



Digital Participation Research Review

The Communications Consumer Panel is an independent panel of experts established under the Communications Act 2003. Its role is to influence Ofcom, Government, the EU and service and equipment providers, so that the communications interests of consumers and citizens are protected and promoted.

The Panel pays particular attention to the needs of older people and people with disabilities, to the needs of people in rural areas and people on low incomes, and to the needs of small businesses, which face many of the same problems as individual consumers.

The Consumer Panel is made up of part-time members with a balance of expertise in consumer issues in the communications sector. There are members representing the interests of consumers in Scotland, Wales, Northern Ireland and England.

Consumer Panel Members are appointed by Ofcom, subject to approval by the relevant Secretaries of State. They are appointed in accordance with Nolan principles and are eligible for re-appointment. The Consumer Panel is assisted by a small advisory team.

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Section 1

Executive summary

It is essential that people have the support, confidence, skills and equipment to get online and get the most from the internet. Without this, many will be unable to access the public services, information and entertainment the rest of us take for granted.

Communications Consumer Panel research carried out in 2008 showed that people across the UK believed access to the internet was at a tipping point: moving from being a 'nice to have' to a 'must have'. They expected that in the future, people who did not have broadband access would be at a significant disadvantage as more, and more vital, services were delivered solely online, or provided offline in a way that penalises users through higher cost or lower quality.

Research by Price Waterhouse Cooper, conducted in 2009, showed that those without the internet are already disadvantaged. On average, people who use the internet save £560 a year by shopping and paying bills online and people with basic IT skills earn up to 10 per cent more than their offline counterparts.

The Digital Britain Report, published by government on 16th June 2009, identified a new term, *digital participation*, defined as:

'Increasing the reach, breadth and depth of digital technology use across all sections of society, to maximise digital participation and the economic and social benefits it can bring.'

The report announced the establishment of the Digital Participation Consortium, made up of over 65 representatives from industry and the third sector, and chaired by the communications regulator Ofcom.

The National Plan for Digital Participation, published in March 2010, set a target for a 60 per cent reduction in the 12.5 million people who are not currently online, with older people and the less well off a particular focus.

To help Government, Ofcom, Consortium members and others increase the number of people using the internet, the Communications Consumer Panel has developed a Consumer Framework for Digital Participation.

The views and experiences of consumers are at the heart of the Panel's Consumer Framework for Digital Participation. The Framework takes the consumer perspective, bringing together all the different things that people need to get online and get the most from the internet.

By putting consumers first, the Framework will enable policy makers and service deliverers to:

- **Highlight the particular needs of different groups:** different groups of people will need different things to help them get online and get the most out of the internet. Using the Framework, the Panel has analysed the evidence to identify the particular needs of different groups, helping ensure that they get the help and support that is right for them.
- **Identify gaps and overlaps in current provision:** there are lots of different digital participation projects and initiatives being delivered by many different organisations across the country. Mapping these multiple initiatives against the Framework will identify gaps where people's needs are not being met and overlaps where there is an opportunity for activity to be delivered in a more streamlined, efficient way.
- **Target new provision:** identifying the particular needs of different groups and gaps in current provision will enable new activity to be targeted in a way that achieves the maximum impact with the available resources.
- **Assess progress:** the Framework can be used to assess progress and evaluate activity and initiatives against how well they meet consumers' needs. Using the Framework in this way could ensure that the available money is spent in ways that will have a real impact on people's ability to get online and get the most from the internet. The Panel will be using the Framework in 2011 to evaluate progress.

The Consumer Framework for Digital Participation

This review sets out the evidence from the existing literature. We have used this research, alongside original research commissioned by the Panel and consultation with experts from the public, private and third sector, to develop and test the Framework.

The key messages from this review, and from the original research commissioned by the Panel, are summarised in *Delivering Digital Participation: the consumer perspective*, which it has published alongside this report. All reports are available on the Panel's website.¹

The full Framework is set out below.

¹ The Panel's website address is www.communicationsconsumerpanel.org.uk

Figure 1: the Consumer Framework for Digital Participation



The research has identified five stages in the digital participation journey:

- To get interested;
- To get online;
- To make it work;
- To enjoy the benefits; and
- To manage the risks.

Each of these phases contains a number of important elements, summarised below. The supporting evidence for each of these elements is provided in the main body of the report.

To get interested: the first step in getting people to participate digitally is for them to get interested. They need to know what the internet is, what it can do and what the benefits are to them. They also need to believe that those benefits

are sufficiently compelling to justify the time, effort and expense involved; and they need to have the confidence to take the plunge.

To get online: once people have decided they are interested in using the internet they have to navigate a range of practical issues: the equipment and services they need have to be available; they must know how much it will cost and be able to afford it; if they are intending to get the internet at home rather than use it, for instance, at work or at a friend's house, they need to be able to choose the equipment and services that are right for them; and they need to be able to get help and support.

To make it work: people need to be able to use the equipment and services. If they have home access, this involves being able to set up and maintain their equipment and connection. For both home use and use elsewhere it also includes being able to navigate the web and find the content and services they need. To do these things people need help. This help needs to be available throughout the process, not just when they are starting out.

To enjoy the benefits: people need to be able to make the most of the opportunities that the internet provides. To do this they need to be able to communicate effectively online; to have the confidence and skills to interact with whatever services or content they choose; and have the opportunity to create content if they wish. They also need to be able to pursue their passions, getting involved in and discovering more about whatever it is that makes them tick.

To manage the risks: once people are online they need to be able to protect themselves, and if they have them their children. This involves knowing how to protect personal information, being aware of the possibility of scams and being able to judge the veracity and reliability of the information they encounter. They need to be aware of their rights in the online as well as the offline world, and to behave responsibly.

Socio demographic differences in internet take up and use

Different groups of people need different things to help them get online and get the most from the Internet. To illustrate this we have looked in detail at the different views and experiences of a number of sub-groups. The groups we have looked at are:

- Older people (65 and over);
- Young people (16-24);
- Parents;
- Disabled people;
- People on low incomes; and
- People in rural areas.

The key findings for each of the different groups are summarised below.

Older people (65 and over)

- Older people are least likely to use the internet and place least importance on it. Those older people who do use it spend the least time online.
- Older people have the largest number of barriers to digital participation.
- The biggest barrier is lack of interest. Older people say that they are not interested in using the internet or finding out more about it. They do not see it as relevant to their lives.
- Cost is also a barrier for older people. They are likely to need information about costs and access to affordable services and equipment.
- Many older people have little experience of and very low confidence in their ability to use the equipment. They will often need training on how to use a computer as well as ongoing help to ensure they feel comfortable with and can use a wide range of services online.
- Older people will also need practical support with choosing, buying and installing the equipment. They will need to know they have access to help if something goes wrong.
- The accessibility of equipment is also a significant barrier for many older people who encounter problems with small font sizes or readability issues on websites, or equipment that requires a high level of dexterity. These people are likely to need assistance to locate, afford and learn to use accessible equipment.

Young people (16-24)

- The vast majority of young people have home access to the internet. They are reasonably confident online, and are more likely to use the internet for a range of communication, entertainment and creative activities.
- A small number of young people have little or no access to or experience of PC-based internet access, although they are likely to have mobile phones. These tend to be young people who are also disadvantaged in other ways.
- Young people show the least concern about the internet and are least likely to be cautious about giving out personal information on websites or to others online.
- They are also the least aware of sources of funding for internet content and least able to describe the regulatory status of content.
- Younger people are less likely than their older counterparts to be informed or confident about their consumer rights. They are also most likely to participate in illegal peer-to-peer file sharing.

Parents

- Overall parents are more likely to have the internet than UK adults as a whole.
- Those without the internet generally recognise its potential benefits and think that it would bring advantages to their children.
- Cost is a stumbling block for many parents, although some think the costs are higher than they are.
- Fear is also a big barrier, including fear of the technology and fear of the implications of the technology for their position in and control over the household.
- Support is needed to help improve parents' confidence in understanding and using the technology. But for many parents this will need to be closely linked to support to increase confidence more widely and tackle other problems in their lives.
- Once parents have the internet they are likely to need support in keeping themselves and their children safe online.

Disabled people

- Many, including some disabled people themselves, believe disabled people are particularly likely to benefit from using the internet. However, disabled people are less likely than the general population to have access to the internet at home and there is relatively little research into what disabled people themselves see as the benefits of and barriers to digital participation.
- Some disabled people lack the confidence to use technology and can be scared of 'making a fool of themselves'.
- Cost can be a barrier for disabled people, both the cost of the internet itself and of specialist adaptive equipment. Disabled people may also need help to identify the costs of the equipment they need.
- Disabled people are more likely to need help during the purchasing and set-up process as they can find it more difficult to make multiple trips, shop around and install equipment.
- Many disabled people require specialist equipment to use the internet, which can be difficult to use and expensive, and is often not available if they want to access the internet outside the home.
- It can be more difficult for disabled people to identify and access suitable help.

- Disabled adults are less confident than those without a disability in their ability to protect themselves and conduct a range of activities online, including communication, leisure and transactions.

Low income adults

- People on low incomes are less likely to have the internet at home and less likely to have exposure to the internet outside the home than people on higher incomes.
- The first barrier to overcome for many people on low incomes is lack of interest. Compared to those on higher incomes they are less likely to know much about what the internet can do or see what the benefits are to them.
- Cost can be a barrier, and for those without bank accounts or who do not live in permanent accommodation so can availability.
- Many people on low incomes are unsure what equipment they will need to get online.
- People on low incomes are also more likely to lack confidence in or experience with using technology and will need ongoing support to help them set-up and use the equipment.

People in rural areas

- Household ownership of the internet is higher in rural areas compared with urban areas and rural users are more likely to use the internet for transactions and entertainment.
- Despite a higher level of overall take up, people in rural areas are more likely to experience broadband 'not spots', where broadband is not available. As a consequence, people living in these areas tend to value getting broadband particularly highly.

Introduction

About this review

As part of its role to protect and promote the interests of citizens and consumers in the communications sector, the Panel has developed a Consumer Framework for Digital Participation. The Framework is based on a review of five years of academic and policy evidence into what people themselves say they need to get online and participate. This report sets out that evidence, demonstrating how we have used it to build the framework.

The report is divided into the following sections:

- About digital participation: setting out the background and context to the debate.
- A Consumer Framework for Digital Participation: providing an overview of the Framework, why it is important, the evidence base underpinning it and how it can be used.
- Take-up and use: an overview of current statistics about who uses the internet and how.
- What people need to get online and participate: setting out the evidence underpinning each element of the Framework.
- The needs of different groups: looking at the areas of the framework where different socio-demographic groups are particularly likely to need help.

To further test and refine the framework the Panel consulted with representatives from government, industry and the third sector and commissioned original research, *The Journey to Digital Participation: a consumer research report*, conducted on our behalf by Essential Research.

The key messages from this research review, and from the Panel's original research, are summarised in *Delivering Digital Participation; the consumer perspective*. All three reports are available on the Panel's website².

² The Panel's website address is www.communicationsconsumerpanel.org.uk

The evidence base

The evidence set out in this report reflects citizens' and consumers' views of what they need to get online and get the most from the internet. Evidence has been included on the basis that it draws on UK quantitative or qualitative research undertaken directly with citizens and consumers. It does not include solely theoretical or policy focused publications. The review analyses 56 reports and aims to include the main pieces of research published between January 2005 and April 2010³.

The majority of the evidence included in the paper was identified and reviewed by the Panel advisory team. We also commissioned the Centre for Communications Research at Loughborough University to identify and review the key academic research for inclusion. Academic research was included on the criteria identified above. The key findings from the academic review of the literature were incorporated into this review by the Panel advisory team.

We also commissioned Essential Research to conduct original qualitative research to test and refine the framework. The research report has been published alongside this review, and the key findings have been incorporated into the analysis set out below.

³ A full list of research reports included in this review is in the bibliography on pages 73-75.

About digital participation

The Digital Britain report, published by government in June 2009, identified a new term, *digital participation*, defined as:

'Increasing the reach, breadth and depth of digital technology use across all sections of society, to maximise digital participation and the economic and social benefits it can bring.'

The National Plan for Digital Participation was published in March 2010⁴. The plan sets a target for a 60 per cent reduction in the 12.5 million people who are not currently online by March 2014, with older people and the less well off a particular focus. It also puts forward ideas about how to use social marketing techniques and targeted outreach to increase the numbers of people going online. This work will be led by the Digital Participation Consortium, which is made up of over 60 representatives from industry and the third sector, and chaired by the communications regulator Ofcom. Up to £12 million of public money has been allocated to fund the social marketing campaign and projects to help people get interested in and learn to use the internet.

The role of the Communications Consumer Panel is to influence Ofcom, Government, the EU, and service and equipment providers, so that the communications interests of consumers and citizens are protected and promoted. The Panel has a particular responsibility to champion the interests of vulnerable consumers, including older people, those on low incomes and those with a disability. These groups are among the least likely to use the internet. The Panel is therefore committed to ensuring that those who are currently digitally excluded can have the help they need to get online and get the most from the internet.

To help those involved in delivering digital participation, particularly Government and Ofcom, the Panel has developed a Consumer Framework for Digital Participation. The Framework sets out what people need to get online and get the most out of the internet. The Framework was included in the Government's National Plan for Digital Participation and can also be found on the website of the Digital Participation Consortium⁵.

⁴ The Plan can be found at <http://www.bis.gov.uk/uploads/plan-digital-participation.pdf>

⁵ The link to the website is <http://www.digitalparticipation.com>

Section 4

Why digital participation is important

Communications Consumer Panel research carried out in 2008 showed that people across the UK believed access to the internet was at a tipping point: moving from being a 'nice to have' to a 'must have'.

The research participants expected that in the future, people who did not have broadband access would be at a significant disadvantage as more, and more vital, services were delivered solely online, or provided offline in a way that penalises users through higher cost or lower quality. They anticipated that people would miss out on a wide range of services including: shopping, banking, school work, public services, and TV and other content.

Research by Price Waterhouse Cooper, conducted in 2009 on behalf of the then Champion for Digital Inclusion Martha Lane Fox, showed that disadvantage is already occurring. On average, people who use the internet save £560 a year by shopping and paying bills online, and people with basic IT skills earn up to 10 per cent more than their offline counterparts.

The gap is likely to increase as both government and private companies seek to maximise the efficiency savings the internet can offer. The same research estimated that the potential economic benefits of bringing all those who are currently digitally excluded online is in excess of £22 billion, brought about through a mixture of: improved education and employment outcomes; improved health and well being outcomes; efficiency savings for public service providers; plus potential benefits for consumers who are able to purchase a wider range of products at lower prices.

As this change accelerates, and in particular as government seeks to move more public services online, it will be increasingly important to ensure that people are not left behind. This will be a challenging task. Many of those who are not on the internet face multiple barriers to getting online. Even among those who are online, many people lack the skills, confidence, support or equipment to enable them to fully realise the benefits that the internet has to offer. Delivering digital participation effectively requires us to identify and understand all of these different factors, and help people gain the motivation, skills, access and support they need to get online and get the most out of the internet.

A consumer framework for digital participation

Understanding the communications' needs of citizens and consumers is at the heart of the Panel's work. We helped inject this understanding into the development of the Digital Britain process through the research set out above. We also used the findings of this research, and our knowledge of the sector, to begin to develop a Consumer Framework for Digital Participation. The Framework brings together all the different things that people themselves say they need to get online and participate in a digital world.

A version of the Framework was presented to Lord Carter, in his role as Minister for Digital Britain, during the development of the Digital Britain report. Since then, we have developed the Framework further, informed by: this review of the evidence; consultation with representatives from government, industry and the third sector; and original research commissioned by the Panel for this purpose.

This report sets out the evidence underpinning each of the different areas of the Framework. The full Consumer Framework is set out in figure 2, below.

The Framework is not linear and does not prioritise the different needs and requirements. People will have different needs at different times depending on their lifestyle, whether they are using the internet at home or elsewhere, and the ways in which technology changes and develops. They will start in different places; for instance some may learn to use a PC and/or the internet at an external venue before going on to set-up and install the equipment at home. People might also go backwards as well as forwards. They might forget skills they have already learned or need to learn new skills as new technology comes on stream. Nevertheless, whatever journey people take towards digital participation, to fully realise the benefits of digital participation all of these elements will need to be in place.

Figure 2: The Consumer Framework for Digital Participation



Using the digital participation framework

Bringing all people's digital participation needs together in one place ensures that policy makers and service deliverers start from the perspective of the consumer. This is crucial if we are to provide people with the help and support that is meaningful to them. Too often policy makers or advisors come to discussions about digital participation from different, usually partial perspectives and with prior agendas. For instance, this might be a concern about illegal file sharing, or child safety, or media literacy or some aspect of consumer protection. These are all relevant concerns, but they result in a piecemeal approach that leaves important things out. The consumer framework brings all the different elements together, putting the consumer perspective at the heart of the debate.

Using the framework in this way allows us to do a number of things:

1. Highlight the particular needs of different groups.
2. Identify gaps and overlaps in current provision.
3. Target new provision.
4. Assess progress.

Highlighting the particular needs of different groups

The framework is universal; it aims to set out all the things that people will need and can be applied to anyone. However, different groups and individuals will possess these skills and attributes to a greater or lesser extent. They will need different types and levels of support depending on where they are on their digital participation journey. The research shows there are clear differences in the attitudes and experiences of different socio-demographic groups. To illustrate this, we have looked at what the evidence says about the needs of the following key groups:

- Older people (65 and over)
- Young people (16-24)

- Parents
- Disabled people
- People on low incomes
- People in rural areas

Using the framework in this way can help identify which groups face the biggest barriers and what kind of help they need. This helps government, businesses and the third sector target their activity accordingly, either to those groups who most need support or to those initiatives that are likely to reach the largest numbers of people.

Similar analysis could also be done at a more micro-level; charities or third sector organisations can use the framework as a tool to help them think about which areas their client group is most likely to need help with.

Identifying gaps and overlaps in current provision

The digital participation landscape is complex, with a large number of organisations delivering a wide variety of different projects. The breadth of this activity is exciting but can also be confusing. Organisations delivering digital participation initiatives are not always aware of, or able to coordinate with, others doing similar things. This can mean that effort is duplicated and opportunities to share knowledge are missed. The proliferation of initiatives can also be confusing for consumers, making it difficult for them to identify which support is right for them.

The Framework is a good way of mapping existing support and provision against the range of people's needs. This can be done in different ways. For instance, it is possible to map all the provision in a particular geographical area or available to a particular group. Mapping these multiple initiatives against the Framework would enable the identification of gaps where people's needs are not being met and overlaps where there is an opportunity for activity to be streamlined.

Targeting new provision

Identifying the particular needs of different groups and the gaps in current activity will help to target new provision, ensuring that priority is given to initiatives that will plug gaps, reach the largest number of people or deliver to those groups who are most in need. This would help organisations and projects achieve the maximum impact with limited resources.

Assessing progress

Finally, the framework can be used to assess progress. Bringing together all the different consumer needs in one place makes it possible to assess the extent to which those needs are being met, and identify areas where more still needs to

be done. This will help to ensure that money is spent in ways that will have a real impact on people's ability to get online and get the most from the Internet.

Section 8

Take up and use

Take up and use: adults

The majority of UK households now have the internet at home; in 2009 70 per cent were connected to the internet, an increase from 67 per cent in 2008. Most of these connections (65 per cent) are broadband (Ofcom, 2009f). Both internet and broadband take-up are highest in England (72 per cent and 70 per cent) and lowest in Wales (60 per cent and 58 per cent), although Wales has the second highest take-up of mobile broadband (11 per cent) after England (13 per cent) (Ofcom, 2009g).

People are spending more time on the internet, from an average of 9 minutes per day in 2003 to 25 minutes per day in 2008, although this still lags behind television (225 minutes per day) (Ofcom, 2009f). People are also increasingly using the internet at the same time as other media devices, especially if they have internet access in their living room (Ofcom, 2008a).

Many of those who have the internet value it highly and feel that they couldn't be without it, particularly more regular and confident internet users (Communications Consumer Panel, 2009b). This attachment to the internet is surviving despite the recession; communications services are among the least likely to be cut from the household budget (Ofcom, 2009f).

Take up and use: children

Internet use in the UK starts early. By the age of six 38 per cent of children in a study of 1,852 parents and carers of 0-6 year olds had used a computer on their own, with 40 per cent having looked at websites for children (Marsh et al, 2005).

Use increases as children get older; 91 per cent of UK children between 6 and 17 have used the internet (Livingstone and Haddon, 2009). The highest level of use is among 15-17 year olds (95 per cent), while the lowest is among 6-10 year olds (87 per cent). Along with Sweden the UK has the fifth highest levels of child internet use in the EU27. This access is more likely to be at school than at home, unlike in other EC countries (Hasebrink et al, 2009).

The 2007 Taking Part Child Survey (Department for Culture, Media and Sport, 2008) found that internet/emailing/instant messaging was cited by 64 per cent of 11-15 year olds as one of their free time activities. However, it was not the most valued; just 3 per cent identified internet/ emailing/instant messaging as their most enjoyable free time activity, only slightly higher than TV and considerably behind spending time with friends (38 per cent) and sports activities (23 per cent).

Internet use outside the home

Not everyone without home internet access is a non user. In research among people without home access only 53 per cent had never used the internet before, while 17 per cent used it at least once a week (Ofcom, 2009c). Use outside the home takes place at a variety of locations, including friends' or families' houses, work, school, college, or local libraries (Ofcom, 2009c; Pitt, 2010).

People accessing the internet outside the home use it for a range of functions, similar to those with home access. These include sending and receiving email (45 per cent), working (38 per cent), searching for information (36 per cent), finding information on hobbies and interests (28 per cent), searching for information on travel, holidays or about their local area (27 per cent) and social networking (26 per cent) (Ofcom, 2009c).

Internet use outside the home does not appeal to everyone. Some are put off using the internet in public places, either because they lack the confidence or because it is seen as inconvenient (Beynon-Davies et al, 2008).

'I don't want to have to make an appointment to use a computer at the library' Beynon-Davies, 2008.

This may partly explain the correlation between experience of the internet and intention to get the internet at home. Over seven in ten (72 per cent) of those intending to get the internet at home were already internet users (using it at least once a year) and half (50 per cent) were regular users (at least once a week) (Ofcom, 2009c). These people tended to start using the internet at work, at friends' or family or at their local library. As time went by, they discovered more and more things they could do online. The tipping point came when they felt the benefits of having the internet in the privacy and comfort of their own home outweighed the effort involved.

'I'm getting more interested in it and always messing around with one somewhere.' User, 35-49, London, Ofcom, 2009c.

Proxy internet use

Some non-users have proxy access to the internet, where they are able to ask friends and family to carry out tasks on their behalf (Ofcom, 2009c; Beynon-Davies et al, 2008). This is most likely to be via children or grandchildren (49 per cent), other family members (39 per cent) or friends (25 per cent) (Ofcom, 2009c).

'We book all our holidays [through the internet]. We have a friend and he's on the computer right away for us. We get last minute deals. [If our friend doesn't do it for us] we ask our grandson to have a look, or our daughter-in-law. They have a look for us and then we ring [to book the holiday]' Beynon-Davies et al, 2008.

The link between proxy access and the intention to start using the internet personally is less clear cut than that between out of home access and the intention to get online at home. Nearly two thirds of those who said they intended to get the internet at home but did not use it at home had proxy access to the internet (Ofcom, 2009c). But for some the knowledge that they could ask friends and family to conduct occasional tasks for them if necessary made getting online themselves seem less urgent (Essential and Ipsos MORI, 2009; Essential Research, 2010).

Future take up

Internet take-up has continued to rise, from 50 per cent of households in 2003 to 70 per cent in 2009. An increasing proportion of this is broadband, with 65 per cent of households now having broadband internet compared to 11 per cent in 2003 (Ofcom, 2009f).

However, many people without the internet at home say they are not planning to get it. There are a variety of reasons for this, including financial restraints, lack of skills, lack of interest and lack of need (Ofcom, 2009c; Essential and Ipsos MORI, 2009). This suggests that maintaining growth at the same rate will become increasingly difficult as those who are not online will face more complicated barriers or be less easy to persuade of the benefits. Indeed, research suggests that some people will probably never use the internet, owing to deeply entrenched anti-internet sentiments and a conviction that the effort involved to get online vastly outweighs any benefit they might gain from it (Essential Research, 2010). It is therefore likely that in the future take-up will grow more slowly, and may reach a plateau before universal take-up is reached.

What people need to get online and participate

The journey to digital participation is a complex one requiring different types of skills and support. Having examined the evidence, the Panel has identified five key phases in the digital participation journey:

- To get interested
- To get online
- To make it work
- To enjoy the benefits
- To manage the risks

We examine each of these areas in more detail below.

To get interested

The first step in getting people to participate digitally is for them to get interested. They need to know what the internet is, what it can do and what the benefits are to them. They also need to believe that those benefits are sufficiently compelling to justify the time, effort and expense involved; and they need to have the confidence to take the plunge.

I understand how the internet can benefit me

What people need to get online and get the most from the internet

To get interested

To get online

To make it work

To enjoy the benefits

To manage the risks

I understand how the internet can benefit me

Crucial to deciding to take up the internet is an understanding of what it can do and how that translates into personal benefits. These benefits are wide-ranging. People value the internet as a way of conducting the activities that they already do more quickly, more conveniently and often, in the case of their hobbies or their social networks, more expansively (Beynon Davies et al, 2008; Ofcom, 2009a). Central to this is its enormous versatility. People who use it tend to do so in all aspects of their lives.

'I think I control almost my whole life on the internet whether it's banking, shopping, socialising, music, photos, everything revolves around it.' Female, London, 18-24, C2DE, Communications Consumer Panel, 2009b.

It is possible to break these benefits down into some key categories:

- **Accessing information:** the internet is a quick and convenient way to access a wealth of information, including: news and current affairs; information for work, study or hobbies; information to help people make informed choices; and answering any question through resources like Google or Wikipedia (Communications Consumer Panel, 2009a; Communications Consumer Panel, 2009b; Ofcom, 2008a; Ofcom, 2009c, Department for Communities and Local Government, 2008; Choudrie et al, 2008; DuckfOot, 2009; Essential Research and Ipsos MORI, 2009).

'It's a highway to information and a highway to knowledge and education. It's just amazing what you can learn off it.' User, 50-64, London, Ofcom, 2009c.

- **Communicating:** this includes: the opportunity to communicate and socialise with people all over the world; to keep in contact with family and friends; and to reconnect with friends and acquaintances from the past (Ofcom, 2008a; Choudrie et al, 2008; Communications Consumer Panel, 2009a;

Communications Consumer Panel, 2009b; DuckfOot, 2009; Firth and Mellor, 2009).

- **Online services/transactions:** this includes the convenience of keeping on top of finances and administration through online banking and bill paying (Department for Communities and Local Government, 2008; Ofcom, 2008a; Communications Consumer Panel, 2009a; Communications Consumer Panel, 2009b; Pitt, 2010); and the ease of online shopping (Ofcom, 2008a; DuckfOot, 2009; Essential Research and Ipsos MORI, 2009).
- **Entertainment:** entertainment was mentioned less frequently than accessing information or using online services, but is still an important benefit for a substantial minority of users (Communications Consumer Panel, 2009a; Communications Consumer Panel, 2009b; Essential Research and Ipsos MORI, 2009).
- **Cost savings:** some current broadband users identify cost savings as a benefit (Communications Consumer Panel, 2009a; Communications Consumer Panel 2009b; DuckfOot, 2009; Ofcom, 2009c), including the fact that emailing someone is cheaper than calling someone and that the internet makes it easy to compare prices and get the cheapest deals (Ofcom, 2009c).
- **Time savings:** people value being able to do things more quickly and conveniently and therefore saving time (Communications Consumer Panel, 2009a; Communications Consumer Panel 2009b; Pitt, 2010).

‘With the advance of home shopping it gives you more time to do things that need doing such as family, house, work etc. Everything can now be delivered to your door at the same price, most times cheaper than going shop to shop looking for the best deal.’ Research participant, Glasgow, Communications Consumer Panel, 2009a.

- **Increased social mobility:** in research by the Communications Consumer Panel (2009b) people spontaneously referred to home internet access as a route out of poverty, providing additional educational and vocational opportunities.

‘It’s a good way out of poverty as well. You know, like entrepreneurs using it, and I think that’s the way forward. I don’t know, you could use the internet to get out of poverty, you know, and create a sort of social mobility, with the internet. If you haven’t got that then, you know, you’re definitely disadvantaged.’ Male, London, 18-24, C2DE, Communications Consumer Panel, 2009b.

- **Civic participation and public services:** benefits often cited by policy makers, such as increased civic participation or better public services, are less top of mind for most respondents. However, public services are sometimes mentioned in the context of more efficient services generally (Communications Consumer Panel, 2009b) and when prompted around 1 in 10 say they have used the internet for public or civic purposes such as finding out information about public services provided by local or national

government or looking at political/ campaign/issues websites (Ofcom, 2008a). Those who have used it in this way regard the internet as a quicker and easier way to have your say or get involved compared to traditional channels (Communications Consumer Panel, 2009b; Ofcom, 2009a).

The importance of these benefits can be seen in the evidence of recent adopters and those who are planning to get the internet at home. The latter cited a range of benefits that were motivating them, including looking for information (36 per cent), communicating with friends and family (26 per cent) shopping or using online services (21 per cent) and online banking or paying bills (10 per cent) (Ofcom, 2009c).

The key driver for recent adopters former was a belief that the internet had become an integral part of their lives. Most had previously had access to the internet elsewhere, but having seen the benefits they wanted to use it more often in the comfort and privacy of their own home. Their initial use had been driven by a particular need. For some, it was because of work while for others it was for their children. Once they had installed it the also liked to use it themselves for pleasure. Many also appreciated the cost savings that might come with having an internet connection (Ofcom, 2009c).

Non-users were generally less positive about the benefits. For some there was a sense of inevitability: everything was being conducted digitally nowadays and they would need to learn how to use the internet in order not to be left out (Communications Consumer Panel, 2009a; Essential Research and Ipsos MORI, 2009; Ofcom, 2009c).

'No matter how much we want to resist it... I know that I have got to get on with it.' Non-users, 50-64, London, Ofcom, 2009c.

However, the idea that 'life is moving online' and that government is trying to persuade more people to take up the internet can also create anger and strengthen resistance (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c; Essential, 2010).

'I would like to know why it's [the internet] being forced on us, and it is being forced on us.'" Male, 65-74, non-user, Essential Research and Ipsos MORI, 2009.

Other non-users struggled to identify any benefits at all. While most have heard of the internet the majority of this group said that they know little or nothing about it. Some were able to identify some of the things people might use the internet for, including finding information, shopping, communication and work, but their knowledge was generally limited and vague (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c). Others were unable to think of a single thing that could be done or found on the internet (Essential Research and Ipsos MORI, 2009).

This lack of knowledge was strongly linked to a sense of indifference. People described themselves as not being interested, struggled to come up with any reasons why they should have the internet at home and did not feel they were missing out without it (Ofcom 2009c). They preferred face-to-face, telephone

and written communications and felt the internet did not fit in with their lifestyle (Ofcom, 2009c). Among older people, there was also a belief that the internet was not for people their age (Ofcom, 2009c) and a sense that they have got by without it until now and could see no reason they should need it in the future (Department for Communities and Local Government, 2008).

Simply telling people about the benefits in a generic way is not enough to change this attitude. Many non-users said that they had filtered out messages about the internet owing to a perceived lack of relevance (Essential Research and Ipsos MORI, 2009; Essential Research, 2010). Research in which those who did not have the internet at home were shown a video to demonstrate what it could do (Ofcom, 2009c) found that this did not change people's minds. In fact, a number of participants treated the video as a vindication of their view that the internet is not necessary because they could do each of the things demonstrated in the video face-to-face, in writing or via the telephone (Ofcom, 2009c).

'I can manage really doing everything he's talking about without having to own one, you know what I mean. If I want to find different prices for insurances well you just ring up don't you?' Non-user, over 75, Sheffield, Ofcom, 2009c.

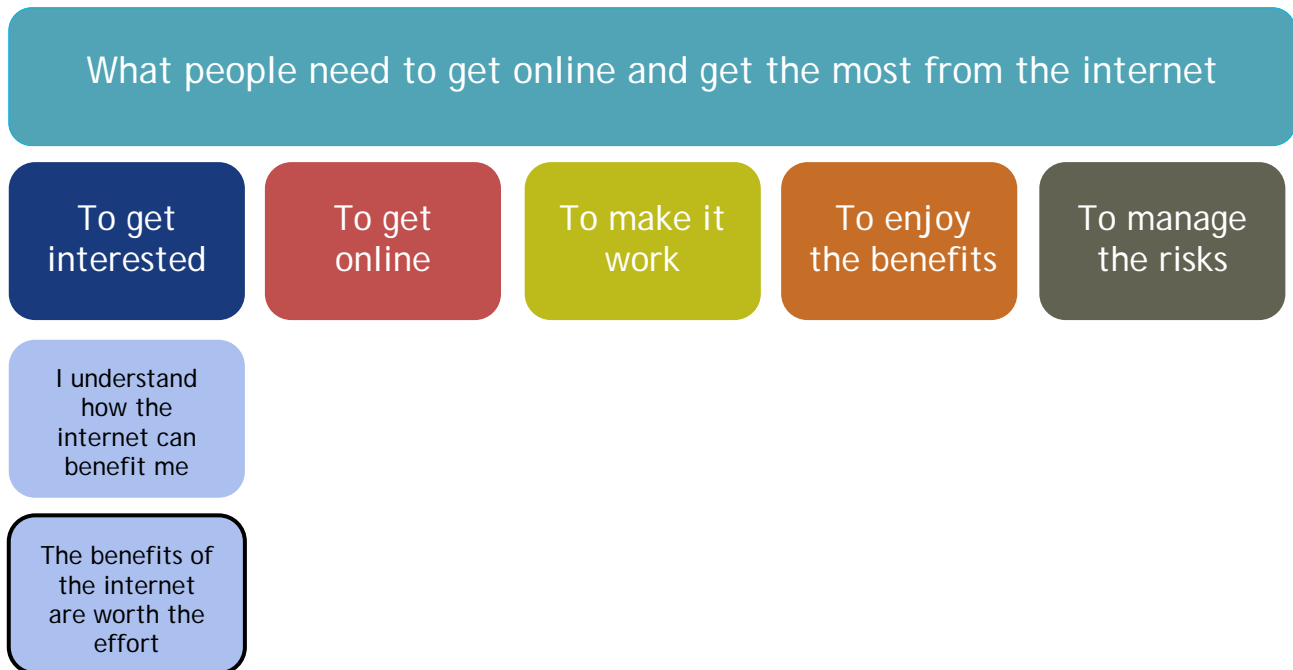
To get interested, people need to understand the specific improvements the internet will bring them personally (Essential Research and Ipsos MORI, 2009; Essential Research, 2010). For instance, one participant in the Panel's research overcame dyslexia and poor computer skills because he was determined to use email to communicate during a court case he was involved in. Telling this person about the advantages of email generically would not have been enough; there had to be a specific way in which it would enhance his own life and needs (Essential Research, 2010).

Evidence from recent internet adopters confirms this. They often described particular events in their lives that had changed their position. For example, a child moving abroad or away to college would emphasise the benefits of being able to use email, while for one recent adopter, the key was setting up a new business with her husband (Essential Research and Ipsos MORI, 2009). Friends and family can play an important role here, demonstrating specific benefits of the internet and promoting those that are relevant to the individuals' concerned (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c; Essential Research, 2010).

Children can also be an important driver. For many people, it is the benefits to their children that motivate them. Broadband at home is considered particularly important for families with school age children (Communications Consumer Panel, 2009b; Ofcom, 2009c) and in research with people who were planning to get the internet in the next six months 21 per cent said their children were the reason (Ofcom, 2009c).

'All that research and information for my daughter, because it's really important for her to have that.' Non-users, 35-49, Glasgow, Ofcom, 2009c.

The benefits of the internet are worth the effort



It must be clear to people that the benefits of the internet outweigh the effort involved in getting online (Essential Research, 2010; Pitt, 2010). For most current users this is the case (DuckfOot, 2009). However, for those who aren't online the barriers can be high.

Many of those who are not on the internet have significant skill barriers and/or a fear of computers and can doubt their ability to learn how to use the internet as a result (Essential Research and Ipsos MORI, 2009).

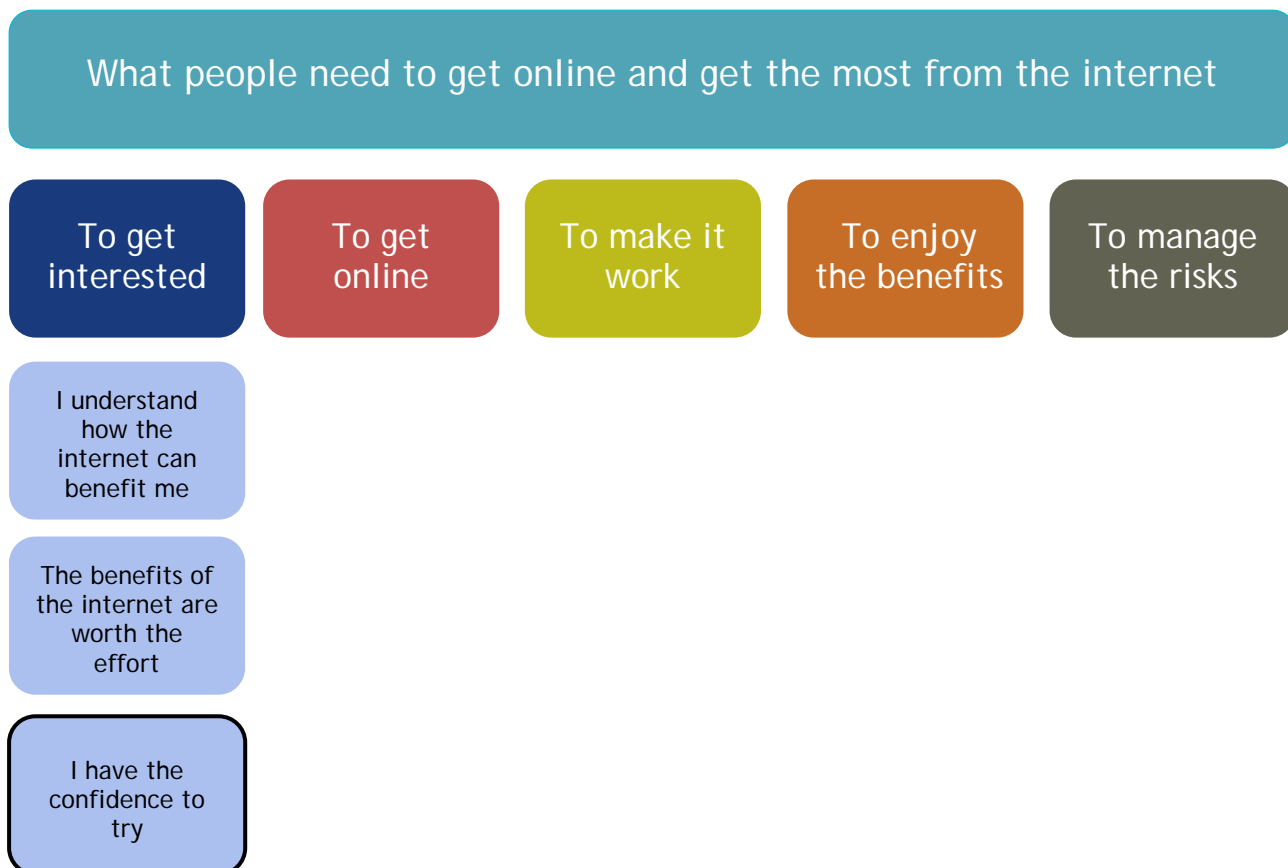
Time can also be an issue. Those with very busy lives, such as parents of young children and active pensioners, often believe the internet to be something which would require a heavy time investment, to the potential detriment of their current lifestyle (Essential Research and Ipsos MORI, 2009).

There are also emotional barriers, including embarrassment, anxiety and pride. People are embarrassed about being 'left behind' and frightened about what this might mean for them in the longer term. They also lack faith in their ability to learn, fear they would be exposing themselves to ridicule and would fail to grasp the basics. For some this can result in feeling trapped, unable to see a way out that does not compromise their pride (Essential Research, 2010).

Any benefits that the internet can offer therefore need to be sufficiently compelling to overcome the time, effort and potential humiliation involved in mastering the necessary skills. They also need to be compelling enough to outweigh the perceived risks of the internet. These include a reduction in face-to-face communication; too much immoral content on the internet; increased social isolation; loss of social and English language skills; more sedentary lifestyles; higher unemployment due to machines replacing people; interruption of family time as a result of an 'always on' culture; infidelity driven by access to

social networking sites; addiction to the internet in general, or to specific online activities such as gambling; having insufficient back-up if things go wrong, particularly as offline alternatives are phased out; greater social exclusion for those without access; and problems with data security and fraud (Communications Consumer Panel, 2009a; Essential Research and Ipsos MORI, 2009; Ofcom, 2009c; Essential Research, 2010).

I have the confidence to try



Once people understand what is in it for them and have decided these benefits are sufficiently compelling to outweigh the effort required, they need the confidence to take the first steps. This is not always easy. Fear and lack of confidence are often strong barriers for those who are not online.

For some, this lack of confidence is part of their general approach to life (Essential Research, 2010), for others it is confined to their relationship with technology. This may be about technology generally, or specific to using a computer or the internet (Lindsay, Smith and Bellaby, 2008; Communications Consumer Panel, 2009b; Essential Research and Ipsos MORI, 2009). Non-users typically describe themselves as being less technologically savvy compared with people round them, with six in ten (61 per cent) disagreeing that they were as knowledgeable about technology as the next person (Ofcom, 2009c).

This can result in people being reluctant to expose themselves by entering into unknown territory and being concerned that they will appear foolish, show themselves up or break something (Ofcom Consumer Panel, 2006; Essential Research, 2010)

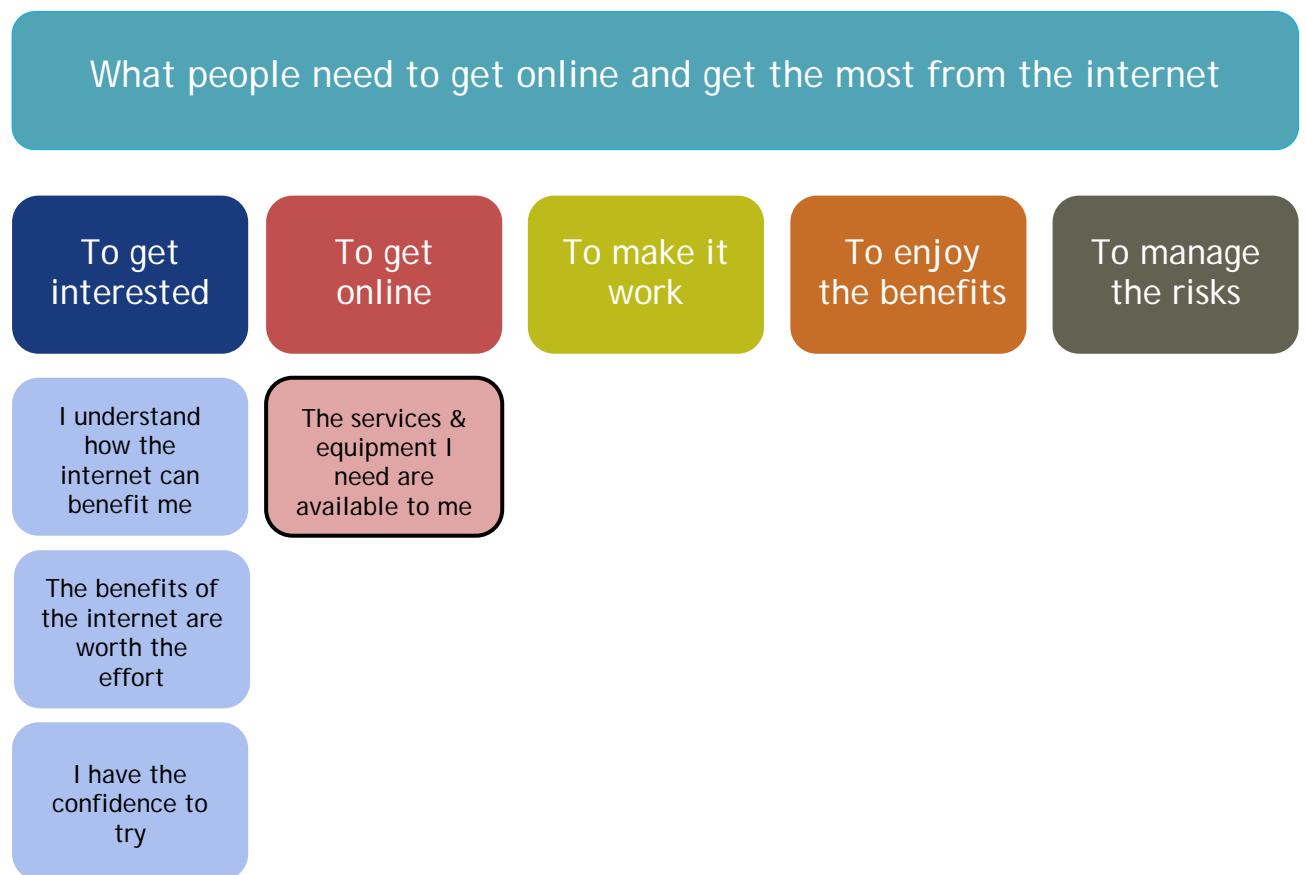
These fears were often hidden, with people preferring to say that they were not interested in the internet, but as people engaged in discussion it became clear that lack of interest could often hide a lack of confidence (Essential Research and Ipsos MORI, 2009).

Friends and family can play an important role in addressing these fears, providing encouragement and reassurance (Essential Research and Ipsos MORI, 2009).

To get online

Once people have decided that they are interested in using the internet, they then have to navigate a range of practical issues. The equipment and services they need have to be available; they must know how much it will cost and be able to afford it; if they are intending to get the internet at home they need to be able to choose the equipment and services that are right for them; they also need to be able to get help and support throughout this process.

The services and equipment I need are available to me

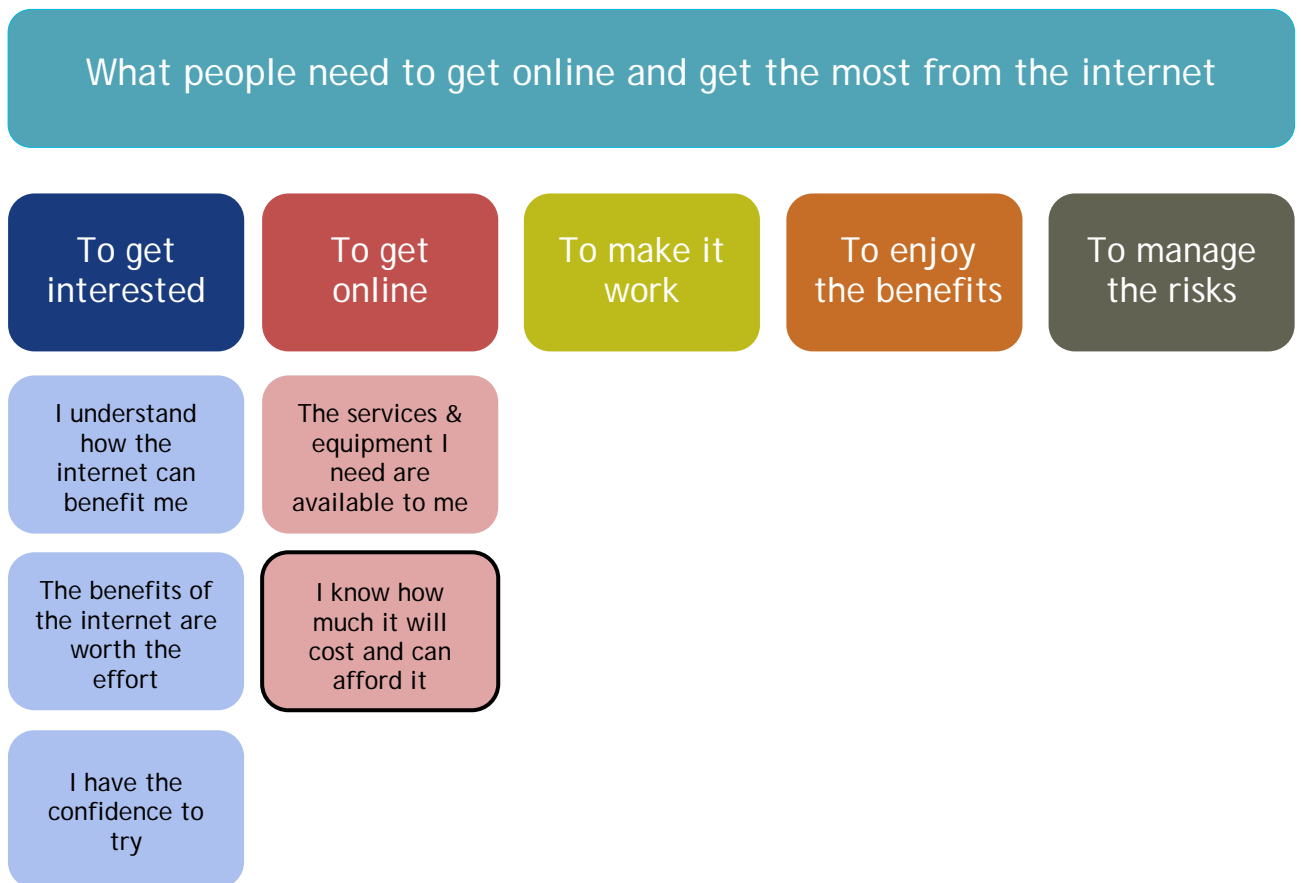


Most people have access to an internet connection if they want it and those who do not have home access are more likely to state barriers related to cost or lack of interest than lack of availability. However, there are still some 'not-spots', where broadband is not available. People who live in these areas tend to value getting broadband particularly highly (Communications Consumer Panel, 2009b).

More commonly cited equipment-related barriers are not having a home computer (a factor for half of non-users) or a landline (15 per cent) (Essential Research and Ipsos MORI, 2009). Others have equipment that is not fit-for-purpose because of slow network connections, computers riddled with viruses or just old, poorly maintained machines (Essential Research, 2010).

While it is possible for most people to purchase up-to-date computers and broadband connections, the process of doing so can be daunting, as we will see below, and for some the cost is prohibitive. Therefore, while the right equipment is generally available, it is not always a practical possibility for the people who are least likely to be online.

I know how much it will cost and can afford it



Research with people who do not have home internet access found a lack of knowledge relating to cost, both in terms of equipment and monthly subscription fees. People often overestimate the actual costs (Department for Communities and Local Government, 2008; Essential Research and Ipsos MORI, 2009; Ofcom, 2009c).

'It's not really out of our price range at all... [the cost] would be negligible. That's why so many people have all this stuff.' Non-users, 35-49, London, Ofcom, 2009c.

Some participants were also confused by 'package' deals that included television, internet and telephone, unable to judge how much should be allocated to the internet service (Ofcom, 2009c).

Among non-users with some knowledge of the cost of a monthly subscription, this was largely driven by awareness of internet supplier deals and advertisements. In some cases, participants already had a relationship with these suppliers due to satellite television and mobile phone services and so had a slightly better idea of associated costs. The experiences of friends or family who had already got the internet were also an important factor in making participants more aware of the associated monthly internet costs (Ofcom, 2009c).

Even where people are aware of the actual costs these can still pose a barrier (Department for Communities and Local Government, 2008). The cost of a computer is generally a more significant factor than the cost of a broadband subscription, although both are mentioned as barriers by some (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c). The more computer literate also mentioned other costs such as the set-up fee charged by the internet service provider, the cost of reactivating a phone line and the cost of anti-virus software (Ofcom, 2009c).

This is particularly important when the benefits are not seen as particularly strong. Without a compelling reason to get the internet non users are often concerned that they will not use the internet enough to justify the financial outlay (Essential Research and Ipsos MORI, 2009).

Affordability can be affected by circumstantial factors. For instance, many of those who cite cost as the main barrier are unemployed (Ofcom, 2009c). Others intend to get the internet but are waiting: to move into long term accommodation or a property where they could split the cost of the connection with housemates; for a steadier income; or for financial support to buy a computer (Essential Research and Ipsos MORI, 2009).

There were also specific affordability concerns associated with entering into a broadband contract, particularly among people on a limited or unstable income or who were worried about their job security. They were uncertain whether they would be able to afford the monthly payments throughout the whole contractual period. They were also concerned they might run up a large bill because, unlike with pay as you go, they would not be able to monitor the usage of the internet or the fixed phone line that came with it. Many recent adopters and those intending to get the internet at home in the near future mentioned the recent fall in the prices of monthly tariffs as one of their tipping points (Ofcom, 2009c).

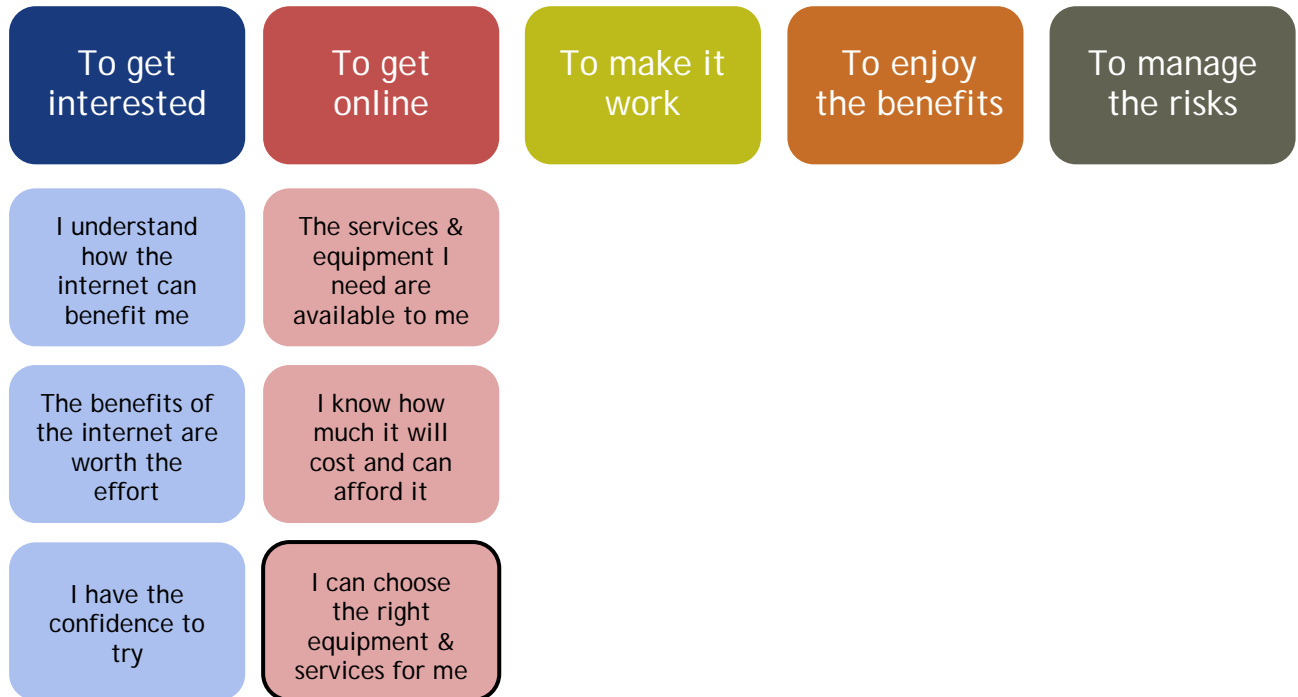
Cost barriers for recent adopters were often removed or reduced by friends and family handing down old computers and helping them to get the best deal with a broadband provider. This reduced the risk; they could worry less about not using the internet as their personal financial loss would be limited (Essential Research and Ipsos MORI, 2009).

'I don't think I would have got the internet so soon if my friend hadn't given me his old computer. I really didn't know whether I'd use it enough

to go out and spend all that money myself.' Female, 35-44, recent adopter, Essential Research and Ipsos MORI, 2009.

I can choose the right equipment and services for me

What people need to get online and get the most from the internet



People find choosing the best computer package and understanding the different technical options confusing (Ofcom, 2009c; Essential Research, 2010). This is particularly likely among older, low income consumers, but even those who are regular users of the internet and describe themselves as fairly computer literate often have problems (Ofcom, 2009c).

'There is so much to choose from, you don't know which offer is best.'
Recent adopter, 25-34, Ofcom, 2009c.

Many are unsure what equipment they need or which providers to approach (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c). Most people expect that this will only get more complicated in the future, as the choice of products and service increase, and almost everybody would welcome help filtering the options and making the right choices (Communications Consumer Panel, 2009a).

I can get help making these choices if I need it



Most people need help to get online. This might include help accessing the right equipment, understanding the real costs involved, and possibly also financial help to afford the right equipment. They are also likely to need help in working out what is the right equipment and package for their needs. In research with recent adopters, almost all had received help of some sort, most often from friends or family members (Essential Research and Ipsos MORI, 2009; Essential Research, 2010).

There was an appetite among both non-users and recent adopters for independent information explaining the process involved in signing up with an internet service provider and outlining, in layman's terms, the different costs involved, the equipment required, the different deals or types of contract available and the key features of different broadband contracts (Essential Research and Ipsos MORI, 2009).

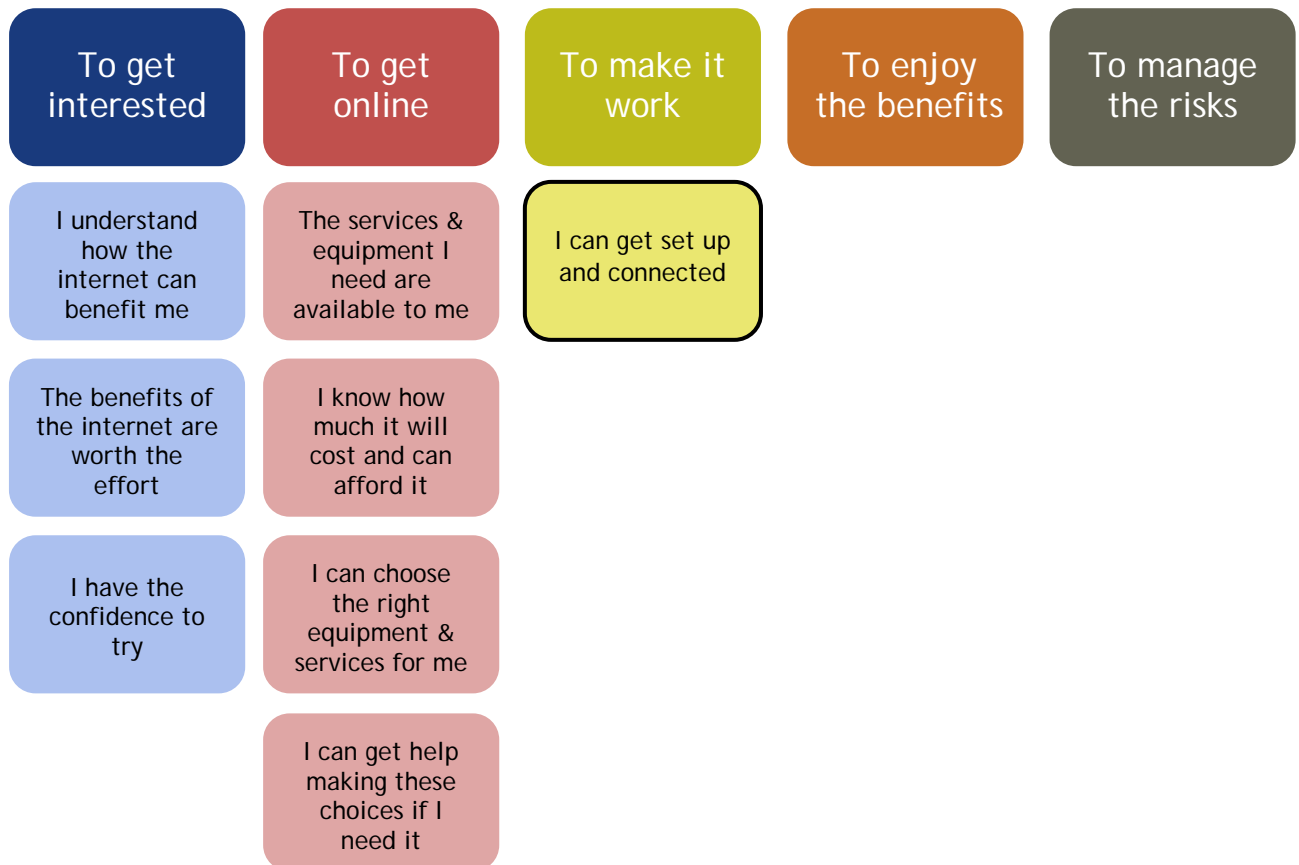
'From someone coming at it who really doesn't know what they are doing ... it really is mind boggling. You don't really know what it is you are buying' Female, 35-44, recent adopter, Essential Research and Ipsos MORI, 2009.

To make it work

People need to be able to use the equipment and services. If they have home access, this involves being able to set up and maintain their equipment and connection. For both home use and use elsewhere it also includes being able to navigate the web and find the content and services they need. To do these things people need help, and this help needs to be available throughout the process, not just when they are starting out.

I can get set up and connected

What people need to get online and get the most from the internet

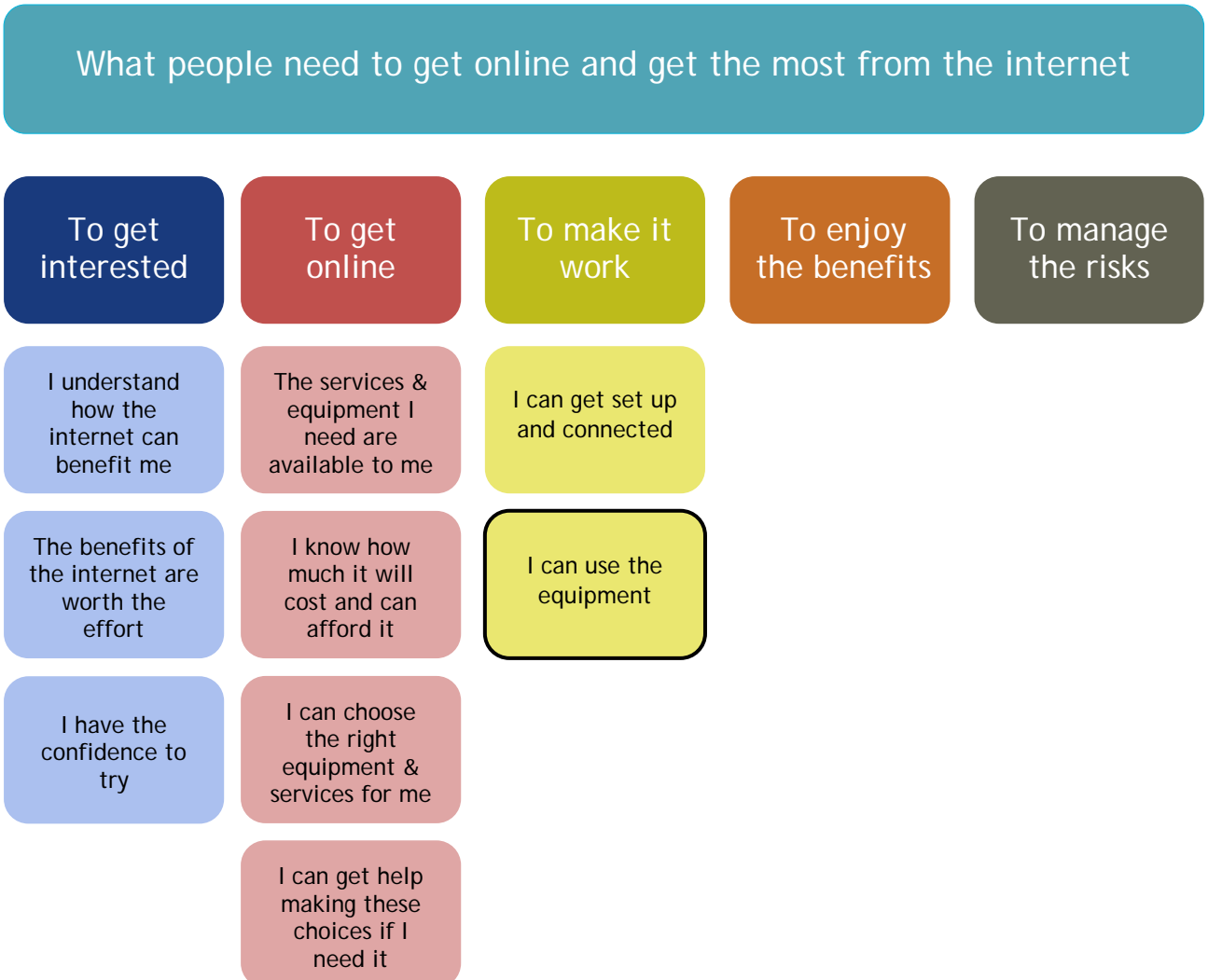


Getting set up and connected can be daunting. Even those who are reasonably confident can experience problems. Most find the installation process confusing (Essential Research and Ipsos MORI, 2009) and a minority encounter problems with connection or set-up, even those who are already regular users of the internet and fairly computer literate (Ofcom, 2009c).

Most new users only get through the experience with assistance, most often from family or friends but also sometimes in the form of formal training (Ofcom Consumer Panel, 2006; Essential Research and Ipsos MORI, 2009; Essential Research, 2010). Support from friends and family included arranging and

overseeing broadband installation and help with setting up laptops and PCs, email addresses and virus protection software (Essential Research and Ipsos MORI, 2009).

I can use the equipment



For many people computers and the internet can be unfamiliar and difficult to use. Non-users often know little or nothing about the internet (Ofcom, 2009c) and have no familiarity with screen-based devices (other than TV) and keyboards (Department for Communities and Local Government, 2008; Ofcom, 2009c; Essential Research and Ipsos MORI, 2009). This is often accompanied by a discomfort with technology generally and a willingness to let others take charge of technology for them (Ofcom, 2009c).

'I would like to get a bit more computer literate, but even my mobile phone confuses me.' Non-user, 50-64, London, Ofcom, 2009c

Feeling comfortable using a computer is often a necessary first step, and for a minority of users, lack of knowledge or skills can be the main thing that is holding them back (Ofcom, 2009c).

There is also a tendency for people without experience of the internet to over-estimate its complexity and fragility. They often fear that they will break the equipment, or even the internet itself, and underestimate their ability to master the skills they need (Department for Communities and Local Government, 2008; Ofcom, 2009c; Essential Research, 2010).

I can find the content and information I am looking for



Once people get online most are confident they can find the content or information they are looking for (91 per cent of current users) and over half of these are very confident (58 per cent). The more confident people are the more functions they use and the more new sites they visit. However, older and new users are sometimes less confident, and their internet use is narrower as a result (Ofcom, 2008a; Essential Research and Ipsos MORI, 2009). Inexperienced users are not always familiar with the role of search engines and sometimes struggle to return to websites, scroll up and down the page, navigate between different open windows and distinguish between search bars and the address bar (Essential Research and Ipsos MORI, 2009; Essential Research, 2010). This impedes their ability to find the content and information they want.

I can get help when and as often as I need it

What people need to get online and get the most from the internet



People need help to get started and learn the basics. Having friends and family available during the set-up phase to demonstrate basic functions such as how to turn the computer on and off, and access the web browser, is crucial (Essential Research and Ipsos MORI, 2009).

This help also needs to be available over the long term. Research among people aged between 50 and 74 who were given a new computer and free broadband subscription found that many were still learning how to use the internet after six months (Lindsay, Bellaby, Smith and Baker, 2008).

The right kind of support can make the difference between becoming a confident, proficient internet user and being restricted to a narrower and less fulfilling internet experience (Essential Research, 2010). New users with access to ongoing support were more confident in their technological skills and more likely to use a wide range of internet functions (Lindsay, Smith and Bellaby, 2008). Conversely, not having the right support can lead to people giving up altogether. Research among people who used to use the internet but no longer do so also found that 11 per cent had given up because their computer had broken down (Ofcom, 2009c).

To be effective support needs to be delivered in a non-threatening way and to be relevant to people's needs and experiences (Department for Communities and Local Government, 2008).

'They tried to get me to do a computer course. It was all about how to learn to type and use Word. It wasn't really for people like me.' Homeless man, London, Department for Communities and Local Government, 2008.

Information needs to be provided in simple, non technical language (Department for Communities and Local Government, 2008; The Better Regulation Executive and National Consumer Council, 2007). Communication about courses should demystify them by conveying what happens, who attends, what the tutor will be like and what will be covered, and offer people reassurance that courses are for people like them (Essential Research and Ipsos MORI, 2009). People also felt that it would be helpful for courses to provide clearly written instructions and support afterwards in case people get stuck (Essential Research and Ipsos MORI, 2009).

Many of those who need help have had bad experiences of education (Department for Communities and Local Government, 2008; Essential Research and Ipsos MORI, 2009). Even the best classes or formal training can therefore be seen as intimidating or embarrassing, with many concerned that they would be the slowest/oldest/youngest/least clever in the class (Essential Research and Ipsos MORI, 2009).

Unsurprisingly therefore most people's preferred source of support was friends and family (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c). Many recent adopters talked about how important friends and family had been as a source of reassurance in case something went wrong (Essential Research and Ipsos MORI, 2009). However, many recent adopters felt embarrassed about asking for help even from those close to them and some felt that they were annoying friends and relatives by asking them too often for assistance (Essential Research and Ipsos MORI, 2009). In some cases friends and family can be a barrier rather than a help. They can be impatient, unwilling to teach them, or resent the learner's presence on the family computer (Essential Research, 2010).

To be effective, whoever is providing support needs to have a number of key qualities. They must be reasonably knowledgeable about the internet, have enough time available, and be patient, tenacious and enthusiastic. Many people do not have access to somebody who meets this description (Essential Research, 2010).

Support also needs to be easy to find. Most people expect that as technology becomes more complicated it will be increasingly difficult to know how and where to access help (Communications Consumer Panel, 2009a). This is a particular issue for more vulnerable groups who often cannot identify support sources and are not connected to supporting organisations or networks. (Department for Communities and Local Government, 2008).

'When you go to a library and you can't find a book, you know you can ask the librarian for help. But I don't know who to ask for help with the

computers'. Elderly woman, Nottingham, Department for Communities and Local Government, 2008.

To enjoy the benefits

People need to be able to make the most of the opportunities that the internet provides. To do this they need to be able to communicate effectively online; to have the confidence and skills to interact with whatever services or content they choose; and have the opportunity to create content if they wish. They also need to be able to pursue their passions, getting involved in and discovering more about whatever it is that makes them tick.

I can communicate effectively



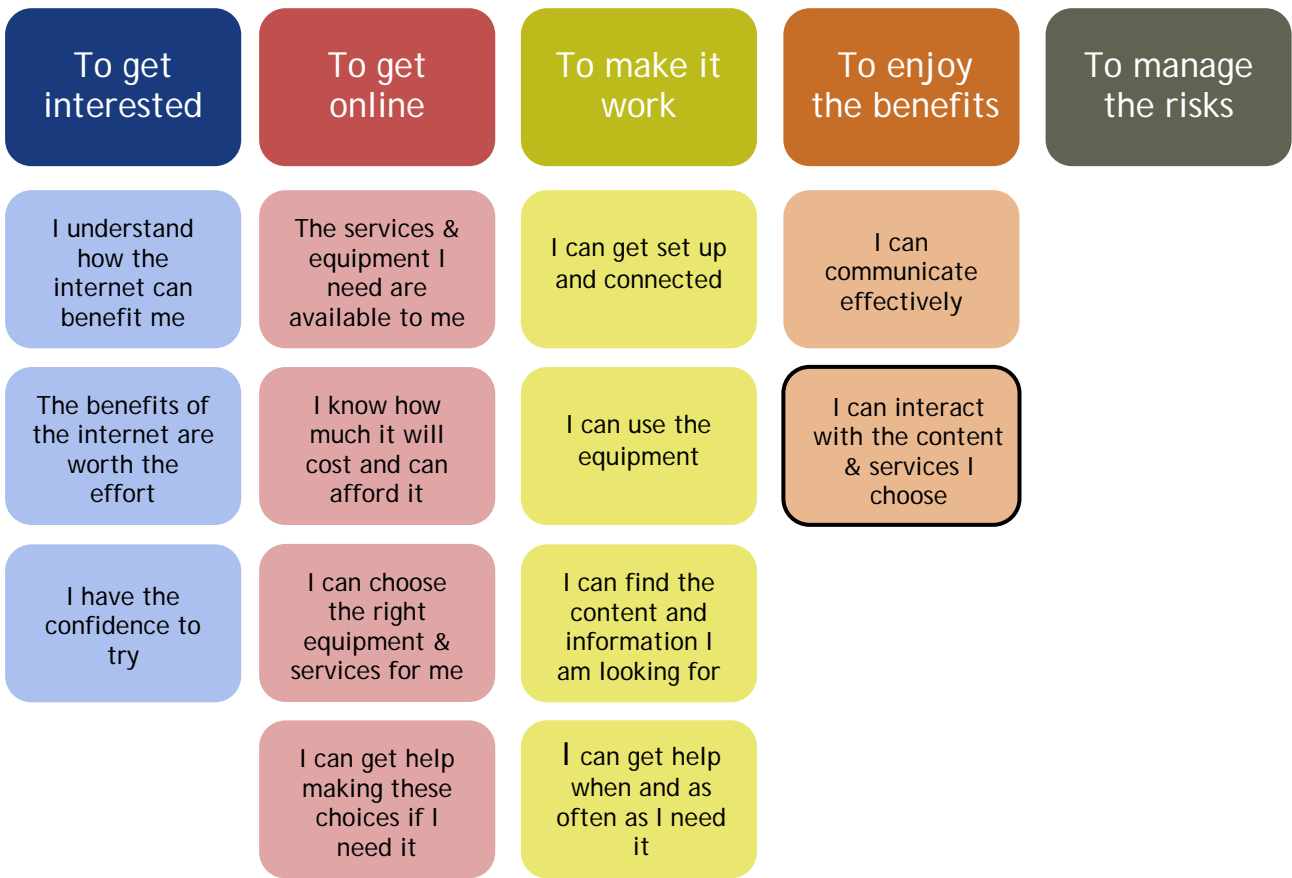
Communication is a key benefit of the internet and the activity people were most likely to do online. Around three-quarters of internet users say they use the internet for communication purposes, including sending and receiving emails and using online chat rooms or instant messaging (Ofcom, 2008a). The most popular activity among internet users in 2009 was sending and receiving emails (90 per cent), 40 per cent had posted messages to chat sites, blogs, and newsgroups and

21 per cent had communicated via telephone or video calls over the internet (Office for National Statistics, 2009).

The research does not indicate that people are concerned about their ability to communicate using the internet.

I can interact with the content and services I choose

What people need to get online and get the most from the internet



One of the benefits of the internet is the breadth of activity that it allows. In addition to the communications activities set out above, some of the most popular activities conducted online in 2009 were: using the internet to find information about goods or services (78 per cent); using services related to travel and accommodation (69 per cent); purchasing goods or services (64 per cent); internet banking (54 per cent); online news (52 per cent); and web radio or TV (42 per cent) (Office for National Statistics, 2009).

To participate in these activities users need to access a wide range of websites, conduct transactions and interact with users or service providers online. However, as we have seen above, concerns about security can inhibit people from using the internet as expansively as they might do otherwise. People also need to feel confident in their ability to use and navigate the internet. The more

confident people are, the more functions they use and the more new sites they visit (Ofcom, 2008a).

I can create content if I choose



People tend to be less confident about creating content online than finding information or communicating. One-quarter of internet users are not confident they can create content online (Ofcom, 2008a; Synnovate, 2009). There are also relatively low levels of interest in these activities (Essential Research, 2010, p. 67). Those people who said they were confident in their ability to use creative elements were asked about their interest in a number of specific creative activities, including:

- uploading photos;
- setting up a personal profile on a social networking site;
- contributing comments to someone else's blog;
- setting up a website or blog;
- making a short video and uploading it to the internet; and

- contributing to a wiki.

With the exception of uploading photographs to the internet, people were more likely to say they were not interested in these activities (Ofcom, 2008a).

However, the research also suggests this is changing, with data from the Office for National Statistics (2009) showing an increase in the number of users who say they upload and create content from 24 per cent in 2008 to 40 per cent in 2009.

I can pursue my passions

What people need to get online and get the most from the internet



As we saw above, the hook that gets somebody online is generally something specific to their own lives. While most people can see the benefits of the internet in general terms, to really get interested they need to understand what those benefits mean to them.

Realising those benefits therefore means that people have to have the skills, knowledge and ability to pursue their passions on the internet. This is what turns it from a functional tool to something much more exciting. These passions can be hugely varied, with people citing everything from booking and researching holidays, getting information on their hobbies, keeping in touch with their

family, tracing a family tree and many more (Essential Research and Ipsos MORI, 2009).

'It was little things, like I wanted to know about an amaryllis, and my husband said that you don't need to look it up in a book, you could look on the internet.' Female, 65-74, recent adopter, Essential Research and Ipsos MORI, 2009.

'They [family] told me get a computer and you will be able to do the "tap, tap, tap, tap" and get the [local ping pong club] results straight away!'. Male, 65-74, recent adopter, Essential Research and Ipsos MORI, 2009.

Research among recent adopters also shows that as people become more confident they are able to pursue their interests and passions in ways they did not expect at first (Essential Research and Ipsos MORI, 2009).

'I never thought I would say this but I would miss the internet [if I no longer had it]. I sit on it every evening ... and I can look up recipes any time I want.' Female, 65-74, recent adopter, Essential Research and Ipsos MORI, 2009.

To manage the risks

Once people are online they need to be able to protect themselves and, if they have them, their children. This involves knowing how to protect personal information, being aware of the possibility of scams and being able to judge the veracity and reliability of the information they encounter. They need to be aware of their rights in the online as well as the offline world, and to behave responsibly.

What people need to get online and get the most from the internet



Concerns about the internet are widespread and growing. Over half (63 per cent) of people expressed concern about the internet in 2007, an increase since 2005 (Ofcom, 2008a). Sources of concern include paedophiles, content unsuitable for children, identity fraud, safety of personal details, hackers and online scans (Ofcom Consumer Panel, 2006; Ofcom, 2008a; Communications Consumer Panel, 2009a; Essential Research and Ipsos MORI, 2009; Essential Research, 2010). A minority also expressed concerns at their potential vulnerability or exposure through being connected to the internet, with everyone from neighbours to the Government perceived as being able to snoop on them (Essential Research and Ipsos MORI, 2009).

‘That’s what I worry about, when you give your card details. My daughter banks on the internet. You hear all those cases of people being robbed.’
Male, 75-84, non-user, Essential Research and Ipsos MORI, 2009.

‘You’re always hearing of people getting ripped off, it doesn’t sound very safe to me’. Ofcom Consumer Panel, 2006.

Much of this fear is influenced by stories in the media, rather than personal experience (Ofcom Consumer Panel, 2006; Essential Research and Ipsos MORI, 2009; Essential Research, 2010).

Despite these fears, the majority are reasonably confident that they can protect themselves online. Over half (59 per cent) of users are confident that they can tell whether a website is truthful and reliable (although 20 per cent are not confident in their ability to do this). 78 per cent undertake some sort of check when they use a new site, most often checking how up-to-date the site is, or assessing the overall look and feel of it. Most will also look for either professional signs (such as the kite mark or padlock) or rely on personal instinct before entering their personal details when registering on a new website (Ofcom, 2008a).

The areas where people are least likely to feel confident are installing security features like a firewall, anti-spy or antivirus software and installing software that can block access to certain sites (Ofcom, 2008a). Many people say that they would like more protection, particularly with respect to the security of their data but also in relation to their privacy as users of online services (Communications Consumer Panel, 2009a).

Many feel that they have to strike a balance between making full use of the internet and protecting their personal information (Essential Research, 2010). Around half of people have some concerns about sharing personal information and around one-fifth said they would never enter their mobile phone number, debit card details or home phone number when registering on a website (Ofcom, 2008a). Many recent adopters also said that they would not be confident to shop online without considerable reassurance (Essential Research and Ipsos MORI, 2009).

When it comes to protecting children online, research suggests more than just filtering software is required and that even parents who have quite high levels of confidence using the internet may need more information and support. The National Consumer Council (Fielder et al, 2007) found that the increasing acceptance of mobile phone credit and new 'internet currency' such as Splash Plastic allows children to make online purchases independently. However, children are confused by mixes of free and paid-for goods on the same web page and find online purchasing procedures unclear. It also found that: privacy policies are not always easy to find or understand; there is confusion caused by differing child age regulations and codes in different countries; and some sites encouraged children to give away their own or their friends' details, or send the information to a friend in return for free offers.

The research also revealed that of the 40 sites that children use most often, less than a third were designed for children. The rest were gaming, entertainment and social networking sites targeted at an older, often student audience. Children and their parents therefore need to be able to understand and protect themselves in an adult online environment (Fielder et al, 2007).

It is also important to note that for internet users to be able to protect themselves they have to be able to rely on government to police criminal

behaviour online and for government and businesses to take care of people's data. While people recognise the potential benefits of information-sharing they will only fully embrace communications services if they trust companies, service providers and government to treat their personal information with care (Communications Consumer Panel, 2009a).

I can judge whether content and services are truthful and reliable

What people need to get online and get the most from the internet



The majority of research in this area has focused on the extent to which people understand how content is funded and regulated. This has found confusion about what, if any, internet content is regulated. In research by Ofcom (2008a) over half of those surveyed (57 per cent) were unable to say whether the content they were asked about is regulated. People were also unsure how different types of content are funded, particularly search engines. Over two in five people did not know how the BBC website is funded (46 per cent) and half did not know the main source of funding for search engines websites (52 per cent). Awareness of funding sources decreased between 2005 and 2007.

Regular users of the internet are more likely to state incorrectly that the content is externally regulated than the population in general, with those who

download content particularly likely to believe that there is some form of audio and visual content regulation (Ofcom, 2008a).

This lack of knowledge does not necessarily mean that people trust content. Just 42 per cent of people say they tend to trust what they find on the internet (Ofcom, 2008a). Some consumers also think the reliability of content may increase as the amount of information available increases (Communications Consumer Panel, 2009a).

‘There will be a lot more information from a wider range of sources but because there aren’t any regulatory bodies for stuff on the internet for example, the credibility of those sources is questionable. Reliability might be an issue.’ Research participant, London (Communications Consumer Panel, 2009a)

People were also clear that it would never be possible to know for certain whether content was truthful and reliable. Rather, they needed to have the knowledge, experience and confidence to make a judgement (Essential Research, 2010).

I know my rights and responsibilities online

What people need to get online and get the most from the internet



Consumers' rights and responsibilities on the internet span a wide range of issues, from consumer protection when purchasing equipment and services through to understanding what is and is not legal online.

While most people regard themselves as fairly well informed about their consumer rights this knowledge does not automatically translate into the online sphere. Consumers feel much less confident about making a complaint, returning goods or raising a problem when buying on the internet, compared to when buying from a high street or local independent store (BIS, 2008). More than 60 per cent of shoppers are less likely to return goods purchased online, compared to goods purchased on the high street; three quarters (77 per cent) of UK consumers don't know there are differences between online and high street consumer rights; and more than one in 10 (13 per cent) admit to not being sure of their consumer rights with online purchases (BIS, 2010).

There is less evidence about the extent to which people understand their responsibilities online. The evidence that does exist tends to be focused on illegal peer-to-peer file sharing. A review of the evidence by CIBER (2009) found that consumers are confused about what is legal when it comes to consuming online content.

Other research has also found that consumers are not necessarily aware of their rights when it comes to online advertising, including when or how they can complain about misleading or inappropriate advertising (Fielder et al, 2007).

Section 9

Socio demographic differences in internet take up and use

The factors set out above are all important, but the extent to which they represent barriers to digital participation will be different for different people. People's experience of the internet, and their propensity to use it, vary and this variation is correlated with a variety of socio-demographic characteristics.

This section therefore sets out the main socio-demographic factors associated with awareness, take-up and use of the internet. It then looks in more detail at some key socio-demographic groups and assesses what the evidence says about the extent to which they possess the different skills and attributes identified in the framework. The groups that we have chosen to focus on are:

- Older people (65 and over);
- Young people (16-24);
- Parents with children living at home;
- Disabled people;
- People on low incomes; and
- People in rural areas.

These groups have been selected because they illustrate how different the needs of different groups can be, and because they represent vulnerable groups that may be more in need of support.

The analysis below provides a snapshot of the likely needs of these groups, but is not comprehensive. Talking about the needs of large and diverse groups inevitably involves a degree of generalisation. Also, while we have tried to look as comprehensively as possible at the available evidence, there may be information that we missed, or it may be that in some areas the research to see whether a group is more likely than others to need help has not been done.

It is also important to note that the needs of each group have been identified on the basis of what they themselves have said about where they are on their digital participation journeys. People may not be aware that they require a

particular skill in order to participate. This is particularly the case for people who are not online and who do not know much about the process of getting online. These people might not be able to identify the sorts of skills that they will need to fully participate digitally, but they might still need support in those areas.

Finally, because people are composed of a wide range of different socio-demographic characteristics they may fall into a range of the different groups set out below. In the analysis below we have tried to identify those issues that are particular to that group. For instance, many older people are also on low incomes. This makes it likely that affordability of equipment will be an issue for many older people. However, because this is primarily associated with their income status rather than their age it has been highlighted in the section on low income but not older people. It is therefore important to consider all the characteristics of a particular target group.

Overview: socio demographic stratification

Awareness, take-up and use of the internet are highest among younger, degree-educated, high-income, AB consumers (Ofcom 2008a, Ofcom 2008b, Ofcom, 2009c, Office for National Statistics 2008). Conversely, the groups with the lowest levels of awareness, connectivity and use are:

- Older people, particularly those over 75;
- Low income consumers, particularly those with a household income below £11,500 per annum;
- People in DE socio-economic group;
- People with a visual, hearing or mobility impairment;
- People with no formal qualifications; and
- The unemployed.

(Ofcom 2008a, Ofcom 2008b, Ofcom, 2009c, Office for National Statistics 2008; Essential and Ipsos MORI, 2009).

People living in Scotland, Wales or Northern Ireland also have lower awareness, understanding of, and confidence in using the internet, though this is more likely to be due to demographic differences between the nations (Ofcom, 2008a).

Many of those who are not currently online will exhibit a number of these socio-demographic characteristics. For instance, among older people those with a relatively high household income, educated to degree level and from the AB socio-economic group are more likely to have and use the internet than those with low household income, low levels of education, from the DE socio-economic group and/or with an impairment.

There has been growth in take-up among all socio-demographic groups. However, take up among older, low income and DE groups is not currently growing quickly enough to close the gap in take up in the near future (Ofcom, 2008b).

Older people (65 and over)

The difference in take up between younger and older groups is particularly pronounced: 64 per cent of people aged 65 and over had never used the internet in 2009, compared to 0 per cent of 16-24 year olds (Office for National Statistics, 2009). Among those aged 75 and over the gap is even more pronounced: just 8 per cent of people aged 75 and over had home internet access in the first quarter of 2009, compared to 75 per cent of 15-24 year-olds and 83 per cent of 35-54 year-olds (Ofcom, 2009f). There is also evidence that some older people who do have the internet at home do not use it, and are more likely than the general population to be non users in households with internet access (Beynon-Davies et al, 2008; Choudrie et al, 2008; Ofcom, 2009d).

The intention to get the internet at home in the future decreases with age, particularly among over 55s. While take up among older adults is growing, it is doing so from a low base, suggesting that the gap could take a long time to close (Ofcom, 2008a; Office for National Statistics, 2009).

Along with people from lower socio-economic groups older people place the least importance on having broadband at home (Communications Consumer Panel, 2009b), and older people who do have the internet use it less often (Office for National Statistics, 2009) and spend the least time online (Ofcom, 2008a).

Older people are also less likely than the general population to own and use other kinds of technology. They are less likely to have digital television and digital radio and to regularly use newer media devices such as mobile phones, MP3 players and games consoles. This is particularly pronounced among those aged 70 and over (Ofcom, 2009d).

Older people have a much wider range of needs than the other groups we will look at in this report, with the research indicating they need help with almost all of the areas identified in the framework.

What older people need to get online and get the most from the internet



I understand how the internet can benefit me

Research among people without broadband at home found that people over 65 were more likely to say they had heard of the internet but knew almost nothing about it (Ofcom, 2009c), while research among non-internet users over 55 found that the overwhelming majority (91 per cent) said they had little or almost no knowledge of the internet (Essential Research and Ipsos MORI, 2009).

Older people are also less likely to be interested in the internet (Essential Research and Ipsos MORI, 2009; Communications Consumer Panel, 2009b). Of those aged 65 and over, fewer than one in 10 (7 per cent) indicated any interest, with eight in 10 (77 per cent) claiming to have little or no interest (Essential Research and Ipsos MORI, 2009).

There is a strong belief among many older people that they are not missing out by not having the internet. They are less likely to spontaneously mention the benefits that the internet provides (Communications Consumer Panel, 2009b). While in deliberative research they might come to acknowledge the general benefits that the internet brings, they do not see how these are relevant to their own lives, arguing that it is not for people their age and that they have got by

without it until now so will not need it in the future (Department for Communities and Local Government, 2008; Ofcom, 2008a; Communications Consumer Panel, 2009b; Ofcom, 2009c).

This is reflected in research among people without broadband at home that found a group of 'core resisters'. This group did not intend to get the internet, did not use it, were not willing to pay for it, were not interested in any ideas to encourage take up and did not have proxy access to the internet via other people. This group was predominantly aged 65 or above and nearly half were over 75 (Ofcom, 2009c).

The benefits of the internet are worth the effort

For many older people the effort required to get online is substantial. Many older non-users expressed very low confidence in their ability to master the skills needed to operate a computer and use the internet and a minority considered themselves too old to acquire them. They expressed a fear of computer skills coaching or courses and concern that by the time they had learnt how to use a computer, things would have changed so much that their newly acquired skills would no longer be relevant (Essential Research and Ipsos MORI, 2009).

There was also concern that if they did try they would expose their ignorance or embarrass themselves in front of others. This was one of the things that prevented this group making use of free access in libraries (Ofcom Consumer Panel, 2006).

Many of the older participants considered themselves to be 'luddites' and told stories of struggling to cope with DVD players and microwave ovens. The thought of coping with a computer was therefore very daunting for them.

'You've got to learn a new keyboard, don't you? All those computer controls! On my TV you've got buttons all over the place; I can barely cope with that!' Male, 75-84, non-user, Essential Research and Ipsos MORI, 2009.

Older people are also more focused on the risks, including that the internet has led to people not communicating enough face-to-face and that there is too much immoral content on the internet (Ofcom, 2009c).

Because of this, the effort for many older people is seen as too great in comparison to what is often a relatively undefined sense of the potential benefits.

I have the confidence to try

Older people are less likely than their younger counterparts to feel comfortable with technology or feel able to keep up with it (Ofcom Consumer Panel, 2007b; Essential and Ipsos MORI, 2009; Ofcom, 2009c). Research among people aged 55 and over found that those who did not use the internet lacked confidence in their ability to get to grips with it (Ofcom Consumer Panel, 2006; Essential and Ipsos MORI, 2009; Beynon-Davies et al, 2008).

Older people are also less confident than younger users once they get online (Ofcom, 2008a) and often worry that they will make mistakes and break the computer or lose personal data or photos (Essential Research and Ipsos MORI, 2009).

'I'd be frightened I'd do something and it'd go boom!' Female, 65-74, non user, Essential Research and Ipsos MORI, 2009.

I know how much it will cost and can afford it

Older respondents are more likely to be unsure of costs, both for a computer and for the internet. They are also likely to be concerned about the prospect of ongoing as well as set-up costs and to feel vulnerable to being 'ripped off' (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c).

Research from digital switchover supports this. Participants over 75 found it difficult to make informed decisions based on cost and were uncertain how much the process and the different types of package and equipment would cost (Ofcom Consumer Panel, 2007b).

I can choose the right equipment and services for me

Older people are more likely than younger people to say they 'don't know' what equipments is needed to get online (Ofcom, 2009c). Evidence from digital switchover also suggests that older people are likely to have problems with purchasing equipment, and find it more difficult to know what equipment to choose. They worry about buying equipment and are likely to put it off. People over 75 also tend to be less exposed to information about equipment and services than their younger counterparts. They notice media coverage and advertising material less and rely on support groups, local day centres or care homes, and word-of-mouth as their main sources of information. Specific factors that deter them from buying are: fear of purchasing the "wrong thing" or of encountering hidden costs; concern that equipment may not work properly or will go wrong; and worries that it will be difficult to install and use (Ofcom Consumer Panel, 2007b). While this research was specific to digital switchover it is likely that many of the same issues will apply for people trying to get online.

I can get help making these choices if I need it

Older people are also less likely to know who to turn to for help beyond their digital TV provider and friends and family (Essential Research and Ipsos MORI, 2009). Research into digital switchover also found that older people were less able to make multiple trips before purchase and are therefore less likely to shop around and get the best deal (Ofcom Consumer Panel, 2007b). They are therefore likely to need help getting the right information and making the choices that are best for them.

I can set up and get connected

There is evidence that some older people don't know where to look for information about how to get a PC (Department for Communities and Local Government, 2008). Among older internet users getting started was considered the most difficult part and had been full of anxiety for many (Ofcom, 2009c).

Research into older people's experience of digital switchover also showed that for older people, particularly those over 75, the installation process was a major and, in most cases, insurmountable obstacle. They were very often unable to move TV equipment or gain access to the rear of the TV in situ. All were also nervous about causing damage even if they were able to try. They needed help getting the equipment to work, found the instructions difficult to read (both because of the size of the type and the language and jargon used), and continued to find it difficult to use and adapt to the new equipment, even after a six weeks settling period (Ofcom Consumer Panel, 2007b). Similar issues are likely to occur with installation of equipment for internet set-up, and older people are likely to need support setting-up as well as using the equipment.

I can use the equipment

For older people equipment can be unfamiliar and difficult to use. Research with people aged 65 and over who were learning to use the internet found that even after three months respondents were frustrated and encountering challenges (Firth and Mellor, 2009). Problems can include: difficulties in typing and using a mouse; difficulty understanding technical jargon (Beynon-Davies et al, 2008); a lack of clear and readable instructions; websites where the text is small, the layout is confusing and which do not comply with the Disability Discrimination Act and other usability standards; and equipment that is too complicated or fiddly (Department for Communities and Local Government, 2008). Often these complications are related to or exacerbated by age-related health or disability issues, for instance short-term memory loss (Department for Communities and Local Government, 2008; Essential Research and Ipsos MORI, 2009).

'My grandchildren have shown me their computers and mobile phones. I couldn't use any of these things because everything is so small. I have arthritis and need big buttons and uncomplicated gadgets. Even my new TV handset is too complicated'. Elderly disabled man, North London, Department for Communities and Local Government, 2008

There is also a lack of experience among many older people. They are less likely to have used the internet or computers before. While over nine in ten (93 per cent) of 16 to 24 year olds have used a computer before, this falls to just two in ten (21 per cent) of those aged 75 or above (Ofcom, 2009c). Some of those who have used computers and the internet before have had negative experiences when doing so, which can affect people's confidence in their ability to use the equipment (Beynon-Davies et al, 2008).

'[My laptop] always crashes on me. I will type something and it will just disappear from the screen . . . You spend a lot of time typing it in, making it look tidy, then it's gone.' Beynon-Davies et al, 2008.

I can find the content and information I am looking for

Once people get online most are confident they can find the content or information they are looking for. However, older people are less certain of being able to find the information they need and less likely to use new websites (Ofcom, 2008a).

I can get help when and as often as I need it

Older people are less likely than the general adult population to be interested in learning about digital technology and those older people who use the internet are less likely to seek learning support to overcome any problems they encounter (Ofcom, 2008a).

Other than a preference for learning through friends and family, older people are relatively unlikely to have a preferred learning method (Ofcom, 2009d). They are also less likely than younger people to have experience of learning or training outside school: 54 per cent of adults aged 61 and over said they had not participated in any learning, education or training since leaving school, compared to 26 per cent of 21-40 year olds and 27% of 41-60 year olds (Selwyn, 2005). This may mean that they face bigger barriers to seeking training and support.

Older people who had attempted courses had often had negative experiences. Some were told they were too old while others found that the courses assumed a degree of knowledge they did not have (Ofcom Consumer Panel, 2006).

Older people would benefit from courses and support specifically tailored to their needs. This could take the form of courses, free if possible, run by older people for older people and designed for genuine beginners. The idea of a mentor, based locally that could assist face-to-face, or at least over the telephone, was also popular (Ofcom Consumer Panel, 2006; Essential Research, 2010).

I can interact with the content and services I choose

Older adults are less likely than younger people to be interested in using the internet, and those who do use it for fewer activities and for less time in a typical week than adults as a whole (Ofcom, 2009d). They are also less likely to use online government services (Dwivedi and Williams, 2008; Choudrie et al, 2005).

I can create content if I choose

Older adults are less confident and less interested in creating content on the internet than the general population (Ofcom, 2009d). Among internet users, the propensity to upload self-created content decreases steadily with age, from 54 per cent of 16-24 year olds, to 21 per cent of people aged 65 and over (Office for National Statistics, 2009).

People aged 65 and over are also the least represented group on social networking sites, although this may be because they make up a smaller proportion of internet users. The launch in October 2007 of the Sagazone social networking site that targets over-50s suggests that older people may be interested in creating online profiles and participating in social networking given the right product. By January 2008 30,000 people had set up profiles on the site (Ofcom, 2008c).

I can protect myself (and my children) online

Older adults who use the internet are most likely of all adult internet users to have concerns about it (Ofcom, 2009d) and least likely to trust online services and products (Choudrie et al, 2005). This lack of trust means they take some steps to protect themselves: they are the least prepared of all adult users to give out details about themselves; most likely to say there are types of personal information they would never provide; and most likely to say they only look at websites they know (Ofcom, 2008a; Ofcom, 2009d). However, this protection is mainly achieved through circumscribing their internet use. When their use is expanded they can be more vulnerable: over 65s (and C2Des) are the least likely to check a new website or make a judgement before entering personal details (Ofcom, 2008a).

I can judge whether content and services are truthful and reliable

Older people who use the internet are less likely than younger people to critically evaluate new websites and to say they don't know if content is regulated or not (Ofcom, 2008a). This is particularly pronounced among those adults aged 70 and over (Ofcom, 2009d).

Young people (16-24)

The majority of young people have home access to the internet and are reasonably confident users. In 2009 96 per cent of young people had access to the internet, more than any other group, and 86 per cent used the internet every day (Office for National Statistics, 2009). Take-up among 16-19 year olds and 25-34 year-olds is higher than it is among 20-24 year-olds. This may be because 20-24 year-olds have moved from the family home to shared or student accommodation and have not yet set up internet access (Ofcom, 2008a).

Younger internet users (16-19) are more likely to: use the internet for contact with other people (Ofcom, 2008a; Ofcom, 2009h); set up profiles on social networks (Ofcom, 2008c; Ofcom, 2009h); mention and engage in the entertainment possibilities that the internet provides (Communications Consumer Panel, 2009a; Communications Consumer Panel, 2009b; Ofcom, 2009h); and be interested in and have experience of creating content online (Ofcom, 2008a; Communications Consumer Panel, 2009b).

A small number of young people have little or no access to or experience of PC-based internet access, although they are likely to have mobile phones. These tend to be young people who are also disadvantaged in other ways, with a mixture of poor educational achievement, low incomes, housing problems and involvement with drugs or criminal activity (Department for Communities and Local Government, 2008).

What young people need to get online and get the most from the internet



I can protect myself (and my children) online

Young people show the least concern about the internet, with levels of concern increasing with age. Although they use the internet the most, 16-24 year olds are the least concerned about identity fraud and giving out personal details and are least likely to make a judgement about a website before entering personal details. If they do make a judgement, it is most likely to be based on personal instinct rather than more objective checks (Ofcom, 2008a).

A substantial minority of young people (22 per cent) use social networking sites to talk to people they do not know (Ofcom, 2008c). This is more common among this age group than the under 16s and 16-19 year olds are more likely than their younger peers to give out personal information to somebody they haven't met, meet up with somebody they have met online and be the victim of bullying (Livingstone and Bober, 2005). They are generally reluctant to set their social network profiles to private as they are concerned that this will impair their ability to meet new people, despite the fact that many say they dislike the idea of strangers being able to view their profiles (Withers and Sheldon, 2008).

Older teenagers who are shy, attention-seeking or less satisfied with their lives are most likely to engage in risk-taking behaviour, including meeting online friends offline. This is particularly the case among those who are confident in their online skills (Livingstone and Helsper, 2007).

I can judge whether content and services are truthful and reliable

Young people are the least aware of sources of funding and least able to describe the regulatory status of content. They are also more likely than the general UK population to believe that the audio and visual content they download and the user-generated content they use is regulated (Ofcom, 2008a).

I know my rights and responsibilities online

Younger people are less likely than their older counterparts to rate themselves as informed, knowledgeable or confident about using their consumer rights and were twice as likely as any other age group to say they lacked the confidence to make a complaint. A higher percentage in this group agreed they would like to know more about their rights as a consumer than the overall average (BIS, 2008).

Younger people are more likely to participate in illegal peer-to-peer file sharing: 66 per cent of 16-24 year olds felt that it was morally acceptable to download music for free from the internet and 63 per cent had downloaded music illegally (Human Capital, 2009). They may excuse their actions by arguing that the film and music industries are already making lots of money, or by deliberately remaining ignorant about the legal position (DuckFoot Research Limited, 2009).

Parents

Household ownership of the internet is higher among parents of under 16s than UK adults as a whole, particularly parents aged 35 and over and parents whose children are over 5 years old (Ofcom, 2008a). Among those who don't have the internet at home, parents of children under 16 are particularly likely to say they intend to get it. One in four parents without home access say they will get it in the next year, twice the measure across all adults without home access (Ofcom, 2009b).

Parents under 35 are more likely than parents over 35 to use the internet for creative activities, such as social networking, and for entertainment, and parents of children under 5 are more likely than the general population to have experience of uploading photos to the internet (Ofcom, 2009b).

Children are often a very strong motivator to taking up the internet. They put pressure on their parents, saying that they felt left out (Essential Research and Ipsos MORI, 2009). Most parents also believe that the internet provides educational advantages and that without it their children's education could suffer (Ofcom Consumer Panel, 2007a; Essential Research and Ipsos MORI, 2009; Pitt, 2010).

For those parents who are not online the primary barriers are lack of confidence and the cost of equipment. Parents who are online often need support managing the risks, in particular having the knowledge and confidence to protect

themselves and their children and knowing whether content and services are truthful and reliable.

What parents need to get online and get the most from the internet



I have the confidence to try

One of the biggest barriers for parents without the internet at home is fear. They did not understand computers and the internet, felt threatened by having this technology in their home, feared they would not be able to control it and worried that it would isolate and undermine them within their household. This was particularly powerful when a parent was already socially isolated and had a tenuous hold over the family. These parents were also likely to find it difficult to cope with many other areas of their lives. Their attitude to technology was another manifestation of their wider fear (Ofcom Consumer Panel, 2007a).

‘I feel like I am letting my kids down, in so many ways. I can’t go on a bus on my own because I am too afraid’. Mum, without the internet, London, Consumer Panel 2007a

These parents will need support to build up their confidence using and understanding the technology before they are likely to adopt it. For some parents, this will need to be provided alongside wider support to help them build confidence and tackle some of the other issues in their lives.

I know how much it will cost and can afford it

Unlike older people, most parents without the internet at home are convinced of the benefits, but cost prevents them from getting it at home. The initial outlay for a computer was particularly problematic. However, perceptions of cost were not always realistic, with many assuming it would cost more than it actually does (Blackburn and Read 2005; Gillard, Mitev and Scott, 2007; Ofcom Consumer Panel, 2007a; Ofcom, 2009c).

Perceptions of affordability were often related to the fears described above. Once parents had overcome their fears, even those on very low incomes were likely to take practical steps to get the money together. Those who were not doing this were likely to still be working through a number of other concerns that would also need to be tackled (Ofcom Consumer Panel, 2007a).

I can protect myself (and my children) online

Parents with children at home are more likely to have concerns about what is on the internet than those without. Around one third of parents have concerns about their children's internet use and around 1 in 8 are very concerned (Ofcom, 2009i). They are particularly likely to be concerned about: paedophiles and people masquerading as younger people online; websites showing abuse of children; sexual, violent or otherwise inappropriate content for children; identity fraud, insecure sites and access to personal details; and computer viruses, spam and pop-up advertising (Ofcom, 2008a; Essential Research and Ipsos MORI, 2009; Ofcom, 2009b). Despite this, the majority of parents believe that the benefits of the internet outweigh the risks (Ofcom, 2008d).

Parents who are internet users themselves are more likely to mediate their children's internet use. 95 per cent of parents of 8-11 year olds and 78 per cent of parents of 5-15 year olds say they have rules in place regarding their child's access. The most common rules include regularly checking what their children are doing online, restricting internet use after a certain time and only allowing access to children's websites (Ofcom, 2009i). Nearly half (49 per cent) of parents whose children use the internet at home claim that they have installed filtering software, another 37 per cent say they use monitoring software and 27 per cent use both. Parents in the UK are among the most likely of all European countries to use these sorts of tools (Livingstone and Haddon, 2009). Those parents who do not use this kind of software are most likely to say that this is because they believe their children are capable of self-regulating their behaviour and that believed it was important to trust their children (Ofcom, 2008d; DuckfOot Research Limited, 2009; Ofcom 2009h; RedEye optimum.web, 2009). Parents also said they believed internet filters or blocking software to be inadequate given that their children know more about computers than they do (DuckfOot Research Limited, 2009).

Parents' views of how regulated their children's access are not always shared by children themselves. Children report fewer controls on their internet use than their parents and parents often do not have the knowledge or skills necessary to enforce rules about online behaviour (Livingstone, 2005; Ofcom, 2008c; Withers and Sheldon, 2008).

'My mum will ask "Is it safe?" but she doesn't really know.' Withers and Sheldon, 2008.

Parents may also underestimate the degree of risk their children are exposed to. Research with 9-19 year old found that 57 per cent of those who go online at least once a week had come into contact with pornography on the internet. In comparison, only 16 per cent of parents think their children have seen pornography on the internet. Children were also coming into contact with violent and gruesome content (22 per cent, 12 per cent on purpose) and websites that are hostile or hateful to a group of people (9 per cent, 2 per cent on purpose). These were often unpleasant or upsetting experiences for the young people involved (Livingstone and Bober, 2005).

Younger children (9-11) were less likely to have encountered unsuitable content but were more upset when they did. Many in this group experienced unwanted contact. Around a third reported receiving unwanted sexual or nasty comments via email, chat, instant messaging or text messaging. In contrast, only 7 per cent of parents think their child has received sexual messages and only 4 per cent think their child has been bullied online (Livingstone and Bober, 2005).

Children are also not obeying rules about protecting their personal information. While 86 per cent of parents do not allow their children to give out personal information online, only 46 per cent of children in the research acknowledged this rule and nearly half had given out personal information, including their email address, phone number, name of their school and photographs of themselves (Livingstone and Bober, 2005). There is also evidence that young people may be giving away information inadvertently. Research into the 40 sites that children use most often (Fielder et al, 2007) found that none of the children and few of the parents in the research had read a privacy policy. Both children and their parents found the small-print off-putting and lacking in relevance. Even had they attempted to, few websites had privacy policies that children (or many adults) could understand.

Many parents recognise this gap. They say they would welcome more education about the risks and how to respond to them (Communications Consumer Panel, 2009a) and are particularly interested in learning about and using security features like a firewall, anti-spy or anti-virus software and software that blocks access to certain sites (Ofcom, 2008a).

I know whether content and services are truthful and reliable

Research into the sites most popular among children (Fielder et al, 2007) found that many of these were funded at least in part by marketing, but that this was not always obvious. There was a high level of marketing messages on the sites, many of which were integrated into the content pages and were not labelled as advertising, making it difficult for both children and adults to recognise them.

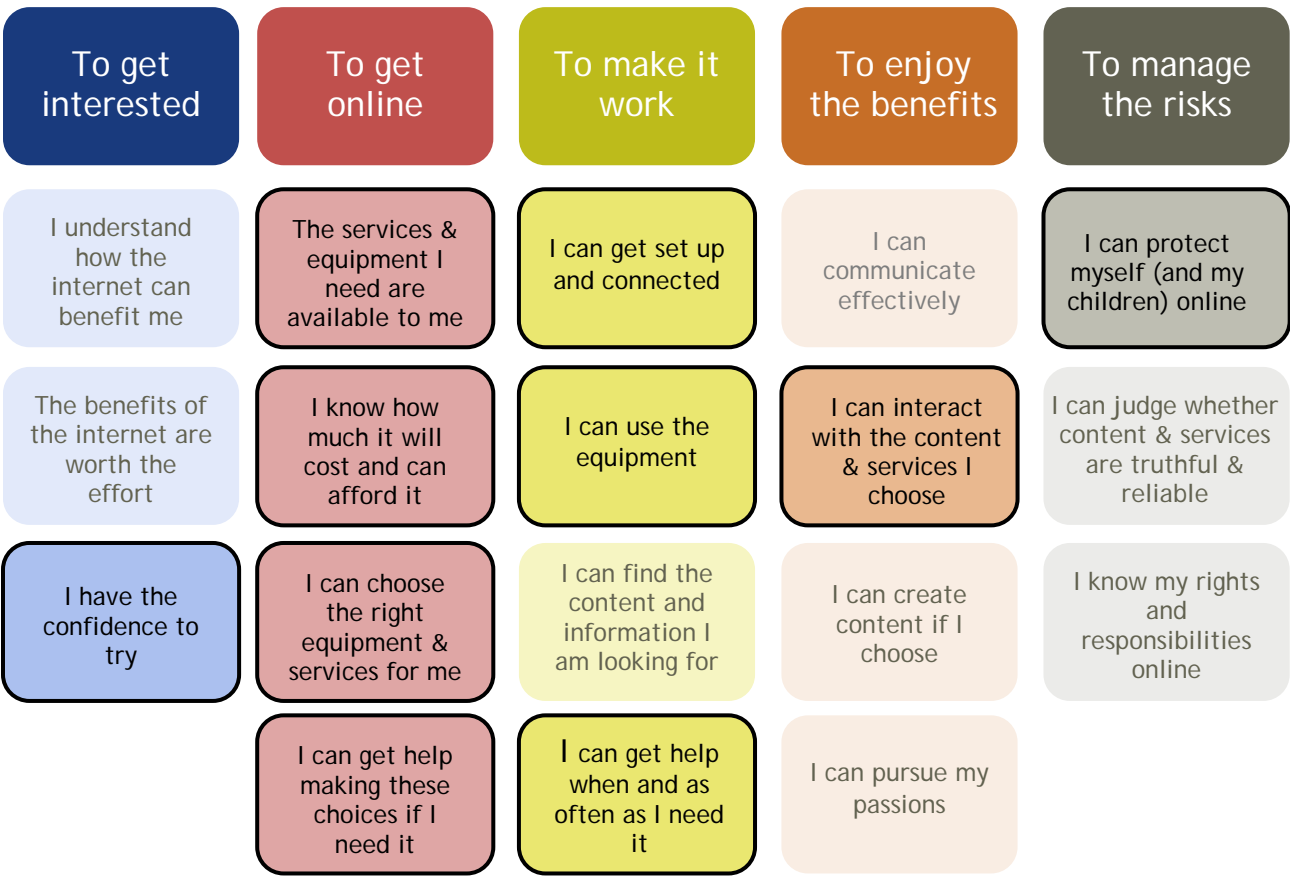
Disabled people

Disabled people are a group many believe are likely to get substantial benefits from using the internet, including the opportunity to overcome physical isolation

and to access information on health, entitlements and local support organisations (Department for Communities and Local Government, 2008; Communications Consumer Panel, 2009b; Valentine, Skelton and Tracey, 2009). However, they are less likely than the general population to have access to the internet at home (Ofcom, 2006; Ofcom 2008e).

There is relatively little research into what disabled people themselves think are the benefits of and barriers to digital participation. The evidence that has emerged through the process of carrying out this review is set out below.

What disabled people need to get online and get the most from the internet



I have the confidence to try

The research suggests that some disabled people may lack the confidence to use technology and can be scared of ‘making a fool’ of themselves (Department for Communities and Local Government, 2008; Valentine, Skelton and Tracey, 2009).

The services and equipment I need are available to me

There is relatively little direct research with disabled people in this area. However, evidence from organisations working with disabled people suggests

that disabled people have particular problems due to the lack, or high cost, of accessible equipment, software and websites (Consumer Expert Group, 2009).

I know how much it will cost and can afford it

Cost can be a barrier for disabled users, with many saying that they would spend more time online if the cost of doing so was reduced (Pilling, Barrett and Floyd, 2004; Ofcom, 2008e). Disabled people who need to use adaptive technology to use the internet also face additional costs, which can be a significant barrier (Pilling, Barrett and Floyd, 2004).

Evidence from digital switchover also suggests that some disabled people who are not online may not be aware of the actual costs. In this research disabled people were uncertain about how much the different packages and equipment cost (Ofcom Consumer Panel, 2007b). The increased range and complexity of equipment needed to use the internet, particularly for those who need adaptive technology, is likely to mean that many disabled people will need help getting accurate information about the cost.

I can choose the right equipment and services for me

Research among representatives from community and voluntary groups working with disabled people suggested that particular attention needs to be given to making disabled people aware of the free adaptive technologies available to them. For instance, it was noted that free screen readers are available for visually impaired people, but when people search on the internet they are more likely to only find out about commercially available screen readers (Department for Communities and Local Government, 2008).

Research into people's experiences of digital switchover found that disabled people found the buying process daunting. They generally had lower levels of knowledge of the different options available to them, which limited their confidence and their ability to make informed decisions in purchasing digital equipment. While this finding was specific to the equipment required for digital switchover it is likely that there are similar issues for the equipment needed to get online and use the internet (Ofcom Consumer Panel, 2007b).

I can get help making these choices if I need it

Digital switchover research found that disabled people were less able to make multiple trips before purchase and therefore less able to shop around (Ofcom Consumer Panel, 2007b). Some disabled people are therefore likely to need help gathering the information they need and with the practicalities of visiting shops and making purchases.

I can get set up and connected

Digital switchover research also found that the installation process was problematic for disabled people, who required help with setting up their equipment (Ofcom Consumer Panel, 2007b).

I can use the equipment

For many people, particularly those with disabilities, equipment can be unfamiliar and difficult to use and does not always comply with the Disability Discrimination Act and other usability standards (Department for Communities and Local Government, 2008). Many disabled people require specialist equipment or adaptations in order to use the internet, including voice recognition software, keyboard adaptations, mouse adaptations and speech output systems. While the majority have access to this equipment there can be problems. Those who require assistive devices find the internet significantly more difficult to use than respondents who do not. Equipment can be expensive, preventing some disabled users from accessing it, and is often not available in external locations, preventing them from using the internet outside the home (Pilling, Barrett and Floyd, 2004). Disabled people also often need more information about how they can customise and use technology to suit their needs (Department for Communities and Local Government, 2008).

I can get help when and as often as I need it

The difficulties identified above suggest that people with disabilities are likely to need help with set up, with customising equipment and technology, and with adapting that customisation as technology develops. That help may be difficult to come by. In research with disabled people, over 40 per cent of internet users would have liked to take a course but did not due to difficulty in finding a course locally, finding a training centre with facilities for disabled people and cost (Pilling, Barrett and Floyd, 2004).

I can interact with the content and services I choose

Disabled adults under 65 are less confident than non-disabled people in their ability to conduct a range of activities online, including communication, leisure and transactions (Ofcom, 2006).

I can protect myself (and my children) online

Disabled adults under 65 are less confident about blocking spam and protecting their PCs from viruses than the overall adult UK (Ofcom, 2006).

People on low incomes

People with an annual household income under £11,500 are less likely than people with a higher income to have the internet at home, to use it outside the home or to have ever used it. Those who used the internet but did not have it at home were more likely to use it at somebody else's house than at work (Essential Research and Ipsos MORI, 2009; Ofcom, 2009c).

Compared to those on higher incomes, low income consumers are less likely to know much about what the internet can do or see what the benefits are to them. Cost can also be a barrier, and for those without bank accounts or who do not live in permanent accommodation so can availability. Many on low incomes are unsure what equipment they will need to get online and would like help to set-up and use the equipment when they do.

What people on low incomes need to get online and get the most from the internet



I understand how the internet can benefit me

Respondents with an annual income under £11,500 who did not have the internet at home were less likely than those with a higher income to be able to identify things people might use the internet for (Ofcom, 2009c). They were also less likely to feel they were missing out by not having the internet and while they may acknowledge the general benefits the internet brings, they do not see how these are relevant to their own lives (Department for Communities and Local Government, 2008; Ofcom, 2008a; Communications Consumer Panel, 2009b; FreshMinds Research and UK Online Centres, 2009; Ofcom, 2009c).

I have the confidence to try

People with annual household income under £11,500 who do not have the internet at home are less likely than those with an annual income over £17,500 to feel confident using a computer (22 per cent compared to 56 per cent). They were also less likely to feel comfortable or able to keep up with technology (Ofcom, 2009c).

The services and equipment I need are available to me

Some people on low incomes, who also do not have a bank account or permanent accommodation, are as a consequence unable to open a broadband account (Department for Communities and Local Government, 2008).

I know how much it will cost and can afford it

People with annual household income under £11,500 who do not have the internet at home are more likely to cite affordability as the main barrier to take up than people an income over £17,500 (39 per cent as compared with 8 per cent over £17,500) (Ofcom, 2009c), with the cost of a computer a particular problem (Robertson, Soopramanien and Fildes, 2007).

I can choose the right equipment and services for me

As household income increases, so does knowledge of the different equipment required. One third of those without the internet at home and with an annual household income of below £11,500 (34 per cent) did not know what equipment they would need to connect to the internet at home, compared to 14 per cent of those with a household income over of £17,500 (Ofcom, 2009c).

I can use the equipment

People with annual household income under £11,500 who do not have the internet at home are: less likely to have used a computer than those with an annual income over £17,500 (49 per cent compared with 75 per cent); less likely to feel confident using a computer (22 per cent compared to 56 per cent); more likely to say that their main reason for not being online is that they don't have the knowledge or skills (36 per cent compared to 9 per cent); and less likely to feel comfortable with technology or feel able to keep up with it (Ofcom, 2009c).

People in rural areas

The internet offers particular benefits to people in rural areas. These include the ability to access goods and services where users would otherwise have to travel long distances and increased access to jobs the internet provides in rural areas through allowing people to work from home (Department for Communities and Local Government, 2008; Commission for Rural Communities, 2009; Communications Consumer Panel, 2009b).

Household ownership of the internet is higher in rural areas compared with urban areas (Ofcom, 2008a) and rural users are more likely to use the internet for transactions and entertainment. Three-quarters of rural internet users say they use the internet for transactions, higher than the UK average of 69 per cent. Watching films or television online is also higher among those in rural areas (Commission for Rural Communities, 2009).

What people in rural areas need to get online and get the most from the internet



The services/equipment I need are available to me

Despite a higher level of overall take-up, rural areas are more likely to experience broadband 'not spots'. This is due in part to low customer density, which creates a disincentive to commercial investment (Commission for Rural Communities, 2009). As a consequence, people living in these areas tend to value getting broadband particularly highly (Communications Consumer Panel, 2009).

Section 10

Summary

This review has been used by the Panel, alongside original research and consultation with experts from the public, private and third sector, to develop and test the Panel's Consumer Framework for Digital Participation.

The Framework identifies the range of things that consumers need to get online and get the most from the internet. As this review demonstrates, different groups of consumers are likely to need help with different elements of the Framework.

Using the Framework, we will be working with Ofcom, government and others to make sure that the full range of people's digital participation needs are met.

Bibliography

Better Regulation Executive and National Consumer Council (2007) *Warning: Too much information can harm. A final report by the Better Regulation Executive and National Consumer Council on maximising the positive impact of regulated information for consumers and markets*. London: Better Regulation Executive and National Consumer Council.

Beynon-Davies, P., Hill, R., and Williams, P. (2008) *Older people and internet engagement: acknowledging social moderators of internet adoption, access and use*. Information Technology & People, Vol. 21 (3), pp. 244-266.

BIS (2008) *General Public Survey of Consumer Rights*. London: BIS. Available at: <http://www.berr.gov.uk/whatwedo/consumers/page51180.html> Accessed on 04/08/09

BIS (2010) *Almost two-thirds of shoppers less likely to return goods bought online*. London: BIS. Available at: <http://nds.coi.gov.uk/content/detail.aspx?ReleaseID=411926&NewsAreaID=2&UserID=895,776,892,854,778,869,710,705,765,674,677,767,684,762,718,674,708,683,706,718,674&ClientID=-1> Accessed on 11/03/2010

Blackburn, C. and Read, J (2005) 'Using the Internet? The experiences of parents of disabled children'. Child: Care, Health & Development, Vol 31 (5), pp. 507-515.

Choudrie, J., Grey, S., Tsitsianis, N. (2008) *Evaluating the digital divide: the silver surfer's perspective*. In SIG GlobDev First Annual Conference. Paris, France, December 13 2008. Available at: <http://www.globdev.org/?q=node/64> Accessed on 23/02/2010

CIBER (2009) *Copycats? Digital Consumers in the Online Age*. London: Strategic Advisory Board for Intellectual Property Policy.

Commission for Rural Communities (2009) *Mind the Gap: Digital England - a rural perspective*. Cheltenham: Commission for Rural Communities.

Communications Consumer Panel (2009a) *No one should miss out: consumers say what they want from the digital future*. London: Communications Consumer Panel.

Communications Consumer Panel (2009b) *Not online, not included: consumers say broadband essential for all*. London: Communications Consumer Panel.

Consumer Expert Group (2009) *Consumer Expert Group report into the use of the internet by disabled people: barriers and solutions*. London: Department for Culture, Media and Sport.

Department for Communities and Local Government (2008) *Community perspectives on digital inclusion: qualitative research to support the development of the digital inclusion strategy*. London: Department for Communities and Local Government

Department for Culture, Media and Sport (2008) *Taking Part: England's Survey of Culture, Leisure and Sport. Headline findings from the child survey 2007*. London: DCMS

DuckfOot Research Limited (2009) *How people assess online content and services*. London: Ofcom.

Essential Research and Ipsos MORI (2009) *Encouraging home broadband adoption research report. A report for the BBC prepared by Essential Research and Ipsos MORI*. London: BBC.

Fielder, Anna, Gardner, Will, Nairn, Agnes and Pitt, Jillian (2007) *Fair game? Assessing commercial activity on children's favourite websites and online environments*. London: National Consumer Council.

Firth, Lucy and Mellor, David (2009) *Dilettantism in investigating the impact of the Internet on the wellbeing of the elderly*. *Qual Quant* , Vol. 43, pp.185-196.

FreshMinds Research and UK Online Centres (2009) *Does the internet improve lives?* London: FreshMinds

Gillard, Hazel, Mitev, Nathalie and Scott, Susan (2007) *ICT Inclusion and Gender: Tensions in Narratives of Network Engineer Training*, *The Information Society*, Vol. 23 (1), pp. 19 - 37.

Hasebrink, Uwe, Livingstone, Sonia, Haddon, Leslie and Olafsson, Kjartan (2009) *Comparing children's online opportunities and risks across Europe: Cross national comparisons for EU Kids Online*. LSE, London: EU Kids Online.

Human Capital (2009) *Youth and Music Survey 2009*. London: Marrakesh Records.

Lindsay, S., Bellaby, P., Smith, S. and Baker, R. (2008) *Enabling healthy choices: is ICT the highway to health improvement?* *Health (London)*, Vol. 12 (3), pp. 313-331.

Lindsay, S., Smith, S. and Bellaby, P. (2008) *Can Informal e-learning and Peer Support Help Bridge the Digital Divide?* *Social Policy & Society*, Vol. 7 (3), pp. 319-330.

Livingstone, Sonia (2005) *Strategies of Parental Regulation in the Media-Rich Home*, *Computers in Human Behavior*, Vol. 23, pp. 920-941

Livingstone, Sonia and Bober, Magdalena (2005) *UK children go online: final report of key project findings*. London: LSE

Livingstone, Sonia and Helsper, Ellen (2007) *Taking risks when communicating on the internet: the role of offline social-psychological factors in young people's vulnerability to online risks*, *Information, communication and society*, Vol 10 (5), pp. 619-643.

Livingstone, S and Haddon, L (2009) *EU Kids Online: Final Report*. London: LSE: EU Kids Online.

Marsh, Jackie, Brooks, Greg, Hughes, Jane, Ritchie, Louise, Roberts, Samuel and Wright, Katy (2005) *Digital beginnings: Young children's use of popular culture, media and new technologies*. Sheffield: University of Sheffield.

Ofcom (2006) *Media Literacy Audit: Report on media literacy of disabled people*. London: Ofcom.

Ofcom (2008a) *Media Literacy Audit: Report on UK adult's media literacy*. London: Ofcom

Ofcom (2008b) *The Consumer Experience 2008*. London: Ofcom

Ofcom (2008c) *Social Networking: a qualitative and quantitative research report into attitudes, behaviour and use*. London: Ofcom

Ofcom (2008d) *Media Literacy Audit: Report on UK children's media literacy*. London: Ofcom

Ofcom (2008e) *People with learning disabilities and communications services*. London: Ofcom

Ofcom (2009a) *Citizens' Digital Participation*. London: Ofcom

Ofcom (2009b) *Digital Lifestyles: Parents of children under 16*. London: Ofcom

Ofcom (2009c) *Accessing the internet at home. A quantitative and qualitative study among people without the internet at home by Ipsos MORI*. London: Ofcom

Ofcom (2009d) *Digital Lifestyles: Adults aged 60 and over*. London: Ofcom

Ofcom (2009e) *Digital Lifestyles: Young adults aged 16-24*. London: Ofcom

Ofcom (2009f) *Communications Market Report 2009*. London: Ofcom

Ofcom (2009g) *Telecoms CMR 2009: Nations and Regions [Charts]*. London: Ofcom

Ofcom (2009h) *UK Adults Media Literacy: 2009 interim report*. London: Ofcom.

Ofcom Consumer Panel (2006) *Older people and communications technology: An attitudinal study into older people and their engagement with communications technology*. London: Ofcom

Ofcom Consumer Panel (2007a) *Children and the internet: A research study into the social effects of lack of internet access on socially disadvantaged children and families*. London: Ofcom

Ofcom Consumer Panel (2007b) *Going digital: supporting consumers through digital switchover*. London: Ofcom

Office for National Statistics (2008) *Internet Access: Households and Individuals 2008*. London: Office for National Statistics

Office for National Statistics (2009) *Internet Access: Households and Individuals 2009*. London: Office for National Statistics

Pilling, D., Barrett, P. and Floyd, M. (2004) *Disabled people and the Internet: Experiences, barriers and opportunities*. London: Joseph Rowntree Foundation

Pitt, Jillian (2010) *Broadband minded? Overcoming consumers' barriers to internet access*. London: Consumer Focus

Pollara (2006) *CRIA Consumer Study of Radio and Music. Survey Results*. Toronto: Pollara.

Price Waterhouse Coopers (2009) *Champion for Digital Inclusion: the economic case for digital inclusion*. London: Champion for Digital Inclusion. Available at: http://raceonline2012.org/sites/default/files/resources/pwc_report.pdf
Accessed on 30th April 2010

RedEye optimum.web (2009) *Parents and Internet Safety*. London: Department for Children, Schools and Families.

Robertson, Alastair, Soopramanien, Didier and Fildes, Robert (2007) *A segment-based analysis of Internet service adoption among UK households*, *Technology in Society* Vol. 29, pp. 339-350.

Selwyn, Niel (2005) *The Social Processes of Learning to Use Computers*. *Social Science Computer Review*, Vol. 23 (1), pp. 122-135.

Synovate (2009) *Consuming digital arts: understanding of and engagement with arts in the digital arena among the general public*. London: Arts Council England.

Valentine, Gill and Skelton, Tracey (2009) *An Umbilical Cord to the World*, *Information, Communication & Society*, Vol. 12 (1), pp. 44 - 65

Withers, K. and Sheldon, R. (2008) *Behind the Screen: the hidden life of youth online*. London: ippr.

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