Broadband and Me

From shopping to sending work emails, you probably use the internet in a whole host of different ways. In this eBook, we take a look at how businesses and consumers are harnessing the power of fast and reliable broadband, touching on everything from the increasing importance of cyberspace to companies to people's attitudes to using social media at work. We also reveal the findings of a survey of 1,000 people across the UK examining our evolving relationships with the web.

To get involved in the conversation online, use the hashtag #BroadbandandMe.
Why fast, reliable broadband is now a business must-have

More of us than ever are now connected to the web. Highlighting this fact, a report from the International Telecommunications Union (ITU) revealed that the number of web users worldwide increased from 738 million in 2000 to 3.2 billion in 2015, and this figure continues to climb. The ITU noted that since the turn of the century, information and communication systems have developed in an unprecedented way, opening up a whole range of possibilities for economic and social development.

From unlocking new sales and marketing opportunities to making it easier to communicate with colleagues and customers, the web has transformed the way in which many businesses function. This means that without suitable internet access, companies can find themselves at a serious competitive disadvantage.

In this context, it’s no surprise that the vast majority of businesses now see fast, dependable broadband a must-have rather than a luxury. The latest British Chambers of Commerce Digital Economy Survey drew attention to this point. Of the companies polled for the survey, 99% revealed that they view a reliable broadband connection as important, while 82% suggested it is extremely important.

70% of respondents said they have a broadband connection at work.
From 1969 - when the first network connection links were created between the Stanford Research Institute and the University of California Los Angeles - to the high-speed broadband setups of today, the internet has made major advances. Here are a few of the most important developments that have impacted on businesses across the UK and further afield.

**Increased speed and bandwidth**

For many companies, frustratingly slow internet services are now a thing of the past. An increasing number of businesses benefit from superfast broadband services, with some Fibre to the Premises packages now offering speeds of up to 1,000Mbps. Companies can also use Ethernet services, which provide extra reliability and mean they don’t have to share bandwidth with other users. In turn, this ensures speed doesn’t suffer as more demands are placed on the network. So, even during periods of high demand, businesses don’t have to put up with sluggish web services. This is particularly important for organisations that use the net for activities that require considerable bandwidth, such as file sharing, IP Voice applications and streaming high-definition video.

**Improved reliability**

Broadband has also become increasingly reliable, and fibre connectivity offers the greatest levels of dependency. Even stronger than copper, fibre-optic internet is resistant to electrical or human interference (unless the fibres are physically cut).

**Migrating to the cloud**

In part thanks to the enhanced speed and reliability of the web, cloud computing solutions are becoming increasingly popular among businesses. Cloud computing simply refers to the practice of using a network of remote servers to process, manage and store data, rather than a personal computer or local server. A poll conducted by enterprise cloud firm ServiceNow found that 52% of businesses consider themselves to be cloud-first, meaning they host new apps and services in the cloud rather than on infrastructure that they own and manage.
The next evolution of business broadband services is set to include so-called dark fibre. The communications regulator Ofcom is looking at ways to increase competition in the market and open up access to Openreach’s fibre-optic cables. This is called ‘dark fibre access’, because they will not be ‘lit’ by BT’s own electronic equipment. Instead, rival operators will have the opportunity to install their own equipment at either end of the cables and light the fibre themselves. Ofcom is currently looking again at its proposals, with an update on the future of DFA expected in the next few months. At TalkTalk Business, we think dark fibre could drive a revolution in business connectivity similar to that seen after the unbundling of domestic exchanges in 2003. We’ve been working to ensure that it lives up to its potential to give businesses better speeds at lower prices more quickly and more flexibly.
The impact on businesses

Ever-improving broadband is undoubtedly changing the ways in which businesses work. Here are just some of the transformative effects that fast broadband has had on companies.

77% of respondents said they have noticed a change in the way businesses are run thanks to the internet.

35% suggested their jobs are totally reliant on having an internet connection, while an additional 33% say their jobs are ‘very’ or ‘quite’ reliant on the web.

61% said they use the internet daily for their work, while a further 11% use it weekly.

67% revealed they use the internet to contact colleagues and suppliers.
**Greater flexibility**

Enhanced connectivity is enabling more people to work remotely and flexibly. This is because fast broadband makes it easier for people to operate from home or other locations, while cloud applications ensure that workers can access the data and systems they need with ease - whether they’re at home or travelling on business. It’s little wonder therefore that research conducted by the Chartered Institute of Personnel and Development found that 76% of employers in the UK now offer at least some form of flexible working to their employees, while 54% of workers report that they are working flexibly in some way.

**Rising productivity**

It’s no secret that slow internet can hit productivity. According to a global survey of 8,000 participants conducted by storage specialists Sandisk, in 2013 the average employee wasted the equivalent of a week per year waiting for their company’s network to respond. Fortunately, with broadband speeds and reliability increasing all the time, companies can now tackle these inefficiencies. Ultimately, this is good news for their bottom lines - and it can help to reduce the stress levels of their employees.

**Better, cheaper and faster communication**

Broadband has helped to revolutionise how many businesses communicate. From enabling companies to send and receive large files quickly and easily to allowing for crystal clear video-conferencing, superfast internet has made it easier for organisations to communicate with customers, colleagues, partners and suppliers. Businesses can also take advantage of varied and cost-effective voice services including IP Voice products that offer greater flexibility and cost savings than traditional calls packages, and cloud-based systems that remove the need for companies to invest in potentially expensive on-site hardware.
Improving customer service

Reliable web access can improve customer service too. It helps businesses to ensure that their websites remain fully-functional at all times and that customers are able to communicate with them quickly and conveniently. By minimising any downtime and helping to keep companies running as they should, fast and dependable broadband also enables businesses to process customers’ orders quickly and accurately.

Changing the ways companies sell

On a rudimentary level, fast internet has changed the way in which many companies sell. Increasingly, retailers are offering their products or services to consumers over the web rather than relying on traditional brick-and-mortar stores. This can help them reach out to a wider customer base while simultaneously keeping their overheads down. Reflecting this trend, an IMRG Capgemini eRetail Sales Index released in January 2017 showed that online sales in the UK totalled £133 billion in 2016, which was up 16% on the previous year. IMRG and Capgemini predict that online sales will increase by a further 14% this year.

Breaking down barriers to start-ups

Broadband is also helping to break down some of the barriers facing start-up retailers. Because they can promote and sell their products or services online and therefore don’t need to invest in retail premises, novice entrepreneurs can get started without having to cover the potentially significant costs associated with renting or buying retail premises.

As well as encouraging regular start-ups, this is paving the way for a rising number of hobbyists to sell their creations over the internet. From handmade jewellery to cakes, people are selling a range of artisan products online. According to a Royal Bank of Scotland survey, nearly a fifth of UK adults treat their hobby as a way to earn extra income or hope that it will develop into a full-time business.

The rise of blogging

Broadband and the internet more widely has also created a whole new industry in the form of blogging and video blogging, or ‘vlogging’. Providing people with an opportunity to share their thoughts and knowledge with the world at the click of a button, this format has seen the rise of the likes of fashion and beauty vlogger Zoella and high-profile political blogger Guido Fawkes.

Creating the gig economy

Fast broadband has played a role in facilitating the emergence of the ‘gig economy’ too. This refers to a labour market that is characterised by freelance work and short-term contracts rather than permanent jobs. It’s estimated that around five million people in the UK work in this way, with roles ranging from video producers, to IT contractors, to couriers.
Personal internet use: how businesses are striking a balance

94% of respondents said they have a home broadband connection.

92% said they use the internet for recreational purposes on a daily basis, while 86% of people said they are reliant on having a broadband connection for recreation.

90% stated that they use the web to keep in touch with friends and family.

From checking up on social media, to making purchases, to streaming music and video, many of us now use the web virtually from the moment we wake up until last thing in the evening. But how is this impacting on the way we work? According to a Pew Research Center survey of over 2,000 people, more than three-quarters of employees said they now use social media at work - and this could well underestimate the actual number.

Clearly some employers are not happy with this trend. Research conducted by CareerBuilder found that 28% of employers said they have sacked someone for using the internet for non-work related activity, while 18% have fired an employee for a post they have put on social media.

Additionally, 56% said their organisation blocks members of staff from accessing certain websites at work. There are now network-level filtering and protection tools available with broadband packages that enable companies to control the websites that their workers visit.

In some industries the prospect of employees spending time on social media is clearly a cause for concern. For example, the use of social media and smartphones is banned in many banks and call centres where employees have access to customers’ account numbers and security details. This is to prevent workers from sharing this confidential information.
However, other companies are taking a different approach to social media usage. A separate study by staffing and recruitment firm Spherion found that 31% of workers believe they are expected to know how to use social media in order to do well in their roles, while 39% suggested that having access to social media sites and tools enabled them to be more productive at work.

As well as helping certain types of worker to get their jobs done, allowing employees to use social media may make it easier for businesses to recruit and retain the best members of staff. The Spherion survey also discovered that 30% of workers believed that having the freedom to use these sites greatly increased their job satisfaction.

PR and marketing companies are clear examples of organisations that stand to benefit from allowing their employees to access social media sites.
According to figures cited by the government, by 2020 the volume of global web traffic is anticipated to be 95 times that of 2005, while fixed internet traffic in the UK is on course to double every two years. Highlighting the demands this will place on infrastructure, the government has suggested that broadband must now be treated as a ‘fourth utility’.

Nine in 10 UK premises already have access to superfast broadband, and this number is set to hit 95% by the end of 2017. A total of £1.7 billion of public funding is being invested in broadband infrastructure improvements across the country and a further 600,000 premises are expected to benefit from superfast broadband by 2020.

The government is also set to put £400 million into a new Digital Infrastructure Investment Fund, which it expects will be at least matched by private sector investors. This money is intended to serve as a catalyst to increase the rollout of full fibre broadband.
The increasing speed and reliability of broadband services is bound to have a big impact on the ways in which we use the internet as businesses and consumers. One area to keep an eye on is the emerging Internet of Things (IoT). This term can refer to anything that’s connected to the web, but it’s increasingly used to describe objects that can ‘talk’ to each other via the internet. The IoT is made up of devices that communicate with one another to convey information and produce an action. It can include anything from smart fridges that tell you when you need to stock up on certain foods to watches that help you to monitor everything from your heart rate to your sleep patterns and synchronise the data with your PC.

Where from here?

Gartner predicts there will be over 20 billion of these connected devices by 2020. If estimates like this prove accurate, we could be on the cusp of a revolution in the ways in which people, technology and companies interact. So, whether you’re looking for your next business opportunity or you’re simply searching for some sophisticated tech to make your life easier, it’s worth keeping an eye on the IoT.
Thanks for taking the time to download and read this eBook.