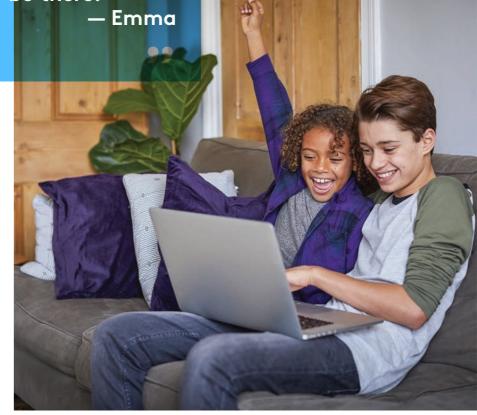
Tablets are now more common than not and are becoming more demanding in terms of connections in the home. We found eight in 10 households we spoke to have a tablet, and children under 10 were their biggest users; more than a third (34%) of them use one compared to their parents (32%) and children aged 11 to 18 (27%).

With reliable wi-fi to reach across a household, children can have the freedom to curl up on the sofa to play a game, make a den in the attic to stream a movie or escape to the study with their tablet to do their homework - all without competing with parents or other siblings for space, peace, and connectivity.

Dr. Becky Spelman adds: "Young people today have grown up in a world in which they are always online, so for them it really is a matter of their culture and it is natural for them to want to communicate with whomever they wish, whenever they wish. However, it is important to balance communication via the medium of a device with communication in real life."

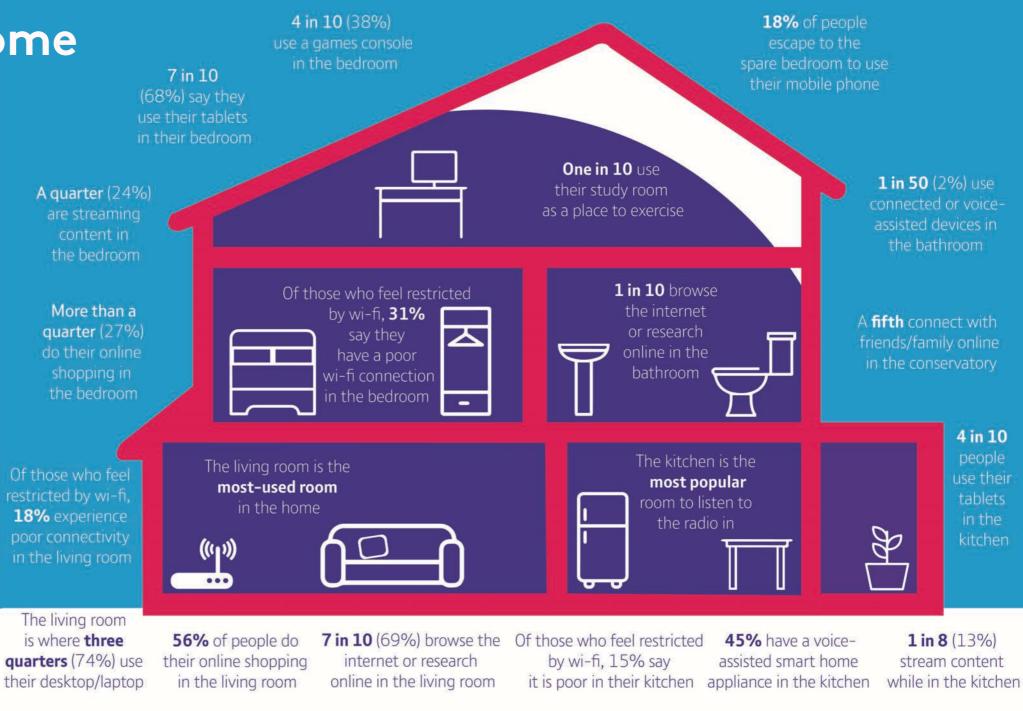
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The Complete Connected Home

Across the home, families use wi-fi in a wealth of ways, experiencing huge positives from the connection and freedom it offers them while also facing a number of challenges with it. Here we look at what's happening in the different rooms of households across the country.



"Give me a strong reliable wi-fi connection": The rise of voice-assistance

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Modern families are becoming increasingly reliant on wi-fi to power voice assistance in their homes. In our research, a fifth (22%) of homes own a voice-assisted smart appliance, 10% own another smart home device and one in 20 households own a connected kitchen appliance.

In homes with voice-assisted smart home appliances, 62% use them in living rooms, 45% in kitchen and dining rooms and 29% in bedrooms – with 2% even using them from the bathroom.

And given a fifth (22%) of those questioned also said they preferred to use their voice for all of their digital activity – something that could include everything from changing the TV channel to switching on the lights or turning up the heating – none of this could function without wi-fi.

Our study also found that 14% of people use a voiceassisted device in the living room and 10% do so in the kitchen. Our main TV is voice-assisted so the boys can go onto that, get online and search for videos.

— Dad James

We also discovered parents are perceived to be the biggest users of a voice-assisted smart home appliance with 64% doing so, with a perception that one in seven (15%) of 11-18 year olds regularly have a go alongside 8% of children under 10. Two thirds (66%) of smart home device owners told us they value being able to get online anywhere in the home. This suggests just how much importance they place on wi-fi to power this forward-thinking technology.

Interior design expert and blogger Lisa Dawson adds: "Without wi-fi, I'd miss the ease of listening to music – shouting 'Alexa, play Lady Gaga' without even needing to find the song is one of the most satisfying things in recent technology development!"

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People are starting to see the real value in having a connected home, which needs wi-fi to work. The technology around voice assistance has also come on leaps and bounds with better artificial intelligence. From TVs to dishwashers, plugs, heating systems and lightbulbs, so many devices now need wi-fi to function. And because you are using voice commands, everyone in the family, including grandparents and kids, can use it intuitively.



Gadget Show presenter Georgie Barrat

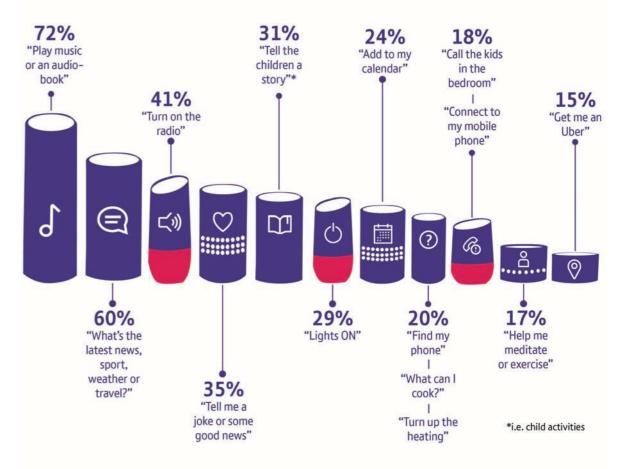
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We have Alexas in every single room of our house. We use them as a kind of walkie talkie. It saves me from doing a lot of shouting.

- Mum Sally



How families use their voice-assisted device³



. These are example commands people could be using based on their responses to the activities they use their voice-assisted device for

Modern wi-fi families are having to make compromises

Wi-fi is now so essential to all of the technology that connects our family life and makes it enjoyable that a poor signal can lead to all manner of frustrations and arguments.

Today's children have grown up with wi-fi as the norm and the wi-fi code is often the first thing they and their friends will ask for at each other's homes.

So with 27% of respondents questioned saying their current wi-fi connection doesn't service the whole of their household and two in five UK families admitting they feel restricted by the reach of their wi-fi, it is obvious that families need better connectivity in the home.

In our study, one in five people also admitted they are being held back from adding more technology to their homes because they believe their wi-fi connection would not support it. Among 18-34 year olds, this rises to more than a quarter (26%) and more than half (52%) of this age group felt restricted by the reach of their wi-fi in general.

The benefits are clear from our research though as four in 10 people (43%) told how they and members of their family would be more productive or happy or fulfilled if their wi-fi worked across the whole home.

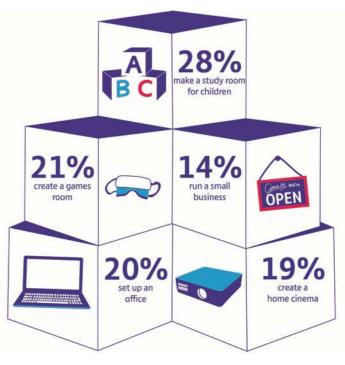
This could prevent the one in 20 (6%) of families who are forced to set rules on the number of devices allowed online at the same time or a similar number (5%) who have to go to a friend's house, café or use a local wi-fi hotspot.

Gadget Show presenter Georgie Barrat says: "Wi-fi is the invisible force that enables all of our different devices to communicate with each other and to your phone. Without wi-fi, no connected gadget would work. Nothing is more frustrating than when the wi-fi drops out and internet

The biggest frustrations found from our research

32% problems streaming TV or arguing with others in the 19% house about wi-fi being unable. to speak to family or friends online 7% being unable to connect to a network when cutting out or working from stalling home

Our research showed how many families face a poor wi-fi connection in rooms such as the loft, a conservatory or their garage. Of these families, the things they would like to do but were unable to due to poor wifi were:



pages won't load, your favourite movie freezes and songs stop playing. It all grinds to a halt if you don't have properly working wi-fi in every room."

The good news though is that while frustrations and emotions can naturally rise due to poor wi-fi signals around the home, there are many simple solutions to solve these problems.

Our research found that while a quarter (25%) had been forced to use 4G data to go online, a fifth (22%) simply moved to a different room in the home where there was stronger wi-fi reception. Another fifth (19%) thought of using a wi-fi range booster and 13% moved the router to a different position in the household.

52% of people would be put off living in, or buying, a house with lots of wi-fi dead spots Among those who feel restricted by wi-fi, on average, people claim that TWO rooms in their home get a poor connection

Registered Psychologist Dr. Becky Spelman says: "It can be very frustrating when some people in a house can get online and others can't, leading to blame and accusations of hogging the bandwidth. When we can't get on the internet, it can feel almost as though we have a limb missing."

Financial expert Jasmine Birtles explains: "Within the home it's now essential to have good wi-fi in all rooms, particularly as more small businesses are now being run from spare or less used rooms and spaces."

The wi-fi revolution: What our experts think...

Gadget Show presenter Georgie Barrat



"Wi-fi has been a massive gamechanger for the way we use tech at home. Cast your minds back to dial-up internet, you were tethered to a phone line and no-one could call the house. Now you can be anywhere in your home and do anything you want to with your devices."

Financial expert Jasmine Birtles



"Wi-fi is so important to modern families that some see it almost as a human right! It's a deal-breaker in some situations. There is data to show that people are putting off moving to the countryside because they feel the wi-fi and mobile connectivity there are poor."

Alice Fowler, Head of Publishing at OurProperty.co.uk

areas."



"Research by OurProperty.co.uk suggests that almost 80% of homes in the UK were built before the 1990s, well before the internet became an essential tool for modern families. Properties of this age often have their primary internet connection in locations which are not ideal for propagating modern wi-fi signals and are more likely to have solid internal walls which block wi-fi coverage. We have also seen a significant number of new homeowners considering strong wi-fi as a value add for their properties, deeming this home functionality as important as neighbourhood safety, travel links and school catchment

Interior design expert and blogger Lisa Dawson

"As a family of five including two boys, a teenage girl and a tech-obsessed husband, wi-fi is an essential part of our home life. My sons are, like many of their age, games console crazy and they spend at least 80% of their game playing time online. My teenage daughter uses the wi-fi in the same way that I used to use a

telephone at her age."

Registered Psychologist Dr. Becky Spelman

"Our bedrooms are our sanctuary, where we feel safe and protected from the world but at the same time we don't want to cut ourselves off from the world. We want to have it all; to feel protected and at home, but also to know that we can reach out via the internet whenever we feel like it."



Charlie Luxton, Architectural Designer and TV Presenter

"In the future, wi-fi will really help us to think about any energy consumption and create warmer and healthier homes. It will also offer us real options for our houses to be much more responsive to the wider electrical network and wider environment."



Complete Wi-Fi will guarantee wall-to-wall coverage at home

Pete Oliver, Managing Director of Marketing for BT's Consumer Business

It could not be clearer from the findings outlined in this report just how much families around the country count on their wi-fi network to live their lives, and that poor wi-fi connections really limit how families use the rooms in their homes.

Connectivity is a key part of modern home life for all of us. It allows us to have fun, unwind, connect with each other, and be more productive. It helps us to come together as a family in new ways, from playing games to asking our virtual assistant to tell us some new jokes. We rely on it to catch up with people on the other side of the world, or just on the other side of the road, for the latest news and gossip. We rely on our connections to create, from novels to music, and to develop or run a small business.

And, increasingly, connectivity in the home isn't just about screens. Tablets, smartphones and connected TVs are still the most prevalent, but more of us are streaming music, books and podcasts on our connected speakers, asking our voice assistants for the weather forecast and making use of smart home technology – without once having to look at a screen. We increasingly expect to be able to use these technologies in every room of our home.

However, one in five homes still have problems with their wi-fi⁴ and we have read here about the frustrations and even arguments this can cause for many households. That's why we're helping families call an end to wi-fi blackspots in the home by providing an entirely new type of broadband - the first in the UK to come with a Complete Wi-Fi guarantee.

This means that families can make the most of every room in their home - to spend more time together, or even make more time and space alone to relax, create or have fun.

This is a leap forward for our customers and it is one that will truly make a difference to millions of families up and down the country, and we're going to keep working to provide our customers with the best connections in the UK.

To learn more about Complete Wi-Fi from BT, please visit: **bt.com/modernfamiliesreport**



https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2015/connected-nations-2015



KANTAR TNS[®]

The BT Modern Families Report has been commissioned working alongside research partner Kantar TNS and is built from a combination of primary quantitative research, online unmoderated video interviews and analysis of secondary data (including Kantar's syndicated Connected Life data and ONS data). The research was based on the following sample groups: Qualitative / case studies: 6 x members in households of 3 or more occupants , at least one of whom is a child aged 15 years or under. Secondary data: Data has been drawn from the publicly available census data from the Office of National Statistics (ONS), and Kantar TNS's own Connected Life study – based on UK adult internet users. Quantitative primary research: an online survey using panel sample from LightSpeed Research of 1,000 respondents, members of UK households that contain three or more occupants, at least one of whom is a child aged 15 years or under.