Ipsos MORI

CarnegieUK TRUST

CHANGING MINDS • CHANGING LIVES

Digital Participation in Dumfries and Kirkcaldy

Mark Diffley, Carolyn Black, Douglas White & Tara Murphy

ACKNOWLEDGEMENTS

The Carnegie UK Trust and Ipsos MORI would like to thank the Scottish Government for funding this research study. In particular, we would like to thank Alyson Mitchell, Alan Rodden, Alan Martin and Caroline Wigerstad for their support and encouragement throughout the research process

CarnegieUK TRUST

CHANGING MINDS • CHANGING LIVES

Design/print by Full Cycle

This report is printed on paper that is FSC certified.

Contents

Foreword

In 2013 the Carnegie UK Trust in partnership with Ipsos MORI published groundbreaking research on digital exclusion in Glasgow. At that time Glasgow was widely regarded as the city with one of the lowest levels of digital participation in the UK. There was however, little understanding of why this was the case and no consensus on the best approach for tackling the issue. Our research, which engaged with both internet users and non-users across the city, sought to answer three critical questions – who is offline in Glasgow; why are they offline; and what might be done to help more people get online in the future. We found there is no single issue which prevents people from using the internet – the barriers people face are usually multiple, inter-related and personal to them. Critically however, we also found that the reasons why people do go online for the first time also tend to be highly personal – in particular to find information and content about a specific hobby or interest that they have. As such a personalised, differentiated approach is vital to tackling digital exclusion. At the same time however, given the scale of the challenge we face in helping significant numbers of people to maximise the opportunities that the internet can offer, we also need leadership and a joined up, co-ordinated approach to our digital participation work to ensure that no one is left behind.

When the Scottish Government asked us to take the methodology from our Glasgow research and undertake similar research in two further areas of Scotland we were delighted to do so. We are extremely grateful to the government for their support for this new research, the results of which are presented in detail in this report. Working with our partners at Ipsos MORI we replicated the research model in Dumfries and Kirkcaldy, two towns on opposite sides of Scotland with relatively high levels of digital exclusion. The results from this new research validate the findings from the original Glasgow study in relation to the highly personal nature of digital exclusion and how it might be tackled. In addition, new questions, not included in the previous study, highlight the critical community aspect of digital participation, with friends and family seen as having a central role in helping people learn digital skills and become internet users.

Taken together we believe that the results from the two pieces of research provide an excellent basis for future action, to help us achieve the prize of ensuring that everyone can benefit from the opportunities that digital connectivity can offer.

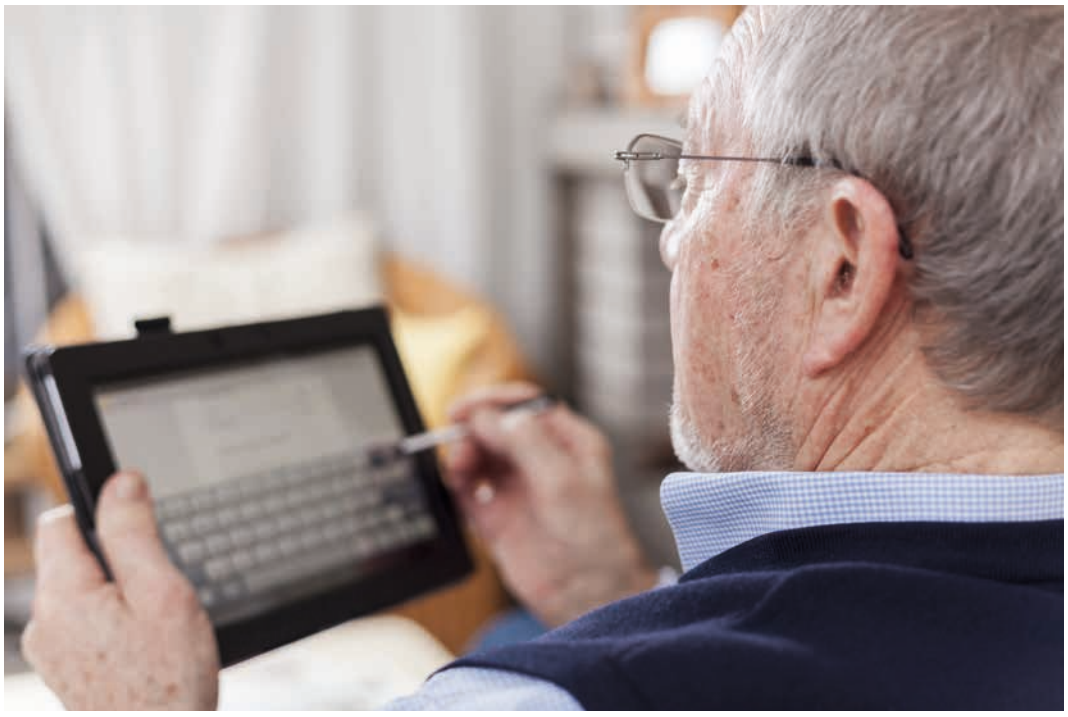
Martyn Evans
Chief Executive, Carnegie UK Trust

Chapter 1 – Introduction

1.1 Background

In recent years, participation in the digital world has become increasingly important in allowing individuals to engage fully with many aspects of public, economic and social life. As a result, those that do not have access to the internet are at increasing risk of being excluded from the benefits associated with digital participation in areas such as education, employment, accessing public services and buying products at the most competitive prices. Furthermore, it is groups that are already more likely to face social exclusion on a range of other issues, including the elderly and the financially disadvantaged, who are most likely to not have access to the internet.

While there has been a steady increase in levels of access and internet use in recent years[1], a significant proportion of the Scottish population remains offline. Scottish Household Survey (SHS 2013) data shows that 22% of Scottish households are not connected to the internet and 20% of adults say that they do not currently use the internet (Table 1.1). However, the level of digital exclusion is not the same across the entire country. As Table 1.1 shows, there is a great deal of variation among local authorities. Within the table, local authorities are listed by the percentage of households without internet access. This ranges from 31% of households in East Ayrshire to only 13% of households in Moray.



[1] The proportion of households in Scotland that have access to internet at home has increased from 42% in 2003 when measures began to 78% in 2013. The proportion of adults who use the internet for personal use has increased from 63% in 2007 when measures began to 80% in 2013 (Scottish Household Survey).

Table 1.1 – Internet access and use by local authority, SHS 2013		
	% households without internet access	% not making personal use of the internet
East Ayrshire	31	26
Inverclyde	31	25
Eilean Siar	30	24
Glasgow City	29	27
West Dunbartonshire	27	24
Angus	27	21
North Ayrshire	27	20
Shetland	27	20
Perth and Kinross	26	22
South Lanarkshire	25	26
Argyll and Bute	25	24
Orkney	23	25
Dundee City	23	21
Dumfries and Galloway	22	25
South Ayrshire	22	22
Scotland	**22**	**20**
Fife	22	19
North Lanarkshire	22	19
Falkirk	21	21
Clackmannanshire	21	17
Stirling	21	15
Aberdeen City	20	21
East Lothian	20	17
Renfrewshire	19	16
East Dunbartonshire	18	19
Scottish Borders	18	18
Midlothian	17	21
East Renfrewshire	17	18
West Lothian	17	13
Highland	16	18
Aberdeenshire	16	17
Edinburgh City	16	12
Moray	13	22

1.2 This research

In April 2013 the Carnegie UK Trust published 'Across the Divide – Tackling Digital Exclusion in Glasgow'[2]. This report was based on research carried out for the Trust by Ipsos MORI Scotland, exploring internet access in Glasgow . Glasgow was of particular interest due to the low levels of digital participation in the city, and the fact that there appeared to be factors affecting participation beyond demographic characteristics.

The research was designed specifically to explore the possibility of a 'Glasgow effect' in digital exclusion. As Glasgow is Scotland's most densely populated urban area, the research may have missed barriers to internet access specific to smaller, less densely populated areas. The Carnegie UK Trust, with funding from the Scottish Government, therefore commissioned Ipsos MORI Scotland to replicate the Glasgow research in two further locations to further explore the barriers to digital participation, and, more specifically, to assess whether these barriers differ in less densely populated locations.

While the research is concerned with the difference between Glasgow and other less densely populated areas, it is not the infrastructure or coverage issues associated with remote rural areas that are of interest. With this in mind, two areas were selected in which to conduct further interviews: Dumfries and Kirkcaldy. The selection was based on the following criteria:

- a relatively low level of digital participation
- a higher level of rurality than Glasgow but with a sufficient population to conduct the same research approach within the timescales available.

Using SHS data and Ipsos MORI's small area statistics modelling tool, maps of Dumfries and Kirkcaldy were created highlighting areas where access is lower than the national average. The areas shaded in orange in the maps in Figures 1.1 and 1.2 (see over) represent areas where more than 33%[3] of households have no internet access at home.

1.3 Research Objectives and Methodology

The overall objective of the research was to replicate the approach undertaken in the previous Glasgow study in two new areas to further explore the barriers (beyond deprivation) that prevent individuals from accessing the internet and the drivers for facilitating greater digital participation.

In order to provide comparable data with the previous research conducted in Glasgow, the same methodology was used to conduct the interviews – a 'hall-test' approach. This involved:

- conducting fieldwork in Dumfries and Kirkcaldy, where internet access was estimated to be low (see Figures 1.1 and 1.2)
- recruiting eligible respondents on-street on the day of interviewing. The research primarily targeted people who do not currently use the internet at home or on a smartphone/tablet computer (**non-users**). A small proportion of the interviews were conducted among those who *do* currently use the internet (**users**), and have a similar demographic profile to those who do not. This was done to provide a comparison to 'non-users' and explore the characteristics which are unique to 'users' in areas of low digital participation
- conducting short semi-structured interviews (lasting around 15 minutes) with participants at a central venue in the town centre in each location

[2] Carnegie UK Trust (2013) *Across the Divide: Tackling Digital Exclusion in Glasgow*. Available at: http://www.carnegieuktrust.org.uk/publications/2013/across-the-divide---full-report

[3] 33% was chosen as the cut off as it is more than two standard deviations above the national mean of 24%. This shows that a significantly greater proportion of the population in this area do not have internet access than Scotland as a whole

It should be noted that the fieldwork for the Glasgow research took place in 2012 while the fieldwork in Dumfries and Galloway took place in 2014.

Ipsos MORI interviewed 402 participants in total – 200 in Dumfries and 202 in Kirkcaldy – across nine days of fieldwork, between March 6 and March 21, 2014. In Dumfries, 150 interviews were conducted with non-users and 50 with users, while in Kirkcaldy, 164 interviews were conducted with non-users and 38 with users.

Recruitment was conducted by experienced Ipsos MORI recruiters and the interviews were conducted by Ipsos MORI researchers using questionnaires developed in consultation with the Carnegie UK Trust (see appendix 1 and 2)

All participants were offered £10 as a thank you for their time.

Figure 1.1 – Areas in Dumfries where is it estimated that at least 33% of households have no internet access

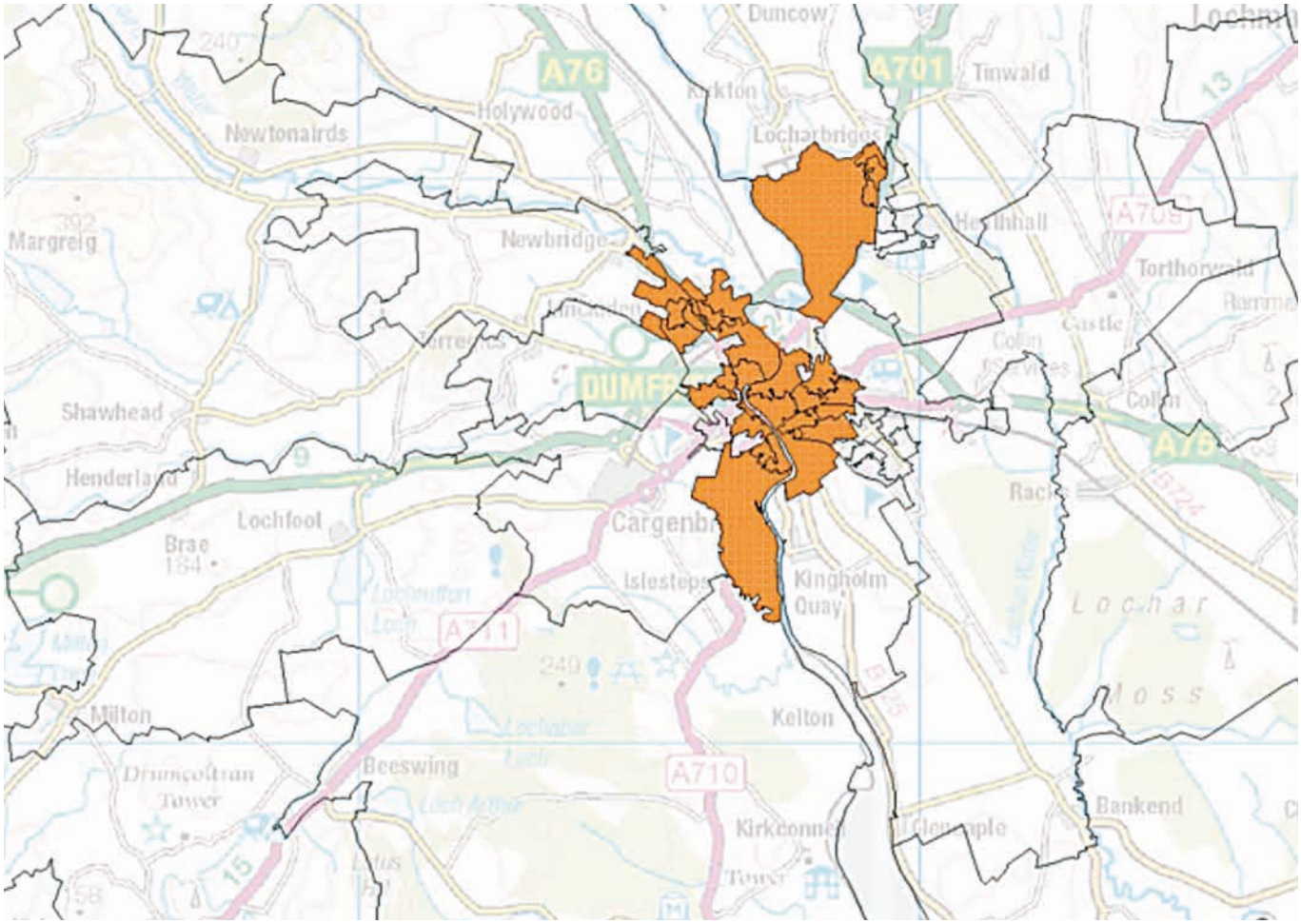
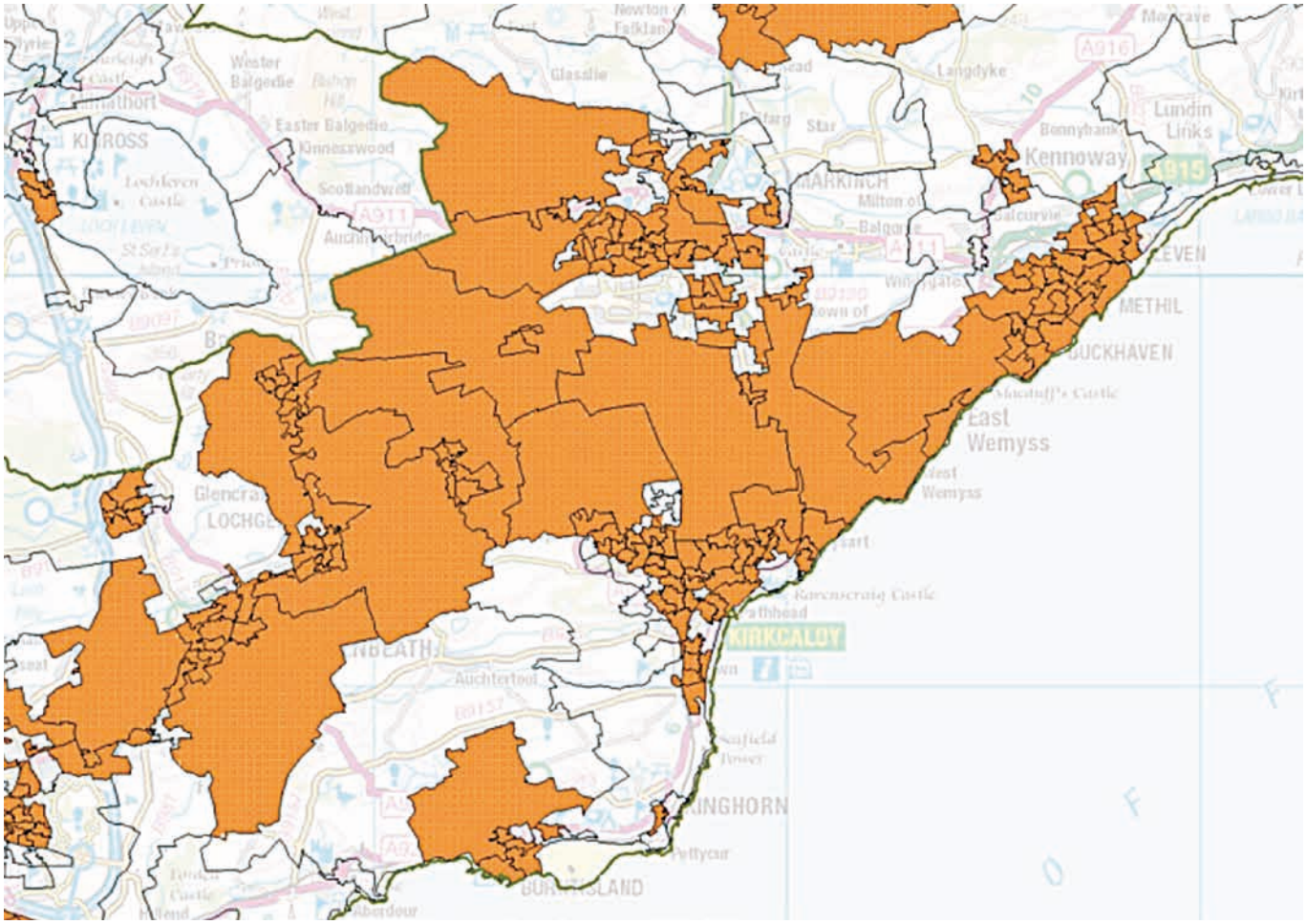


Figure 1.2 – Areas in Kirkcaldy where it is estimated that at least 33% of households have no internet access



Chapter 2 – Sample profile

This section provides an overview of the profile of respondents who took part in the research in Dumfries and Kirkcaldy, and also introduces the internet-use typologies created for analysis in subsequent sections.

2.1 Overall sample profile

Table 2.1 shows the profile of the overall sample in Dumfries, Kirkcaldy and Glasgow broken down by key demographic variables.

The demographic breakdown of respondents in Dumfries and Kirkcaldy were similar with the exception of car ownership, a greater proportion of those in Kirkcaldy reported that they did not have access to a car (65% in Kirkcaldy compared with 53% in Dumfries). However, the profile in both locations differed from that in the previous research conducted in Glasgow.

Overall, the sample profile in Glasgow was younger than in either Dumfries or Kirkcaldy. Over one-third of respondents Dumfries and Kirkcaldy were aged 65 or above (36% and 39%, respectively) while this proportion was only 12% in Glasgow. The age profile of respondents in Dumfries and Kirkcaldy was reflected in the fact that 42% were retired in both locations (compared with 14% in Glasgow) and that only one fifth of respondents in Dumfries and a quarter of respondents in Kirkcaldy (26%) were unemployed, compared with 59% in Glasgow. While these differences are due, in the main, to the differences in age profile, the likelihood of living in social housing also tended to be lower in Dumfries and Kirkcaldy (both 41%) compared with Glasgow (78%). This suggests that the samples in Dumfries and Kirkcaldy were less deprived than in Glasgow.

This is further supported by the fact that respondents in the Glasgow sample were more likely to not have access to a car (88% in Glasgow compared with 65% in Kirkcaldy and 53% in Dumfries) or have taken a holiday in the last couple of years (78% in Glasgow compared with 41% in Kirkcaldy and 46% in Dumfries), the measures used as a proxy for disposable income. In addition, in the previous research in Glasgow, respondents often faced many obstacles in their personal lives, often associated with living in deprived areas, for example dealing with mental health problems, coping with past substance/alcohol addictions, coping with family tragedies, or being at risk of offending. The turmoil caused by these issues meant that the internet was simply not high enough of a priority for these respondents. However, in Dumfries and Kirkcaldy, respondents describing such chaotic lifestyles were much less common, due to the older and more affluent demographic make-up of respondents.

Table 2.1 – Overall sample profile by key demographic variables

	Dumfries %	Kirkcaldy %	Glasgow %
Sex			
Men	48	44	50
Women	53	56	50
Age			
16-24	6	12	6
25-64	57	49	83
65+	36	39	12
Working status			
Working	24	18	17
Unemployed	20	26	59
Retired	42	42	14
Not working (other)	15	13	10
Tenure			
Owned outright/buying on mortgage	43	45	12
Rented from private landlord	14	10	6
Rented from council/HA	41	41	78
Other tenure	3	3	5
Proxies for disposable income			
No car ownership	53	65	88
Not taken holiday (for at least three days) in last couple of years	43	41	78

Source: Ipsos MORI • Base: Dumfries (200), Kirkcaldy (202), Glasgow (200)

2.2 Internet usage

Internet usage was broken down in two ways. First, current internet use – split into never-users, lapsed users and current users – and internet use ever – split into never-users and users. Table 2.2 provides a more detailed definition of each group and summarises the breakdown of the research sample according to respondent's current or past use of the internet:

- Current internet use – the proportion of 'never-users' was higher in Glasgow where over two thirds had never used the internet (68%). This reflects an increase in the number of 'lapsed users' in the current wave of research, rather than in the number of 'users'.
- Internet use ever – respondents in Dumfries and Kirkcaldy were split evenly between those who had never used the internet and those that had experience of using the internet on a regular basis (defined as at least once a month) at some point in the past.

Table 2.2 – Internet usage

	Dumfries %	Kirkcaldy %	Glasgow %
Current internet use			
'Never-user' – has never used the internet regularly	50	50	68
'Lapsed users' –used the internet in the past but not currently	25	31	5
'Current users' – at home or smartphone	25	19	17[4]
Internet use ever			
'User' – have ever used the internet	50	50	32
'Never-user' – have never used the internet	50	50	68

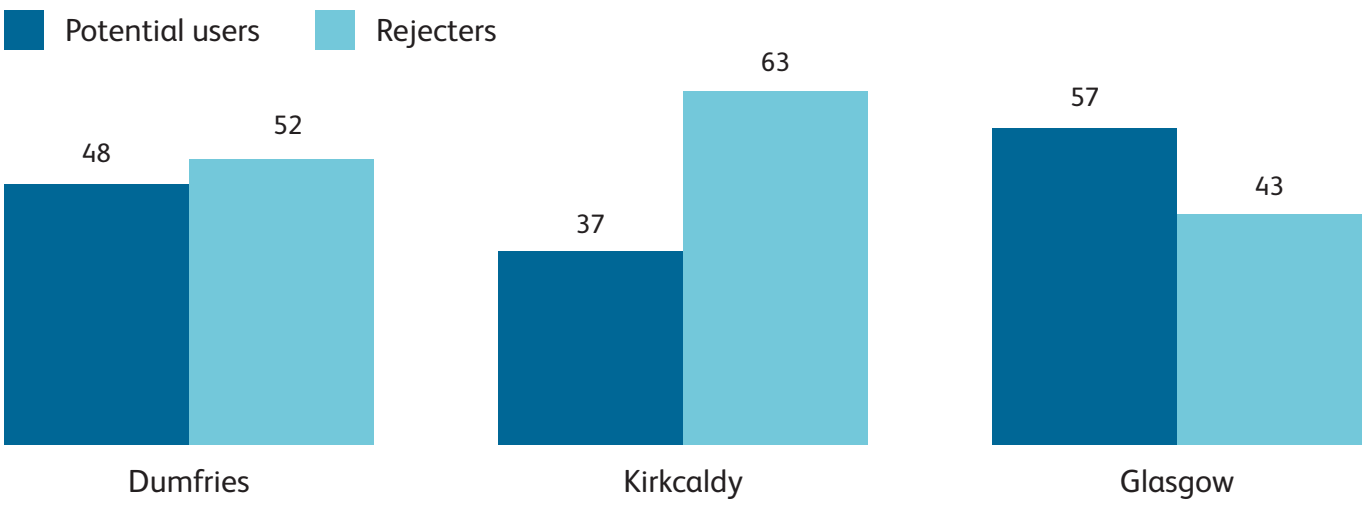
Source: Ipsos MORI • Base: Dumfries (200), Kirkcaldy (202), Glasgow (200)

2.3 Future internet usage

Within the sample of never-users we also differentiated between another two distinct groups – those who expressed an interest in using the internet in future (classified as 'potential users') and those who are not interested in doing so (classified as 'rejecters'). This is shown in Figure 2.1.

This distinction was also drawn out in the Glasgow research and it is important as different strategies to tackle digital exclusion may be required, depending on whether someone is pre-disposed to going online.

Figure 2.1 – Future Internet usage by area



Base: Dumfries (99), Kirkcaldy (101) and Glasgow (128)

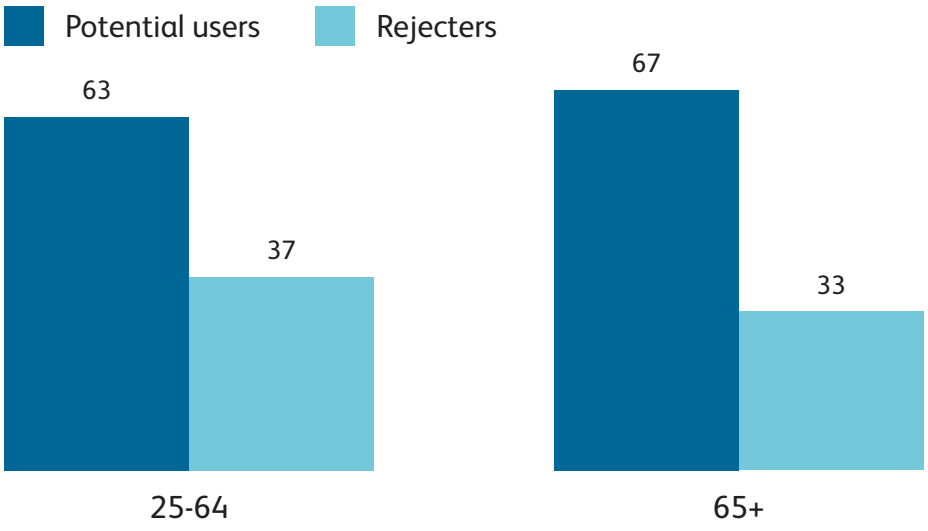
Source: Ipsos MORI

[4] In Glasgow, those who used the internet 'elsewhere' (eg at work, or in a library) were included in the research. However, for the subsequent waves these individuals were not included and are not recorded in table 2.2. This means that the Glasgow figures do not round up to 100% as they miss the 10% of 'elsewhere' users that have not been included in analysis.

In Dumfries, there was a relationship between age and interest in future internet use. Those in the oldest age band of 65+ were more likely than the younger respondents to say that they were not interested in accessing the internet in the future (63% of never users aged 65 and over, compared with 37% of 25-64 year olds). However, in Kirkcaldy, there was no statistically significant difference between the two age groups in terms of 'potential users' or 'rejecters' (Figures 2.2 and 2.3).

However, there were no differences by sex between 'potential users' and 'rejecters' in both areas.

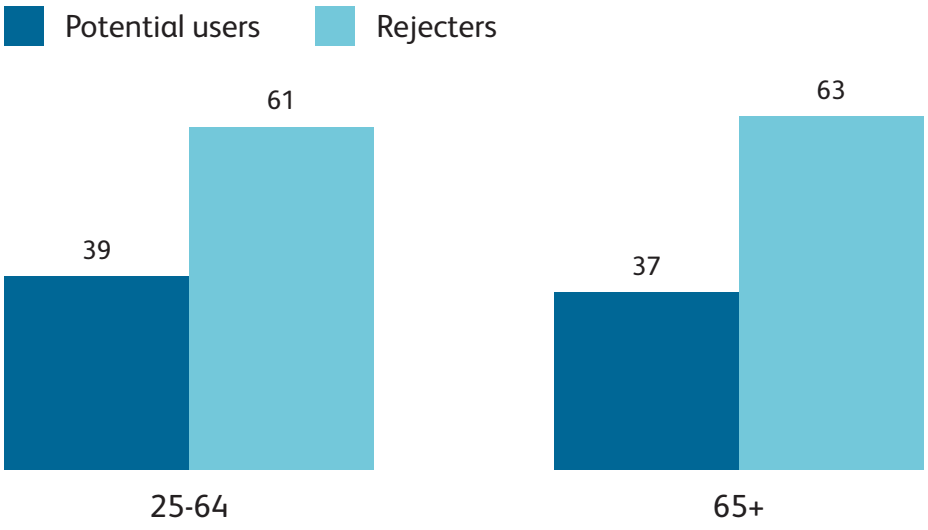
Figure 2.2 – Internet usage by age – Dumfries



Base: Dumfries (99)

Source: Ipsos MORI

Figure 2.3 – Internet usage by age – Kirkcaldy



Base: Kirkcaldy (101)

Source: Ipsos MORI

Chapter 3 – Understanding the barriers to digital participation

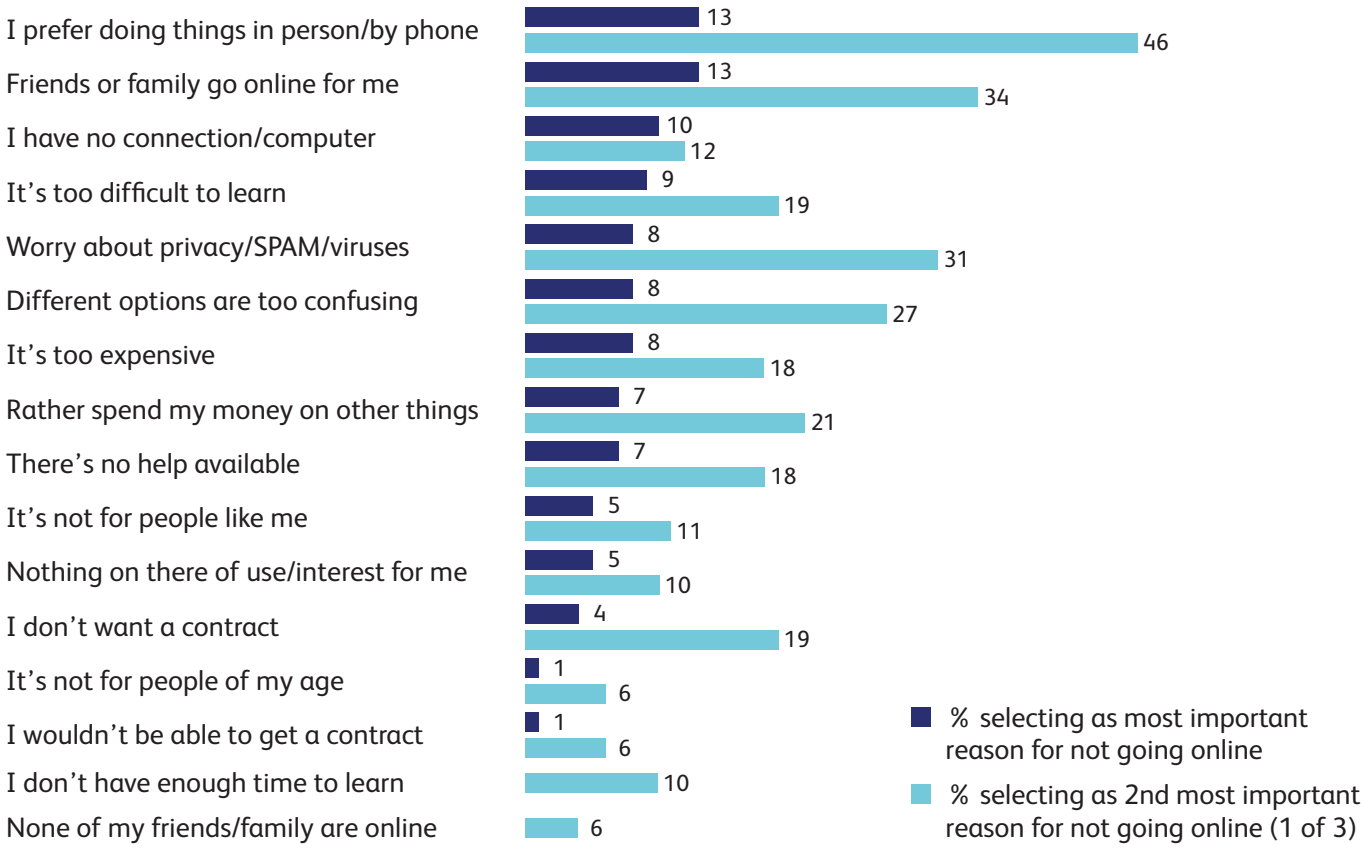
One of the primary objectives of the 2013 research study in Glasgow was to develop a better understanding of why people in the city might be offline. We sought to replicate this approach in Dumfries and Kirkcaldy, to identify if similar issues emerged in these locations.

To develop this understanding of the barriers that people experience to going online, respondents in Kirkcaldy and Dumfries who had never, or no longer, accessed the internet were asked their reasons for not doing so. This replicated the approach used in Glasgow and involved ranking barriers to digital participation on a pyramid grid, based on the extent to which each barrier applied to respondents. The 16 cards were arranged over four tiers to capture the main barrier to digital participation, then the next three most important barriers, then the next five, and finally the seven least applicable barriers (see Appendix 1 for the full list of barriers).

3.1 Barriers to digital participation

Figures 3.1 and 3.2 show the detailed breakdown of the barriers respondents placed in the most important and the second most important tier on the grid.

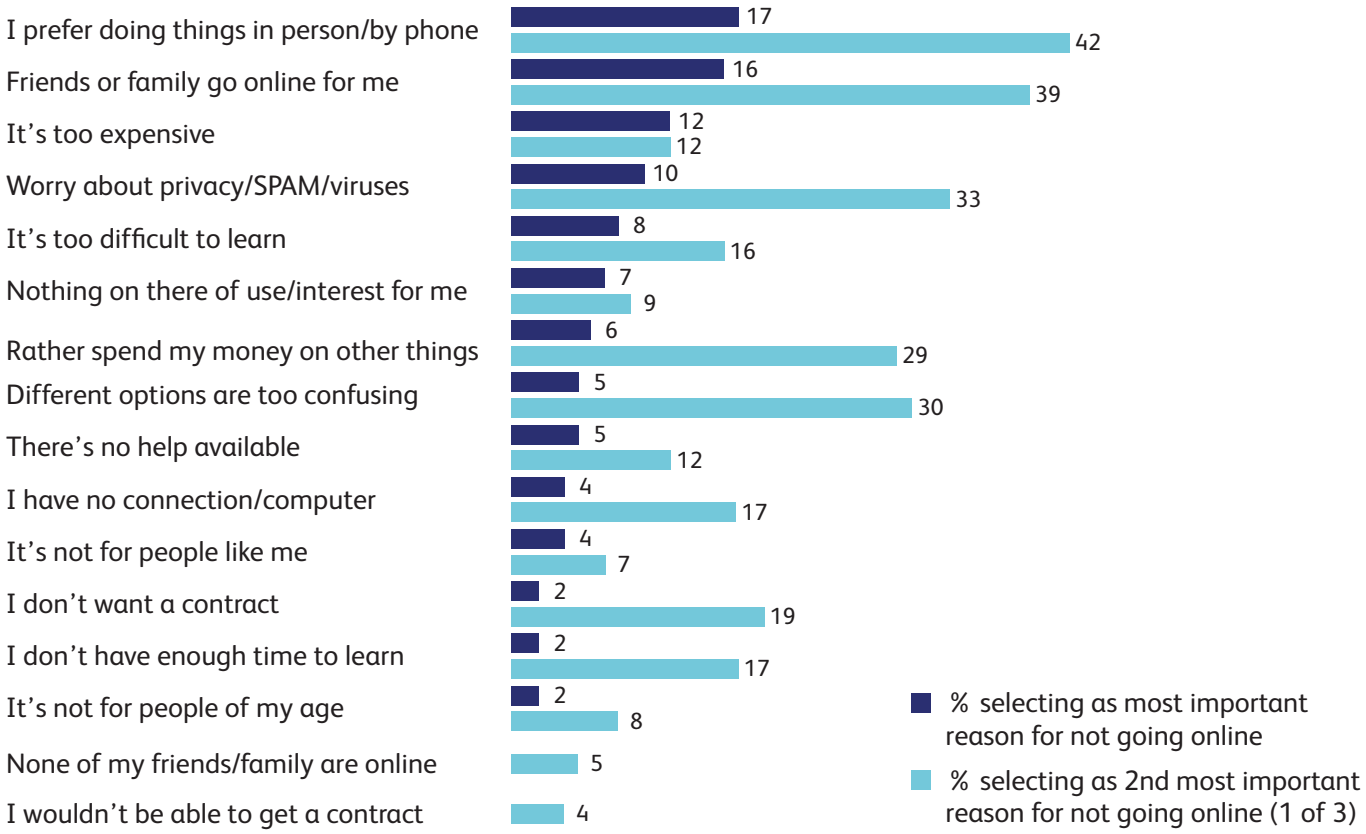
Figure 3.1 – % of those not online citing different reasons for not going online – Dumfries



Base: Never used the internet Dumfries (100)

Source: Ipsos MORI

Figure 3.2 – % of those not online citing different reasons for not going online – Kirkcaldy



Base: Users – Kirkcaldy (101)

Source: Ipsos MORI

3.1.1 Comfort in being offline

In both Dumfries and Kirkcaldy (and in line with the previous research in Glasgow), the two barriers most identified as the main barrier to going online by those who had never used the internet were:

- 'I just prefer doing things in person/by telephone' (13% in Dumfries and 17% in Kirkcaldy)
- 'friends or family go online for me' (13% and 16%, respectively).

These barriers **were also** the most commonly placed in the next three highest positions in the pyramid grid in both Dumfries and Kirkcaldy (as shown in Figures 3.1 and 3.2).

As noted in *Across the Divide: Tackling Digital Exclusion in Glasgow*[5], these reasons appear to suggest that respondents find the familiarity of the offline world comforting.

3.1.2 Concerns about the unknown digital world

In Glasgow, specific concerns about going online emerged as key barriers for non-internet users – particularly in relation to the difficulties of using digital technology; confusion about different options; and worries about SPAM, privacy or viruses.

Similar concerns also emerged in Dumfries and Kirkcaldy, as Figures 3.1 and 3.2 show. However, there were some variations in the nature of these concerns. In Dumfries, barriers frequently placed in the top position were 'I have no connection/

[5] http://www.carnegieuktrust.org.uk/publications/2013/across-the-divide---full-report

computer' (10%) and 'It's too difficult to learn' (9%). In Kirkcaldy 'I am worried about viruses/ SPAM/identity theft' (10%) was the barrier fourth most likely to be placed in the top position. In both Dumfries and Kirkcaldy the barriers of 'I am worried about privacy/SPAM/ viruses/identity theft' and 'I don't know how to set it up/the options available are too confusing' were also both commonly placed in the next three highest positions.

3.1.3 Cost

In Glasgow, the cost involved in going online – particularly when there are other pressures upon disposable income – was a key barrier for non-internet users. This emerged less strongly in Dumfries and Kirkcaldy, although in Kirkcaldy the barrier of 'It's too expensive' (12%) was the third most likely to be placed in top position (figure 3.2).

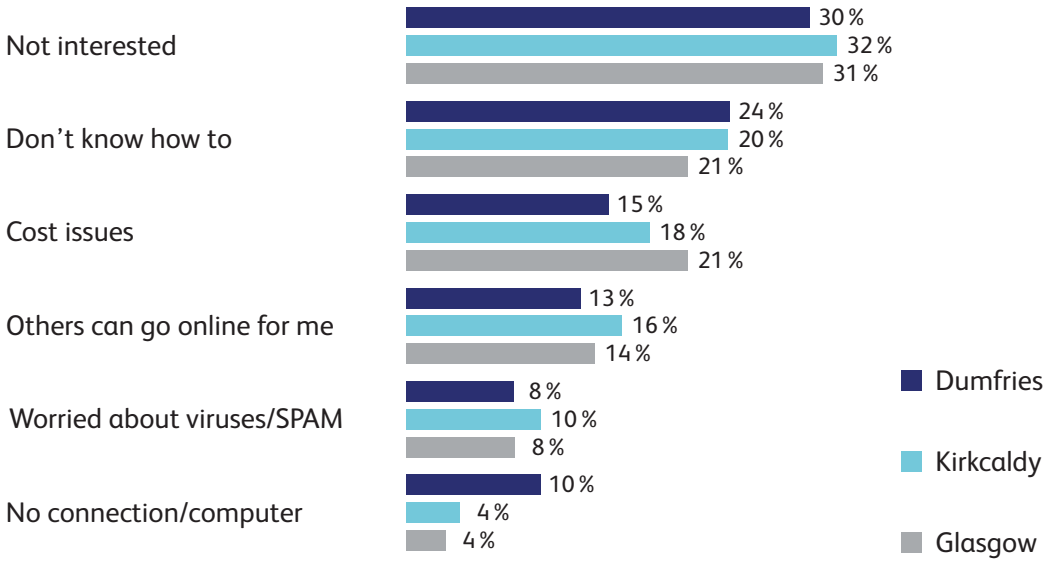
3.2 The importance of relevance, skills and cost

In order to identify the key themes among the barriers, we grouped the 16 barriers into six categories. This allowed us to compare the results across Dumfries, Kirkcaldy and Glasgow. These six categories were as follows:

- **Not interested in the internet** *(I do not think there is anything of interest/use for me on the internet; I just prefer doing things in person or by telephone; None of my friends or family are online; It's not for people of my age; It's not for people like me)*
- **Don't know how to use the internet** *(I do not have enough time to learn how to use it; It is difficult for me to learn how to use it; I do not know how I would get it set up/the different options available are too confusing; I need help with using it and this is not available to me)*
- **Cost issues** *(It's too expensive; I wouldn't be able to get a contract; I don't want to/can't get a contract for it; There are other things I would rather spend my money on)*
- No connection/computer
- Others can go online for me
- Worried about viruses/SPAM

As Figure 3.3 shows, overall, there was very little variation in the main barriers to digital participation reported across the three areas

Figure 3.3 – % of those not online selecting main barriers by area



Base: Dumfries (100), Kirkcaldy (100), Glasgow (140)

Source: Ipsos MORI

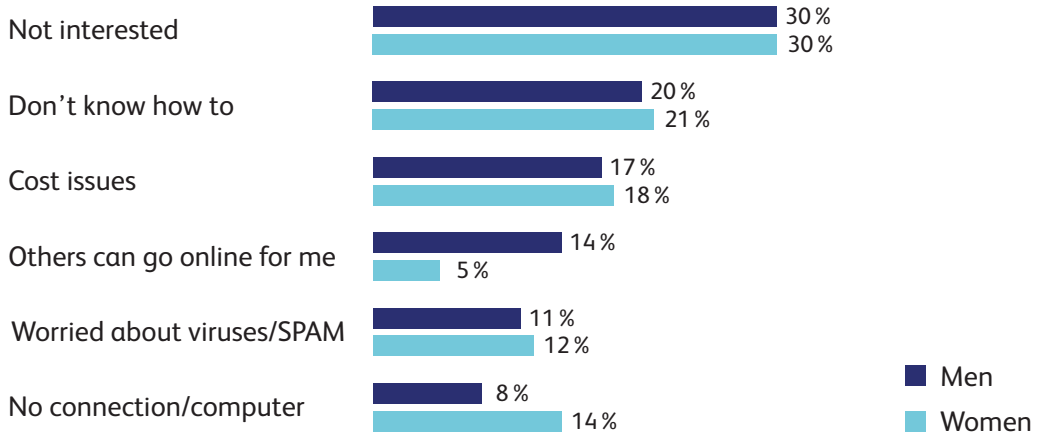
(Dumfries, Kirkcaldy and Glasgow). Barriers relating to a lack of interest, or not seeing the internet as relevant were the most prominent. This was followed by a lack of digital skills or knowledge about how to get online and cost-related issues.

3.3 Impact of age and gender on barriers to digital participation

3.3.1 Gender

Different demographic groups may experience different barriers to getting online. In Glasgow, there were significant differences between men and women in terms of the main barriers to internet access. Men were more likely than women to give reasons that suggest they do not access the internet because they are not interested, whereas women were more likely than men to say that the cost of the internet stopped them from using it. However, as Figures 3.4 and 3.5 show, in Dumfries and Kirkcaldy, these variations were not present.

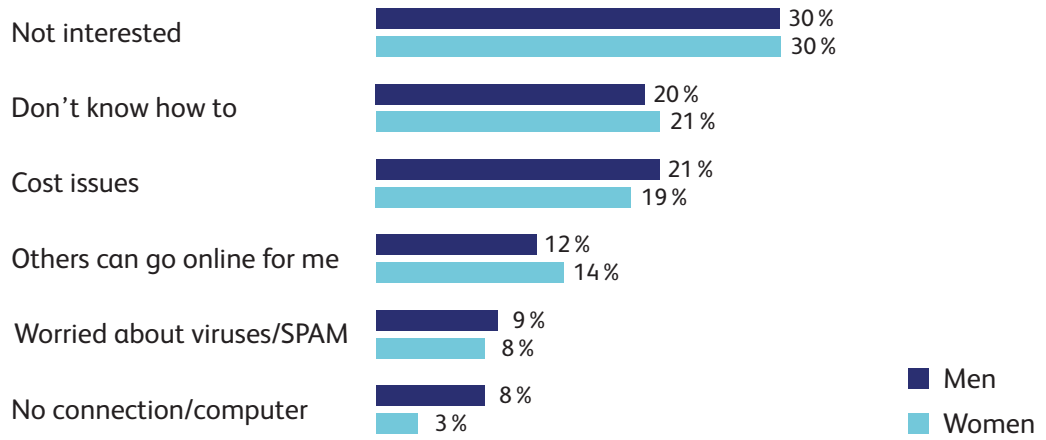
Figure 3.4 – % of those not online selecting main barriers by sex – Dumfries



Base: Dumfries, never users – Men (76) Women (73)

Source: Ipsos MORI

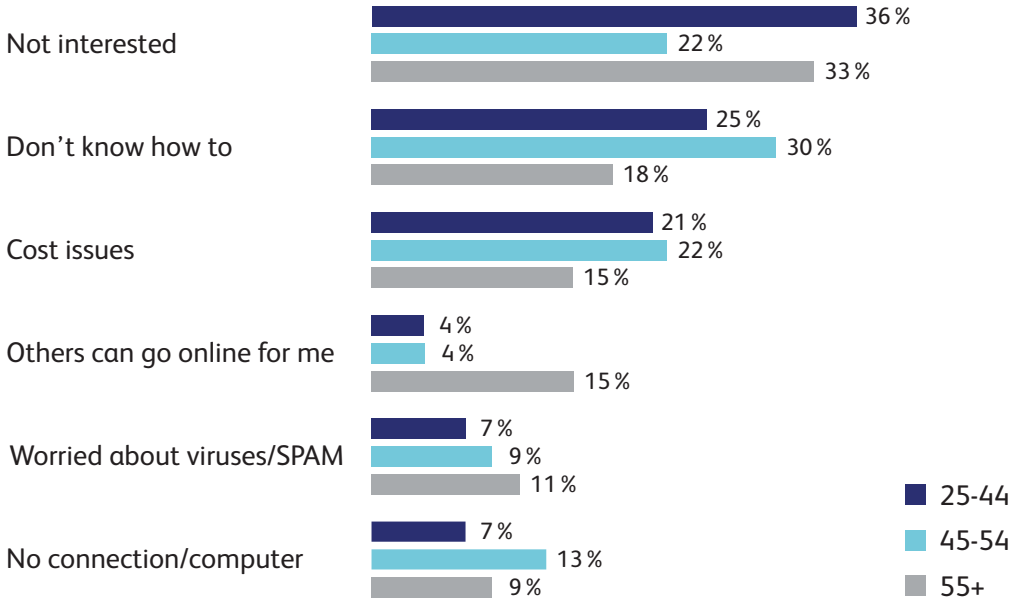
Figure 3.5 – % of those not online selecting main barriers by sex – Kirkcaldy



Base: Kirkcaldy, never users – Men (66) Women (97)

Source: Ipsos MORI

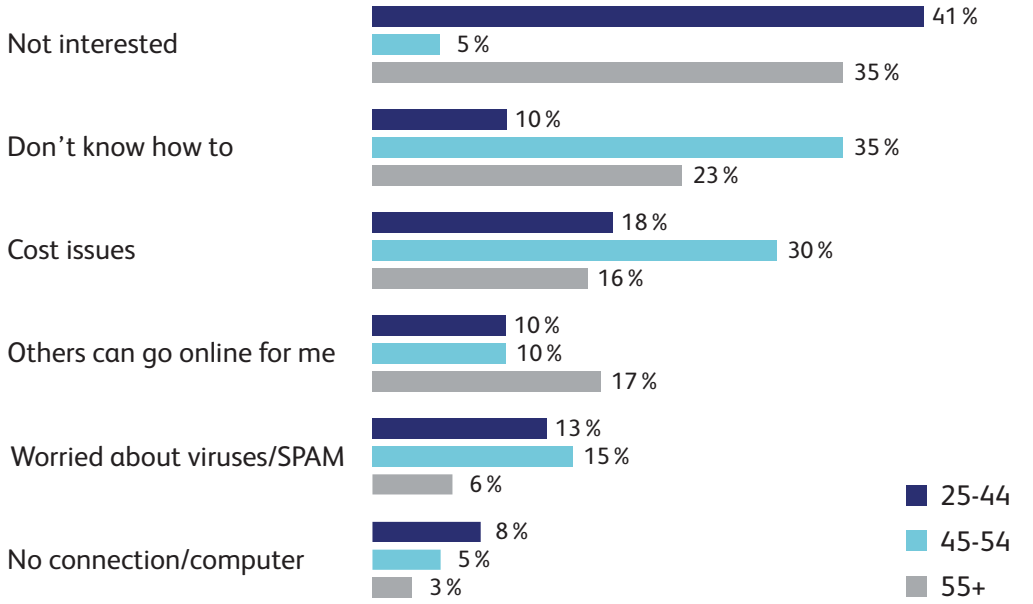
Figure 3.6 – % of those not online selecting main barriers by age – Dumfries



Base: Dumfries, never users – 25-44 (28), 45-54 (23), 55+ (89)

Source: Ipsos MORI

Figure 3.7 – % of those not online selecting main barriers by age – Kirkcaldy



Base: Kirkcaldy, never users – 25-44 (39), 45-54 (20), 55+ (88)

Source: Ipsos MORI

3.3.2 Age

In line with the previous research in Glasgow, age did appear to have an impact on the main barriers to digital participation in Kirkcaldy, although the particular barriers experienced by different age groups were not necessarily the same as in Glasgow.

In Dumfries, there were no statistically significant differences by age (Figure 3.6).

In Kirkcaldy a lack of interest was much more common among those aged 25-44 and 55+ than those aged 45-54. A lack of knowledge about how to go online was a particular problem for those in the middle age band, when compared with those aged 22-44 (Figure 3.7).

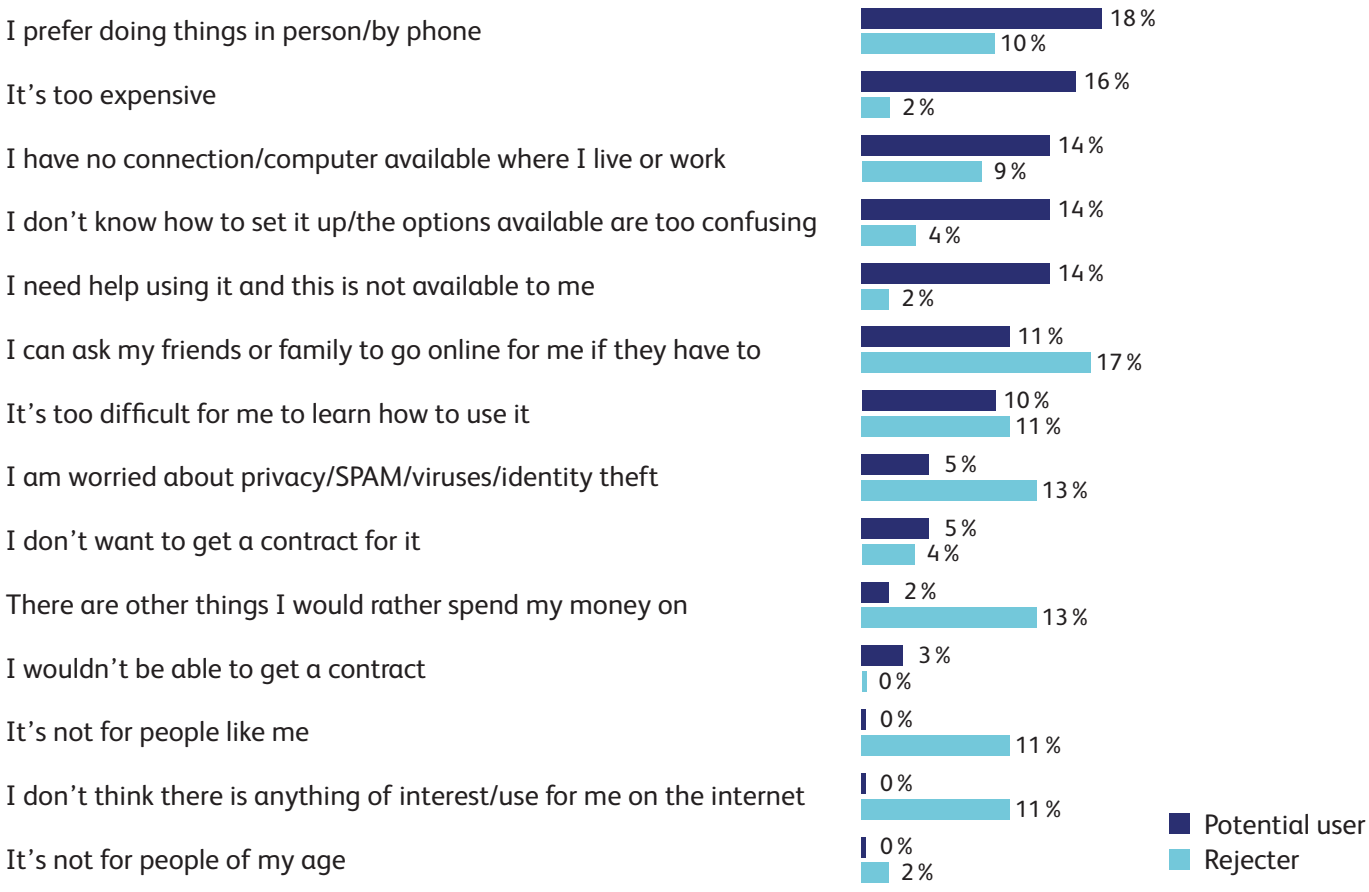
3.4 Impact of interest in future internet use on barriers to digital participation

The research sample in Dumfries and Kirkcaldy includes non-users who expressed an interest in going online in future and non-users who are not interested in using the internet in future.

In Dumfries, 48% of respondents who had never used the internet were potential users and 52% were rejecters. In Kirkcaldy, the respective figures were 45% and 55%.

Figures 3.8 and 3.9 show the main barriers to digital participation broken down by future internet use.

Figure 3.8 – Barriers to participation by interest in future use of the internet – Dumfries



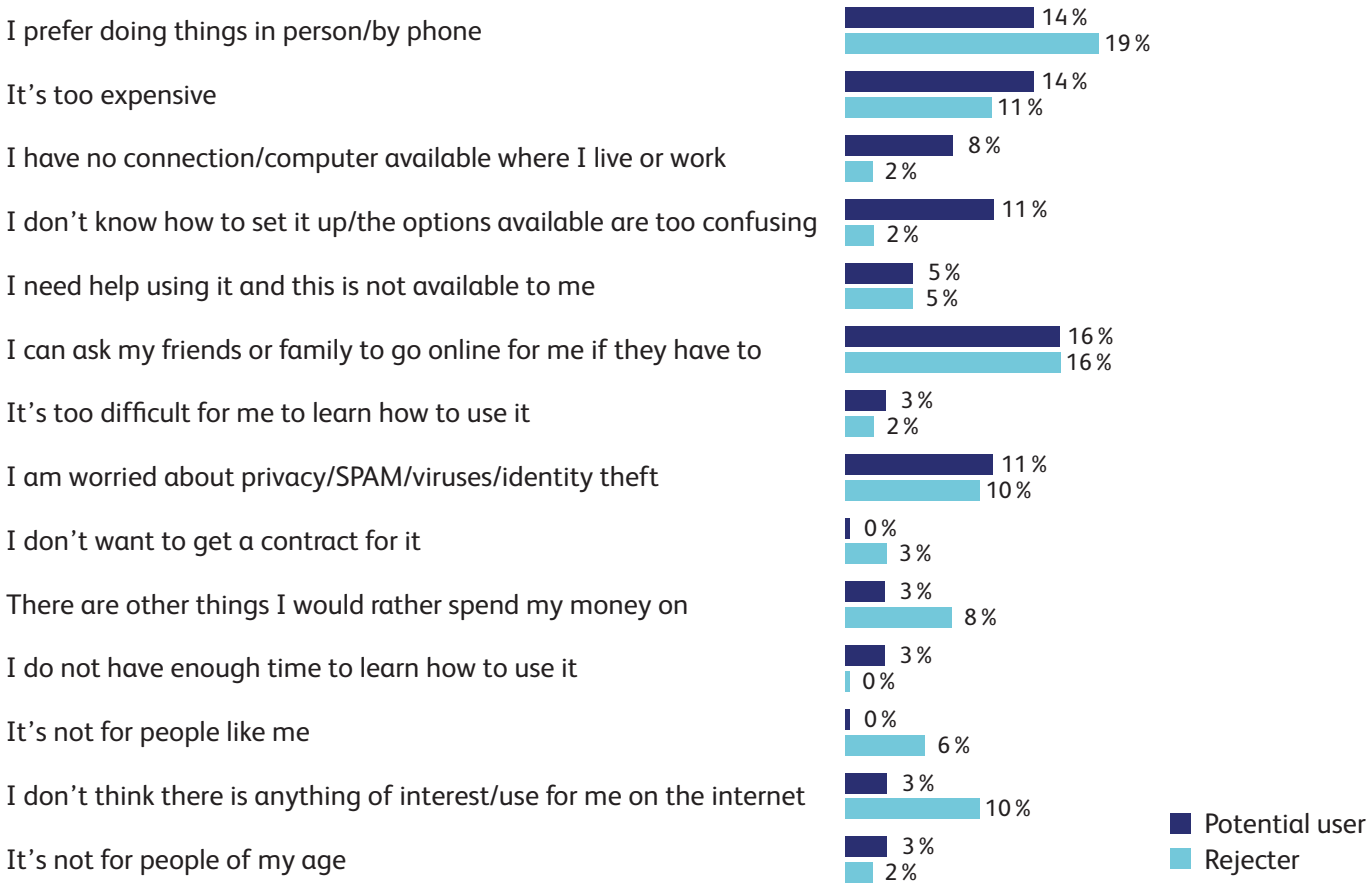
Base: Dumfries – Potential user (51), Rejecter (49)

Source: Ipsos MORI

There was a clear pattern in the differences between potential users and rejecters in Dumfries. Potential users were more likely than rejecters to put practical barriers in the main barrier position. For example, they were more likely to say that the internet was too expensive (16% of potential users, compared with 2% of rejecters) or that they need help to use it (14%, compared with 2%). In contrast, rejecters were more likely than potential users to highlight barriers relating to interest in internet use, such as 'There are other things I would rather spend my money on' (2% of potential users, compared with 13% of rejecters), 'I do not think there is anything of interest/use for me on the internet' (0%, compared with 11%) and 'It's not for people like me (0% compared with 11%) (Figure 3.8).

A similar pattern emerged in the Kirkcaldy data. However, these differences were only significant for the statement 'It's not for people like me' (0% of potential users, compared with 6% of rejecters) (Figure 3.9).

Figure 3.9 – Barriers to participation by interest in future use of the internet – Kirkcaldy



Base: Kirkcaldy – Potential user (37), Rejecter (64)

Source: Ipsos MORI

3.5 Impact of attitudes to technology on digital participation

In the Glasgow study we found that measuring attitudes towards technology was a useful predictor of whether or not someone was likely to be online. Internet users in that research sample were more likely than non-internet users to agree with positive statements about technology, such as:

- The internet makes life easier for people who use it
- Technology is making things better for people like me
- When new gadgets are invented it is a good idea to try and use them

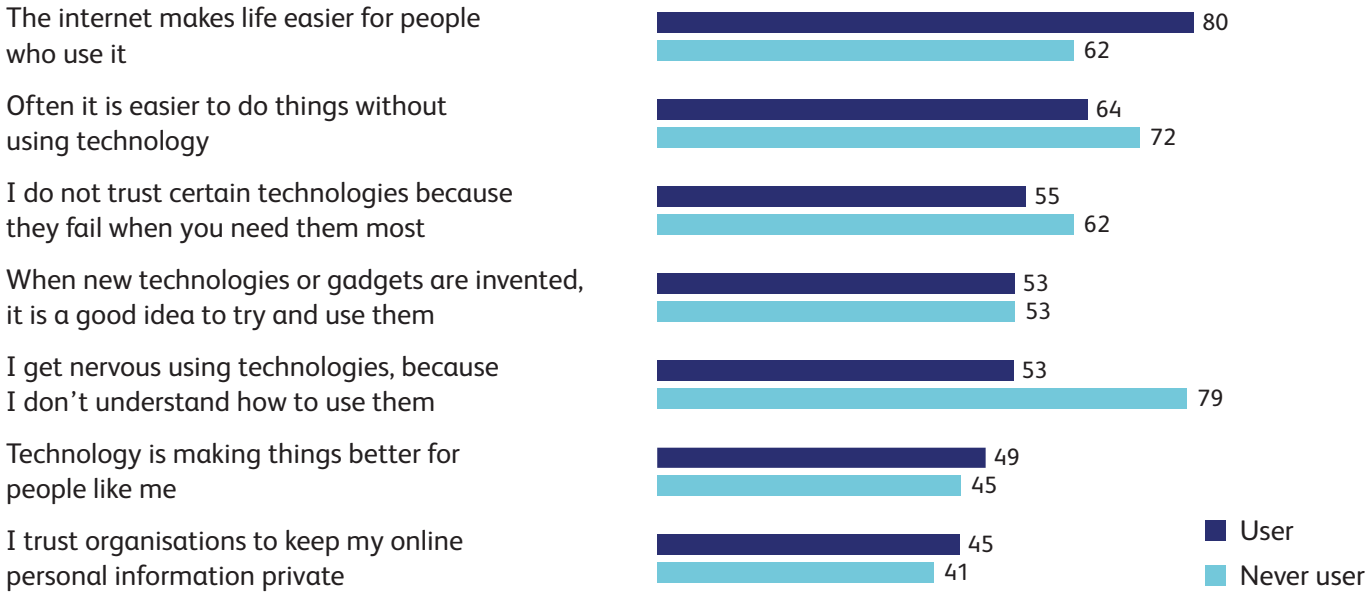
Conversely, in the Glasgow research non-internet users were more likely than internet users to agree with negative statements about technology, such as:

- I get nervous using technologies because I don't understand how to use them
- Often it is easier to do things without using technologies
- I do not trust certain technologies because they fail when you need them the most

We replicated these questions in the research in Dumfries and Kirkcaldy and added an additional statement relating to whether respondents trust organisations to keep their online personal information private. Figure 3.10 and 3.11 illustrate how attitudes differed between 'users' and 'never-users' in each location.

The research found that the differences between 'never-users' and 'users' in Dumfries and Kirkcaldy appeared less stark than between internet users and non-internet users in Glasgow. 'Never-users' in both Dumfries and Kirkcaldy were more likely than 'users' to agree with the negative statement "I get nervous using technologies because I don't understand how to use them" (79% compared to 53% in Dumfries; and 71% compared to 58% in Kirkcaldy). In Dumfries, 'users' were more likely than 'never-users' to agree with the positive statement 'the internet makes life easier for people who use it' (80% compared with 62%). However, there were no other statistically significant differences in either area.

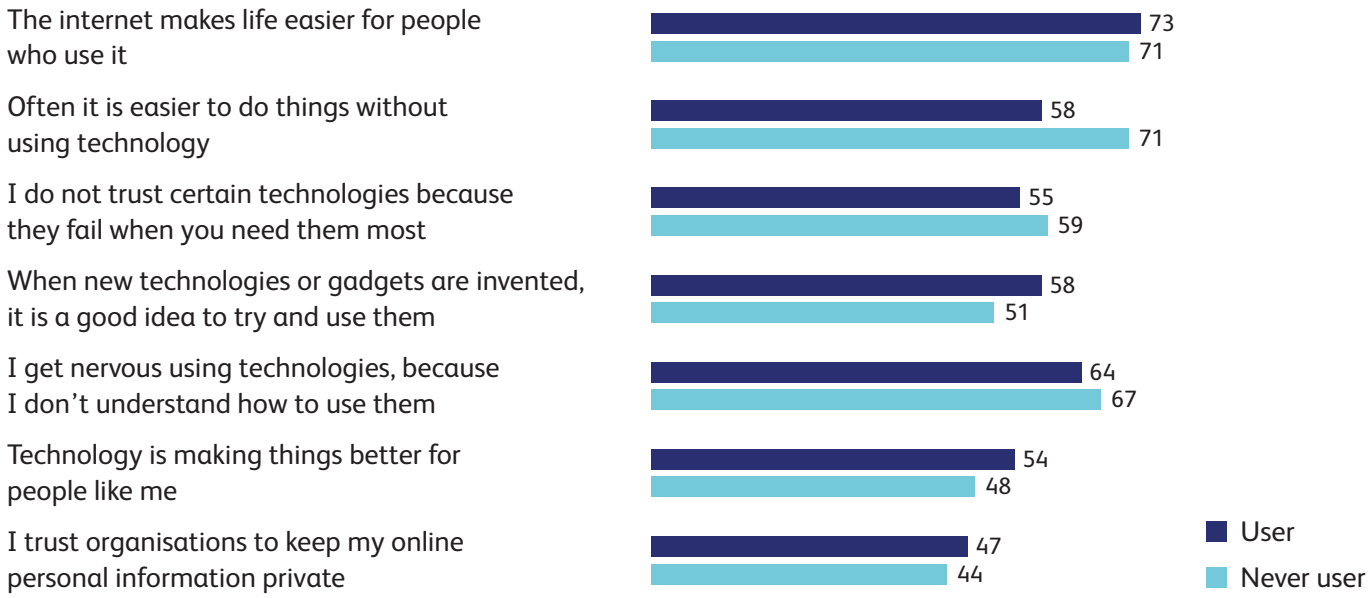
Figure 3.10 – Attitudes to technology by internet use – Dumfries



Base: Dumfries – User (100), Never user (100)

Source: Ipsos MORI

Figure 3.11 – Attitudes to technology by internet use – Kirkcaldy



Base: Kirkcaldy – User (101), Never user (101)

Source: Ipsos MORI

3.6 Impact of attitudes and lifestyle priorities on digital participation

In Glasgow, we carried out further data analysis to better understand the impact that people's trust in technology, alongside respondents' attitudes and lifestyle priorities, might have upon the likelihood of them using the internet. Again, we replicated this approach in Dumfries and Kirkcaldy using:

- a 'trust in technology' scale was established and used to assign a score to each respondent based on the answers they gave across all the technology statements
- a card-sorting exercise used to elicit respondents' lifestyle priorities. Respondents were given 16 cards with statements on them that someone might use to describe themselves[6]. They were asked to rank the 16 statements on a pyramid grid indicating which ones they felt most resembled their own characteristics and priorities. For analysis purposes, the card ranking was broken down into three groups – cards ranked in the top four, cards ranked in the middle and cards ranked in the bottom four

In Glasgow, these measures were used to conduct CHAID analysis to determine which factors had the greatest impact on whether respondents had ever used the internet. This analysis found that trust in technology had the most impact on whether a respondent was a 'user' or 'never-user', with lower levels of trust predicting that a respondent had never used the internet. An appetite for trying out new things was also an important predictor. Those who gave a higher ranking to the statement 'I prefer to stick with what I know than to try out new things' were also less likely to use the internet.

[6] The 16 statements were: I like to speak to people face-to-face; I send cards to my friends on special occasions (eg Christmas, birthdays); I like parties and social events; I enjoy learning new things/visiting new places in my spare time; I am too busy to have any hobbies; I do not like to be in debt; I prefer to shop every day for the things I need; When I buy things, I mostly use my bank/cash card; I like to see or touch things before I buy them; I like to know the background to a news story; I like to know what is going on in the world; I like to know what is going on in my neighbourhood; I prefer to keep my opinions to myself; I prefer to stick with what I know than to try out new things; The majority of my family and friends live within walking distance of my home; I see a friend or a family member that I do not live with almost every day.

The CHAID analysis[7] was replicated for Dumfries and Kirkcaldy. However, unlike the previous research conducted in Glasgow, the behavioural and attitudinal factors entered into the model did not produce a CHAID model that could differentiate between those who have accessed the internet and those who have not (further details on CHAID can be found in Appendix 3).

Therefore, we conducted further analysis in the form of a logistic regression. When the analysis was carried out for Dumfries a viable model did emerge, although only just meeting the significance threshold. The factors that were best able to predict internet use were a low ranking of the statements 'I prefer to stick with what I know than to try new things' and 'I like to know what is going on in my neighbourhood'; and a high ranking of the statement 'I like parties and social events'. Overall, the model explained between 18 and 33% of the variation in internet use (detailed results can be found in appendix 4).

However, the Kirkcaldy regression model was not significant. Neither lifestyle priorities nor trust in technology were reliable predictors of whether or not a respondent in Kirkcaldy had ever used the internet. This reflects the relatively homogenous profile of 'users' and 'never-users' in this location. It appears as though, in Kirkcaldy at least, 'users' and 'never-users' are not only similar demographically, but also in their behaviours and attitudes.

3.7 Impact of communication devices and spend on digital participation

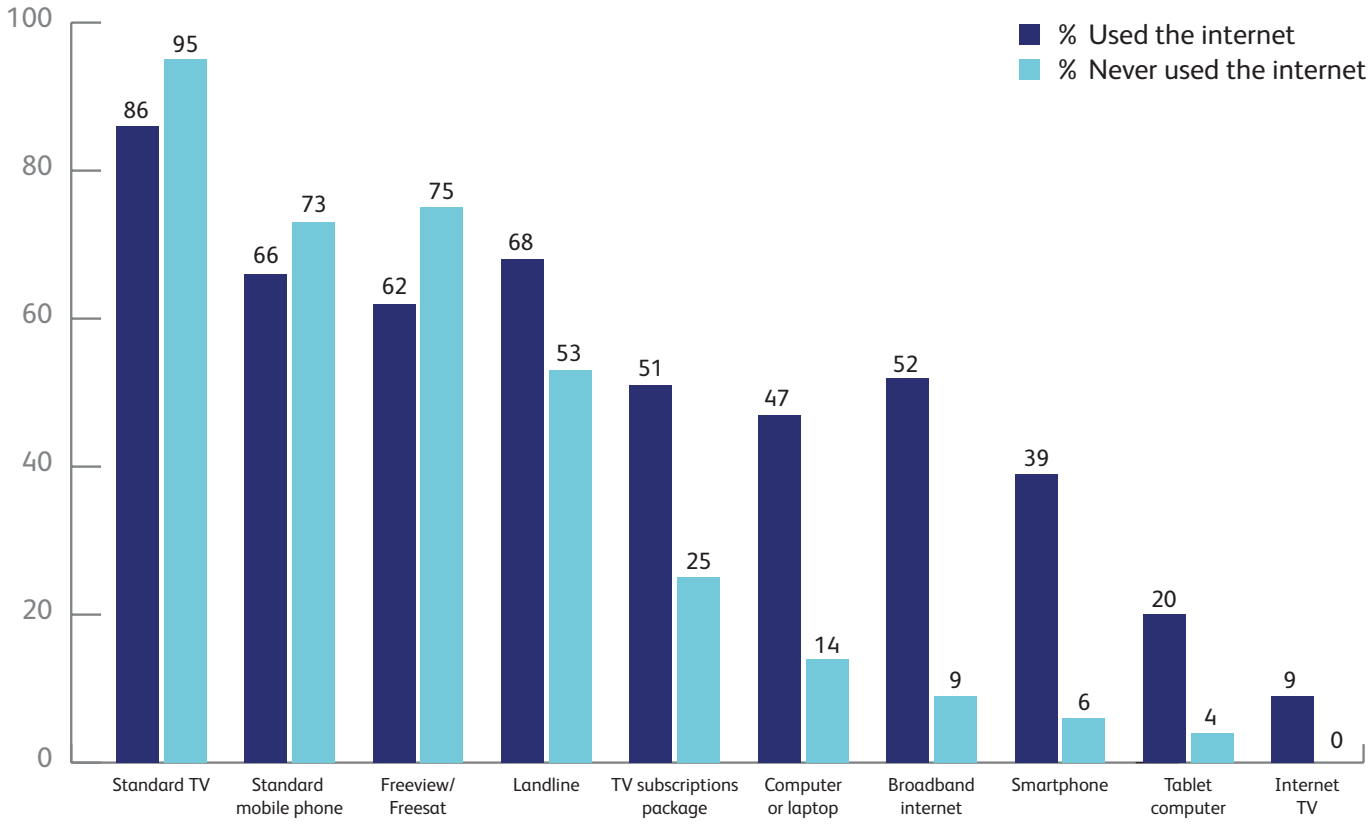
In Glasgow we analysed whether respondents' use of particular communication devices and overall spend on communications items might have an impact on internet usage. The research identified that non-internet users were less likely than internet users to access particular communication services such as pay TV. It also found that internet users tended to spend more each month on communications than non-internet users.

Similar patterns emerged in Dumfries and Kirkcaldy, where there were also differences in the uptake of communication devices by internet use (Figures 3.12 and 3.13). 'Users' in Dumfries were also more likely than 'never-users' to have a landline, which, may, in part be attributed to internet access, and a TV subscription package. In Kirkcaldy, 'never-users' were more likely to own standard mobile phones than 'users', in parallel with the greater use of smartphones among 'users'.

Interestingly, in both Dumfries and Kirkcaldy a minority of 'never-users' had devices in their household related to internet access, including broadband, computers, tablets and smartphones. This suggests that for some never-users, the technology may be readily available but this has not proved a key driver to help them get online.

[7] CHAID analysis begins by segmenting respondents based on the characteristic which has the most impact on what is being analysed – home internet access in this case. This produces two or more segments of respondents. CHAID then looks within each segment and divides it based on the characteristic that has most impact on that specific group. It continues to do this until segments can't be split further.

Figure 3.12 – Communication items owned by respondents' household – Dumfries



Base: All (200), 'users' (100), 'never users' (100)

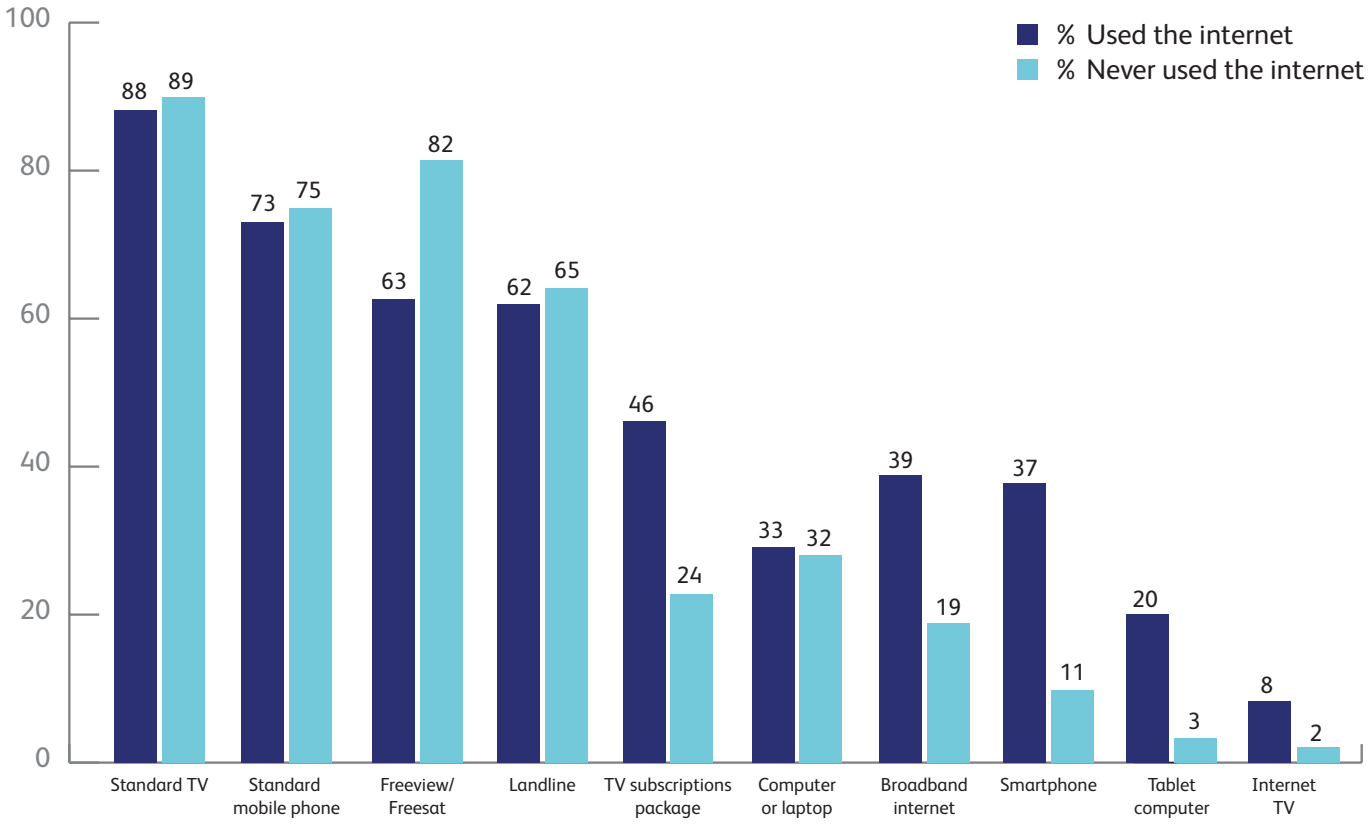
Source: Ipsos MORI

Finally, the research also examined how much money respondents and their households spent, on average, each month on bills for communication items they own[8] (Figures 3.14 and 3.15). The majority of respondents and their households spent less than £40 per month in both Dumfries and Kirkcaldy and in both locations the average amount spent by respondents on communications packages was significantly lower than the UK-wide average household spend of £113.51 reported by Ofcom[9]. In Dumfries, the average monthly spend was £29.35 and in Kirkcaldy £27.62. However, the proportion that was likely to spend more than £40 was higher in Dumfries than in Kirkcaldy (34% compared with 25%, respectively). This reflects the sample profile which suggested that the Dumfries sample were less deprived than those in Kirkcaldy (Figures 3.14 and 3.15).

[8] The items included in the survey were: broadband connection, TV subscription package, landline, mobile phone and tablet computer packages.

[9] http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr13/UK_1_Market_in_context_char1.pdf

Figure 3.13 – Communication items owned by respondents' household – Kirkcaldy

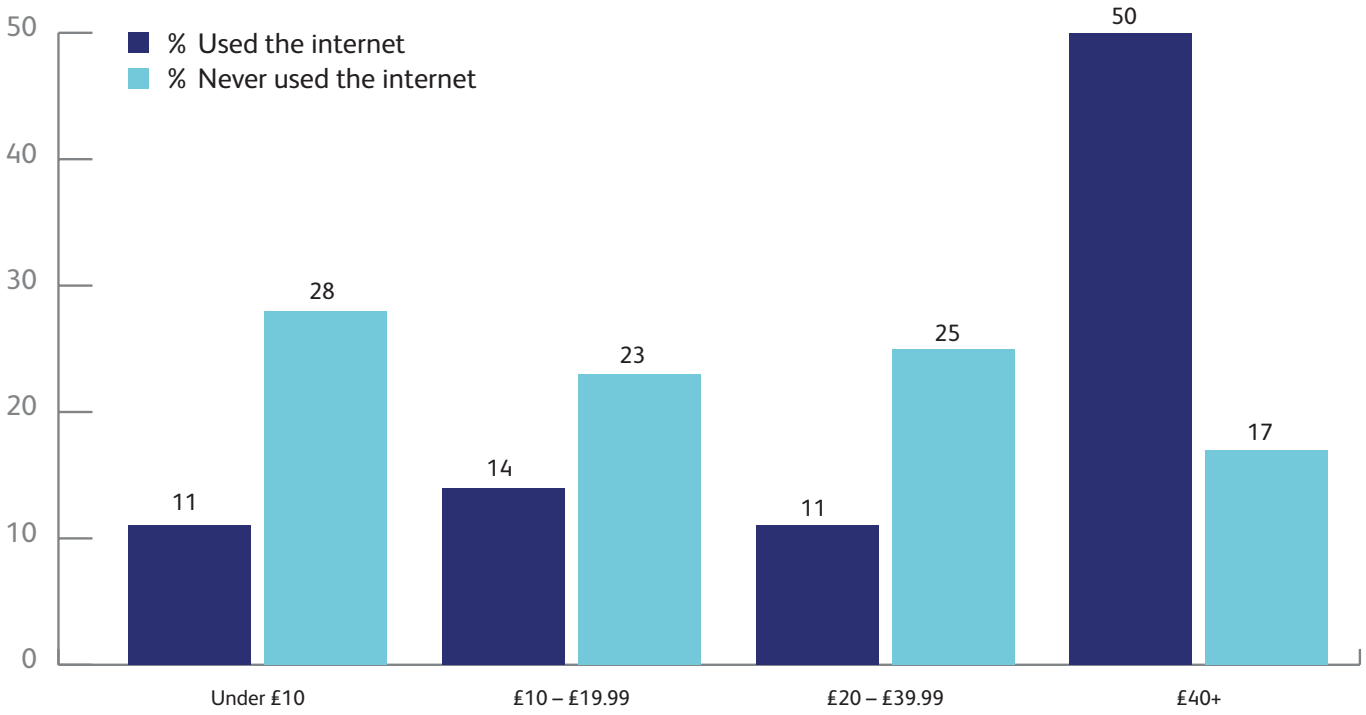


Base: All (200), 'users' (100), 'never users' (100)

Source: Ipsos MORI

'Users' spent more on average then 'never-users'. In Dumfries 'users' spent £38.44 a month compared with £20.25 among 'never-users'. In Kirkcaldy the average monthly spend was £32.37 among 'users' compared with £22.87 among 'never-users'.

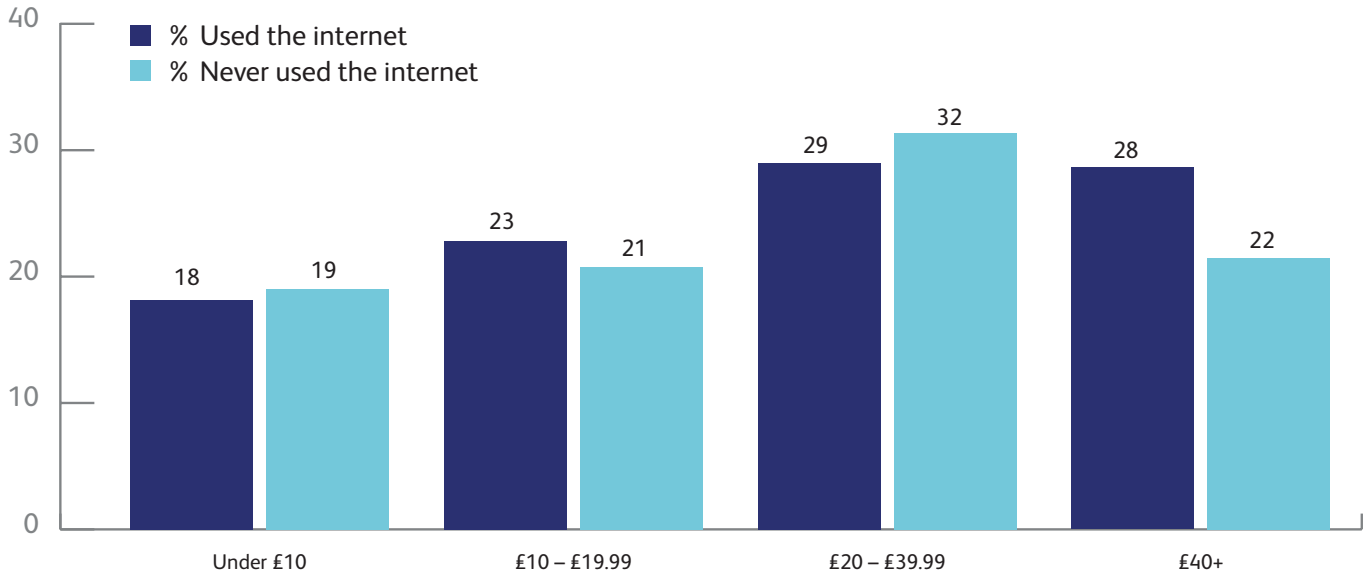
Figure 3.14 – Monthly household spend on communications – Dumfries



Base: All (200), 'users' (100), 'never users' (100)

Source: Ipsos MORI

Figure 3.15 – Monthly household spend on communications – Kirkcaldy



Base: All (202), 'users' (101), 'never users' (101)

Source: Ipsos MORI

Chapter 4 – Understanding the drivers for digital participation

The data on barriers to internet use helps to further our understanding of why people are offline in Dumfries and Kirkcaldy.

The next challenge, if we wish to successfully tackle digital exclusion, is to understand what might encourage or support people to go online in future.

4.1 Why do people go online

Replicating the research that was undertaken in Glasgow, the study in Dumfries and Kirkcaldy explored the reasons why internet users in these areas who share similar demographic characteristics with non-internet users started to use the internet in the first place. This data may be useful in providing policymakers with a better understanding of how the internet might be made relevant to non-users.

Respondents, who had used the internet on a regular basis in the last month, were shown a list of reasons that people give for starting to use the internet and were asked to select those which applied to them personally. As shown in Figures 4.1 and 4.2, a broad range of reasons were selected.

Figure 4.1 illustrates the reasons given by respondents in Dumfries. Around half of respondents started using the internet to look for information that was of interest to them (56%) or to keep in touch with family and/or friends (48%). Other reasons included that they tried it out as they thought it might be interesting (44%) and that they had to use it for school or a course (44%). Respondents were shown the list again and asked which reason was the most important. The most common responses were: to keep in touch with family and/or friends (18%); to try it out as it might be interesting (16%); and to look for information of interest to them (10%).

In Kirkcaldy, respondents reported similar reasons for using the internet initially (Figure 4.2). Sixty one per cent of respondents began using the internet to look for information that was of interest to them, 42% tried it out as they thought that it might be interesting and 37% had to use it for a school or a course. The reasons most frequently cited as the *most important* in encouraging respondents to use the internet were: had to use it for school or a course (18%), to try it out as it might be interesting (13%) and access to the internet was provided either at home, school or work (11%).

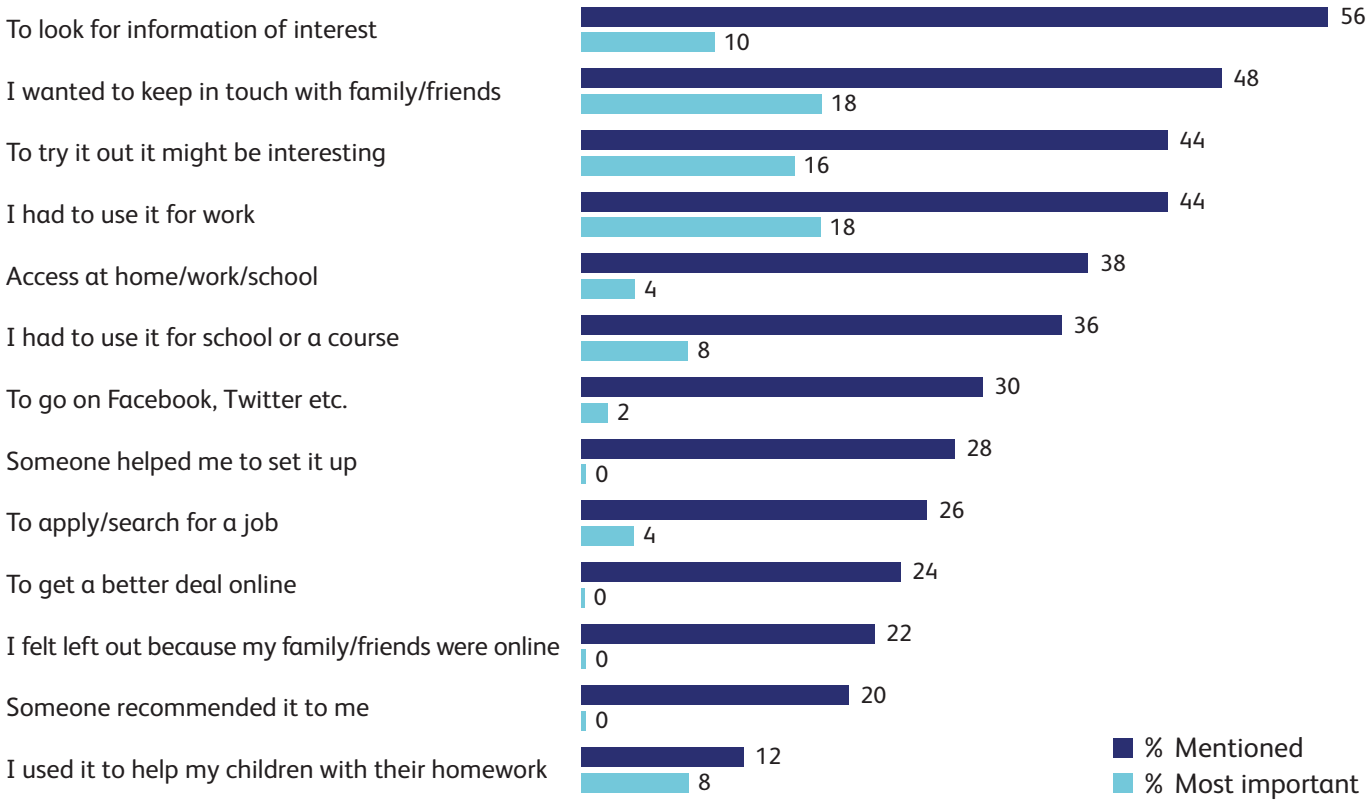
A key difference between the two areas of Dumfries and Kirkcaldy was that a greater proportion of respondents in Dumfries (30%) than in Kirkcaldy (16%) mentioned Facebook and other social media as a factor which encouraged them to use the internet. Similarly, respondents in Dumfries were also more likely than those in Kirkcaldy to mention keeping in touch with family or friends (34%, compared with 13%) and having someone to help set it up (28%, compared with 15%) as drivers to digital participation.

The key drivers for digital participation were the possibility of looking up information of interest; keeping in touch with people; or having to use it for work/school and were broadly in line with the previous research study in Glasgow.

A new question was added which was not asked in Glasgow. 'Rejecters' were asked if any of the reasons given by users for initially going online might encourage them to start using the internet. The drivers most frequently selected were similar

to those cited by those who have gone online: keeping in touch with family and friends (37% in Dumfries and 19% in Kirkcaldy); looking for information that is of interest to them (22% in Dumfries and 11% in Kirkcaldy); and getting better deals online (20% in Dumfries and 17% in Kirkcaldy). However, the most common response from 'rejecters' in both Dumfries and Kirkcaldy was that nothing could encourage them (45% Dumfries and 48% Kirkcaldy).

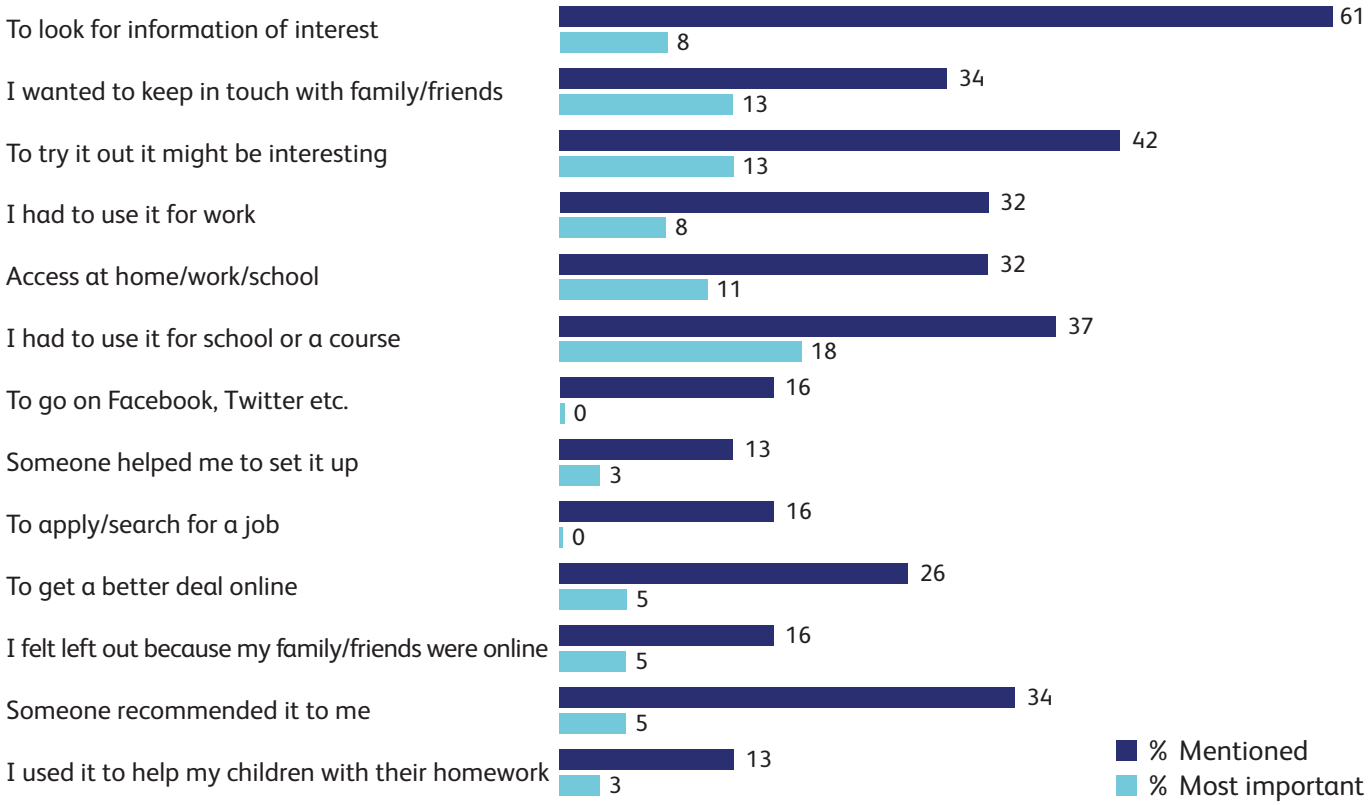
Figure 4.1 – Reasons for starting to use the internet – Dumfries



Base: Users – Dumfries (50)

Source: Ipsos MORI

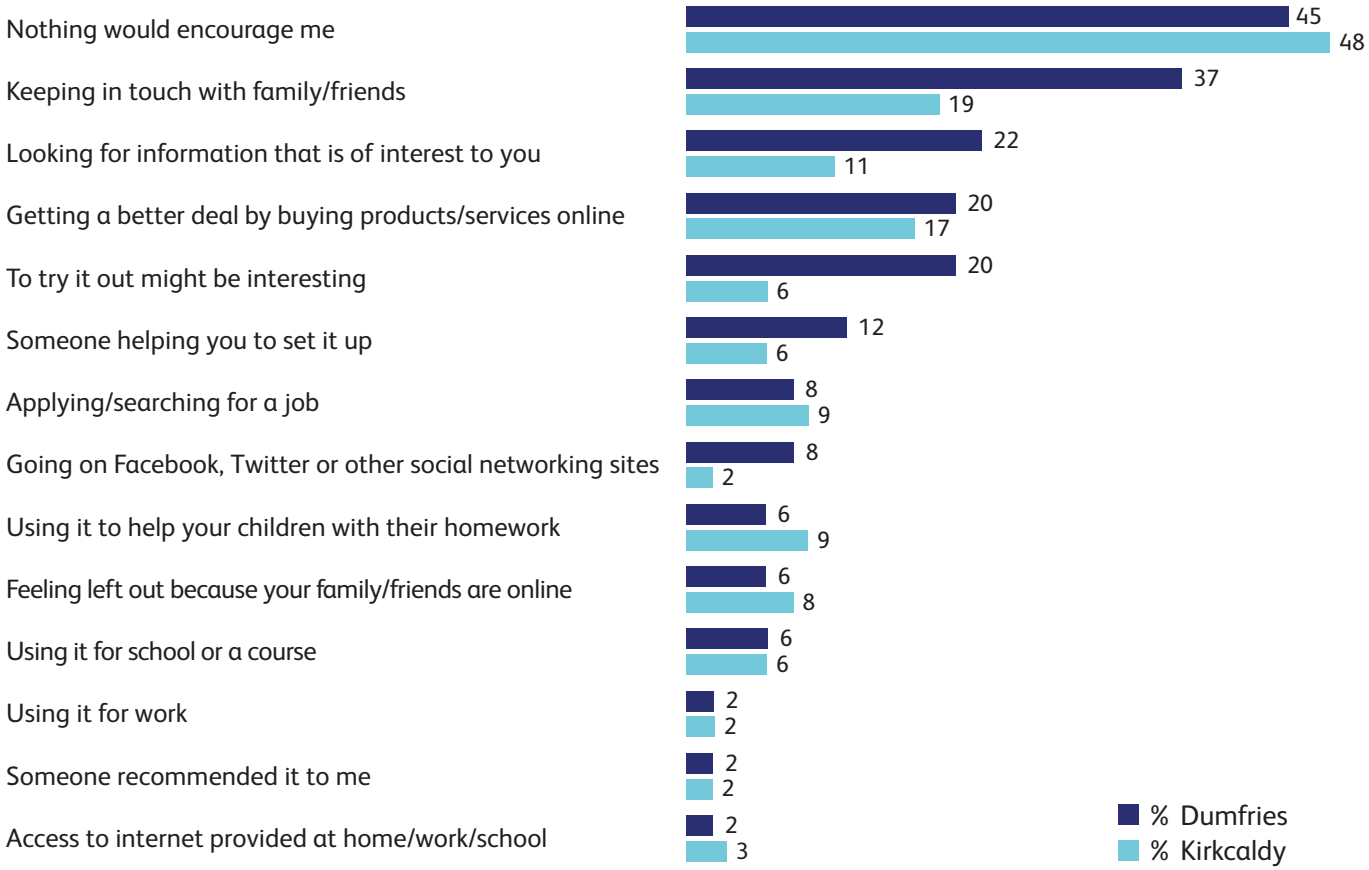
Figure 4.2 – Reasons for starting to use the internet – Kirkcaldy



Base: Users – Kirkcaldy (38)

Source: Ipsos MORI

Figure 4.3 – Possible reasons to start using the internet, 'rejecters'



Base: Dumfries (51), Kirkcaldy (64)

Source: Ipsos MORI

4.2 What do people do online?

We also asked respondents who currently use the internet at home, or on their smartphones, what they do online and how often they do this (Tables 4.1 and 4.2).

In Dumfries, general browsing of the internet (74%) and going on social networking sites (58%) were the most common activities carried out by respondents on a daily basis, whereas more than half of participants had never taken part in an online learning or training course (60%) or used online banking (58%) (Table 4.1).

In line with Dumfries, respondents in Kirkcaldy most commonly used the internet to browse/surf the web (66%) or to use social networking sites (55%) on a daily basis, while half of respondents had never used the internet to look for employment (Table 4.2).

Daily internet usage figures for Dumfries, Kirkcaldy and Glasgow are compared in Figure 4.4. For all three areas, the most common daily online activities were general browsing/surfing the web and using social networking sites, such as Facebook and Twitter.

Kirkcaldy respondents were more likely than those in the other two locations to use the internet on a daily basis for the following tasks:

- watching videos or TV (58% in Kirkcaldy compared with 26% in Dumfries and 25% in Glasgow)

- look for news (50% in Kirkcaldy, compared with 26% in Dumfries and 30% in Glasgow)
- online banking (26% in Kirkcaldy, compared with 14% in Dumfries and none in Glasgow)

However, a greater proportion of respondents in Glasgow reported looking for employment online on a daily basis than in Dumfries or Kirkcaldy.

Table 4.1 – Internet activity, Dumfries

	At least daily %	Weekly %	Monthly or less %	Never %
General surfing or browsing	74	8	12	-
To go on Facebook, Twitter or other social networking site	58	4	6	30
To look for local/national/international news	26	14	26	32
To watch videos or TV online	26	22	22	28
To look for jobs/work	16	12	20	50
To do online banking	14	12	12	58
Used Skype or something similar	10	20	4	46
To use an online public service	8	16	22	50
To take part in an online learning or training course	2	10	26	60
To buy things online	-	22	38	36

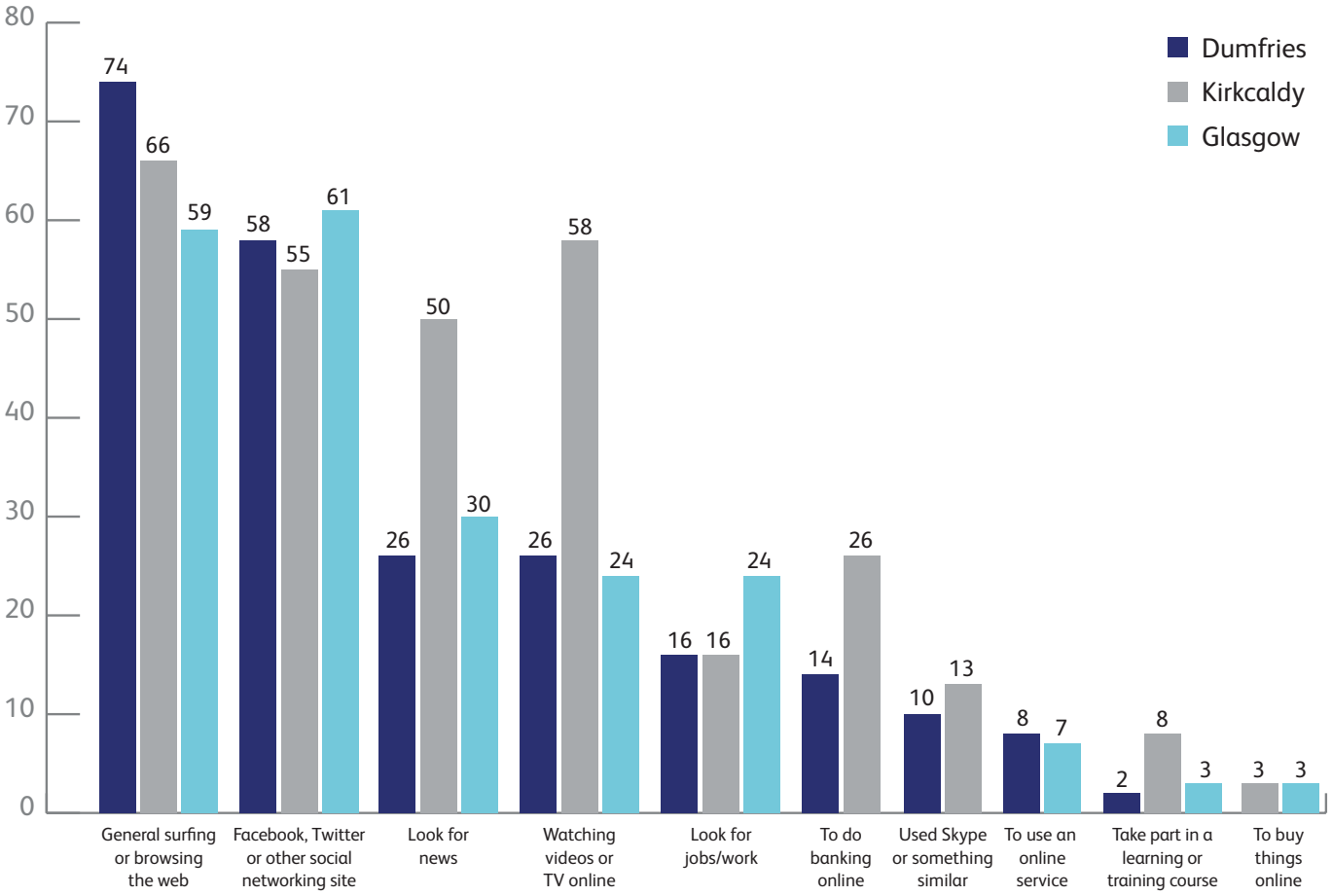
Source: Ipsos MORI • Base: Dumfries 'users' (50)

Table 4.2 – Internet activity, Kirkcaldy

	At least daily %	Weekly %	Monthly or less %	Never %
General surfing or browsing	66	11	11	3
To go on Facebook, Twitter or other social networking site	55	5	3	32
To look for local/national/international news	50	21	11	13
To watch videos or TV online	32	26	18	18
To do online banking	18	21	11	45
To look for jobs/work	16	5	24	50
Used Skype or something similar	13	11	24	47
To take part in an online learning or training course	8	3	40	45
To buy things online	3	24	55	13
To use an online public service	-	5	55	34

Source: Ipsos MORI • Base: Kirkcaldy 'users' (38)

Figure 4.4 – Daily internet activity by area



Base: Users – Dumfries (50), Kirkcaldy (38), Glasgow (33)

Source: Ipsos MORI

4.3 Sources of help for getting online

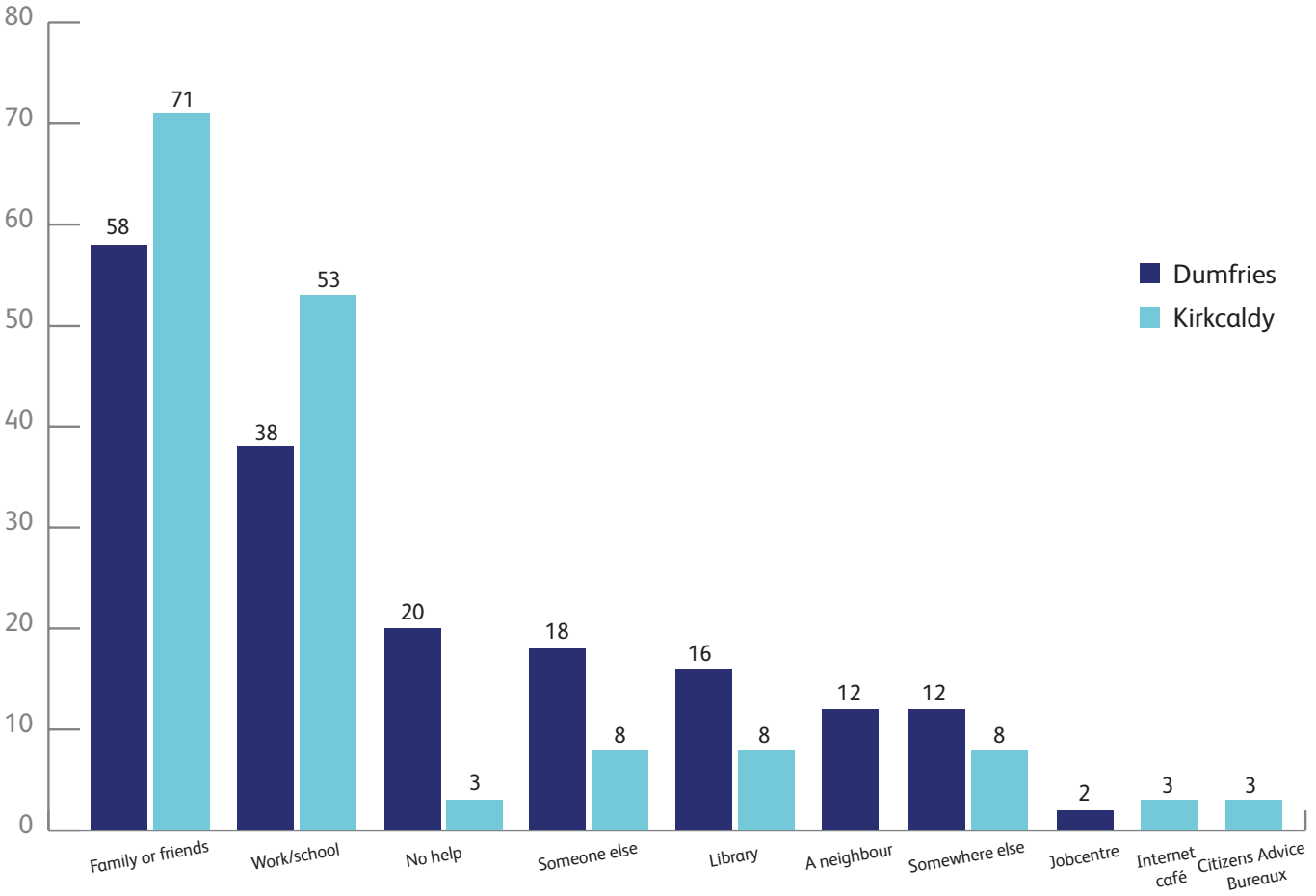
A new set of questions, which were not included in the Glasgow study, were added to the research in Dumfries and Kirkcaldy, to examine useful sources of help to get people online.

Firstly, internet users who participated in the research were asked about the types of assistance they needed when they first started using the internet. As illustrated in Figure 4.5, the most common source of help was from family and friends, for both Dumfries (58%) and Kirkcaldy (71%), followed by help from school or work (38% in Dumfries and 53% in Kirkcaldy).

Overall, respondents in Dumfries were more likely to report that they did not seek assistance when they first started using the internet than those in Kirkcaldy (20% of 'users' in Dumfries, compared with 3% of 'users' in Kirkcaldy).

Despite this, respondents in Dumfries were more likely than those in Kirkcaldy to get help from a number of the sources listed in the question including: someone else (18% in Dumfries, compared with 8% in Kirkcaldy); the local library (16% in Dumfries, compared with 8% in Kirkcaldy); and a neighbour (12% in Dumfries, compared with none in Kirkcaldy).

Figure 4.5 – Sources of help when first used internet



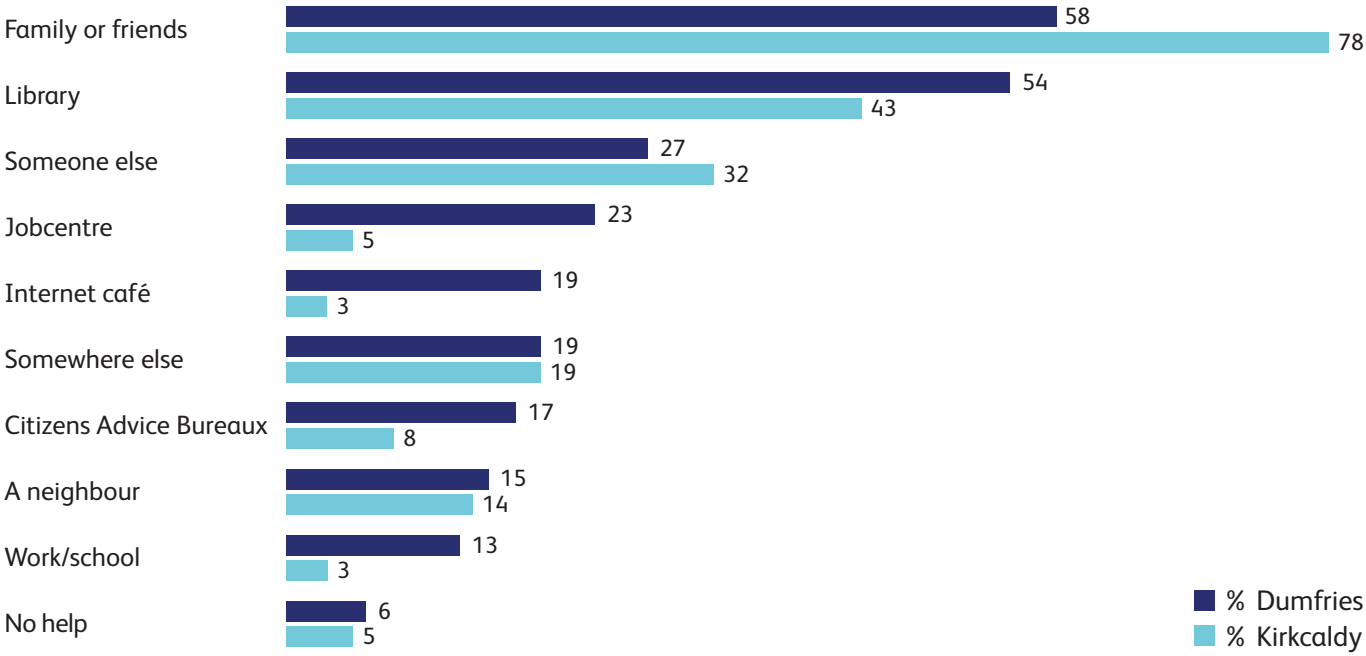
Base: Users – Dumfries (50), Kirkcaldy (38)

Source: Ipsos MORI

'Potential users' in Dumfries and Kirkcaldy were also asked which types of assistance or sources of help they would require to help them access the internet. The most common responses in both Dumfries and Kirkcaldy were: family or friends (58% in Dumfries and 78% in Kirkcaldy) or a library (54% in Dumfries and 43% in Kirkcaldy) (see Figure 4.6). Six per cent of respondents in Kirkcaldy and 5% in Dumfries stated that they would not seek any assistance at all.

The only notable differences between the two samples were that a higher proportion of respondents in Dumfries (23%) than in Kirkcaldy (5%) would consider turning to the Jobcentre for help with accessing the internet, while those in Kirkcaldy were more likely to go to friends or family than those in Dumfries.

Figure 4.6 – Sources of help 'potential users' would like assistance from



Base: Potential users – Dumfries (48), Kirkcaldy (37)

Source: Ipsos MORI

Chapter 5 – Conclusions

In 2013 the Carnegie UK Trust report 'Across the Divide – Tackling Digital Exclusion in Glasgow' used data gathered and compiled by Ipsos MORI to address two key questions: why are some people in Glasgow excluded from the internet and what might be done to support more people in the city to go online in the future?

This new research study, published jointly by Carnegie UK Trust and Ipsos MORI and funded by the Scottish Government, has assessed whether the barriers and drivers to digital participation that exist in Glasgow also exist in Kirkcaldy and Dumfries – two less densely populated urban parts of Scotland, but two places which also experience relatively high levels of digital exclusion.

The data supports our findings from Glasgow that tackling digital exclusion is not straightforward. The barriers that can prevent someone from going online vary significantly between individuals, with each person having their own, unique combination of challenges to overcome before are 'digitally included'. The reasons for people choosing to go online and the best ways to be supported in doing so are also often specific to them. At the same time, the strategic challenge remains of how to support a large number of people to access the internet and benefit from the significant, and growing, range of social and economic benefits that connectivity can offer.

This report provides further insight into these issues, which we believe can be useful in supporting ongoing policy development and implementation at both national and local level. The key findings emerging from the data, and some implications from these, are described below.

5.1 Barriers to digital participation

Similarly to the research in Glasgow, the most significant barriers to people going online in Dumfries and Kirkcaldy are a high level of comfort with being offline and specific concerns about unknown aspects of the digital world. In particular, those who are not online simply prefer doing things in person or by phone or have family members or friends who can go online for them.

In Glasgow, the unknown digital world was regarded as intimidating because the technology was seen as being too difficult to learn; because people were concerned about issues such as SPAM, viruses or privacy; or because the different options in the telecommunications market were too confusing. Each of these factors also emerged strongly as key barriers to digital participation to non-users in both Dumfries and Kirkcaldy. However, in Kirkcaldy an additional, technology-related barrier emerged – with 10% of respondents indicating that the main barrier to them going online was that they had no connection or computer. Tackling these technology-based barriers remains key to extending digital participation.

Cost was less commonly cited as a barrier to digital participation in Kirkcaldy, and particularly in Dumfries, than it was in Glasgow. However, the importance of affordable internet access should not be underestimated. Non-internet users in both Dumfries and Kirkcaldy indicated that they had a monthly budget for telecommunications items (internet, mobile phone, pay TV, etc) of less than £25 per month – even less than the telecoms budget of non-internet users in Glasgow and far below the UK household average of more than £100. Initiatives to support digital inclusion must recognise this financial reality.

The Glasgow research identified that the reasons why people might not go online varied, according to whether or not they were interested in using the internet in future. This pattern also emerged in Dumfries and to a lesser extent Kirkcaldy. Potential internet users were more likely to cite practical barriers to going online, such as cost or because they needed help to use it. Those who said they were not interested in using the internet in future were more likely to identify attitudinal barriers, such as not seeing it as being for people like them.

The barriers to internet access by age and gender varied less in Kirkcaldy and Dumfries than they did in Glasgow. However, some key differences did emerge in Kirkcaldy. Here, non-internet users aged 45-54 were more likely to cite cost and skills issues as reasons for not going online, while both younger (24-44) and older (55+) non-users were less likely to see the relevance of the internet to them.

This data again points to the need for a differentiated approach to digital participation activities, to ensure that the needs of different groups are properly met.

5.2 Drivers for digital participation

Amongst those in Dumfries and Kirkcaldy who are online, but who match a similar demographic profile to those who are offline, the main reasons why they had started to use the internet were a desire to look for information that is of personal interest to them; to try it out because it might be interesting; or to communicate with family and friends. This mirrors our previous findings from Glasgow.

The importance of personally relevant content and a desire to connect with others as critical drivers for digital participation are backed up by the data about what people actually do online once they are connected. In both Dumfries and Kirkcaldy the top four online activities of internet users in our research were: general surfing/browsing, social media, reading news stories or watching videos or TV.

Furthermore, amongst non-internet users in Dumfries and Kirkcaldy, the thing that would most encourage them to use the internet in future would be to keep in touch with family or friends or to look for information of interest to them (although it should be noted that the most popular response to this question was that nothing could encourage them to go online).

All of this supports our key finding from Glasgow that identifying a 'personal hook' or motivation amongst those who are offline and then using this to stimulate interest in the internet is a vital tool to enable digital participation. This new data also reinforces that even once people are digital users, further action is likely to be required to ensure they achieve a level of basic digital skills and are able to derive the full range of social 'goods' that can come from being online.

In both Dumfries and Kirkcaldy the key source of help for internet users getting online had been family or friends. Support from the workplace or at school was also important – but other local services, including libraries, jobcentres or Citizens Advice Bureaux were less commonly cited. For non-internet users, family and friends were also seen as the most desirable source of help if they were to choose to go online in the future. Libraries were also seen as a popular potential source of support, but a common answer to the question about who might help them to go online was 'someone else', perhaps implying another trusted intermediary organisation or local group. These findings suggest that to be effective, it is essential digital participation initiatives identify how they will work in a community-based or networked way, tapping into existing local structures and encouraging friends and family to support each other on the journey to digital inclusion.

Appendices

Appendix 1 – Final Questionnaire NON-USERS

1. Introduction

- thank respondents for their time
- introduce research: "My name is x and I work for Ipsos MORI, the research company. We have been asked by the Carnegie UK trust to speak to people about their lifestyle and how they carry out everyday tasks"
- confidentiality assurance
- re-confirm interview length and incentive

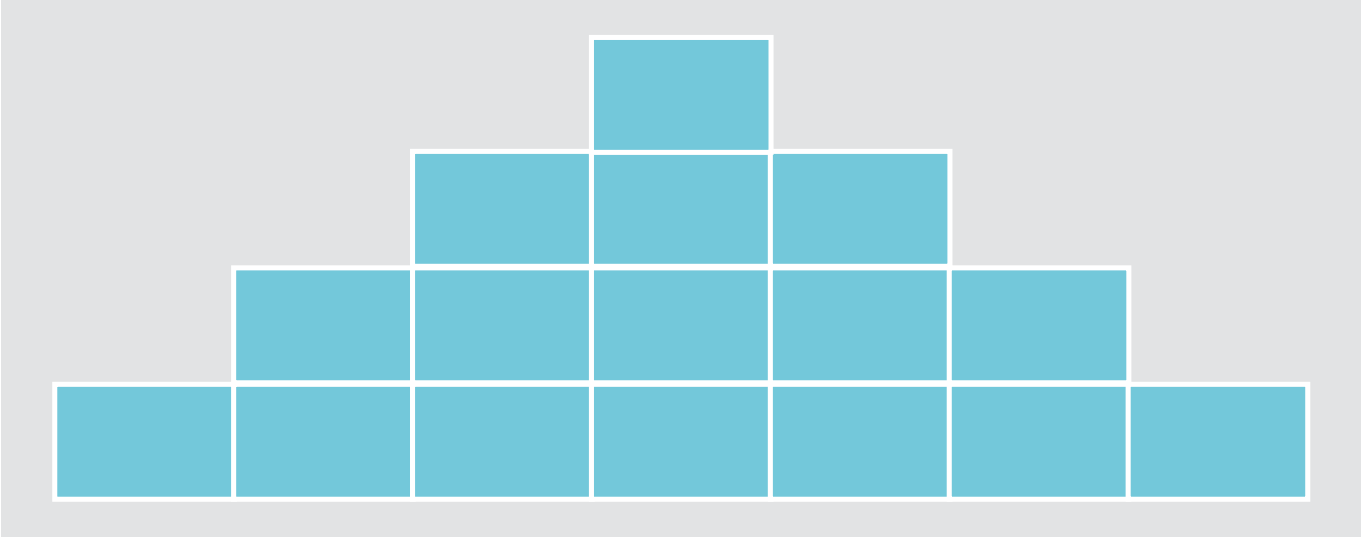
2. Card sorting exercise

Q1 I have a set of cards here with some statements that people use to describe themselves. I want you to place these cards on this grid based on how well you think each statement describes yourself. The statements that describe you the best should be placed towards the top of the grid – so the box here at the very top is for the statement that you feel describes you the best – while the statements that describe you least well should go towards the bottom.

STATEMENTS THAT WILL BE GIVEN TO RESPONDENTS	
1.	I like to speak to people face-to-face
2.	I send cards to my friends on special occasions (e.g. Christmas, birthdays)
3.	I like parties and social events
4.	I enjoy learning new things/visiting new places in my spare time
5.	I am too busy to have any hobbies
6.	I do not like to be in debt
7.	I prefer to shop every day for the things I need
8.	When I buy things, I mostly use my bank/cash card
9.	I like to see or touch things before I buy them
10.	I like to know the background to a news story
11.	I like to know what is going on in the world
12.	I like to know what is going on in my neighbourhood
13.	I prefer to keep my opinions to myself
14.	I prefer to stick with what I know than to try out new things
15.	The majority of my family and friends live within walking distance of my home
16.	I see a friend or a family member that I do not live with almost every day.

Interviewer to observe participant completing grid and to probe why they have chosen some cards over others.

Interviewer record how cards are sorted use card IDs:



NOTE SPACE FOR INTERVIEWER

3. Attitudes to technology

Q2 **People have different views about modern technology.** By that I mean anything from mobile phones, TVs and DVD players to computers, digital cameras and Sat Navs. Please tell me how much you agree or disagree with the following statements:

SHOWCARD A

ROTATE ORDER. TICK START. SINGLE CODE EACH ROW						
	Strongly Agree	Tend to Agree	Neither	Tend to disagree	Strongly disagree	Don't know
Often it is easier to do things without using technologies	1	2	3	4	5	6
I do not trust certain technologies because they fail when you need them the most	1	2	3	4	5	6
I get nervous using technologies, because I don't understand how to use them	1	2	3	4	5	6
When new technologies or gadgets are invented, it is a good idea to try and use them	1	2	3	4	5	6
Technology is making things better for people like me	1	2	3	4	5	6
I trust organisations to keep my online personal information private	1	2	3	4	5	6
The internet makes life easier for people who use it	1	2	3	4	5	6

NOTE SPACE FOR INTERVIEWER

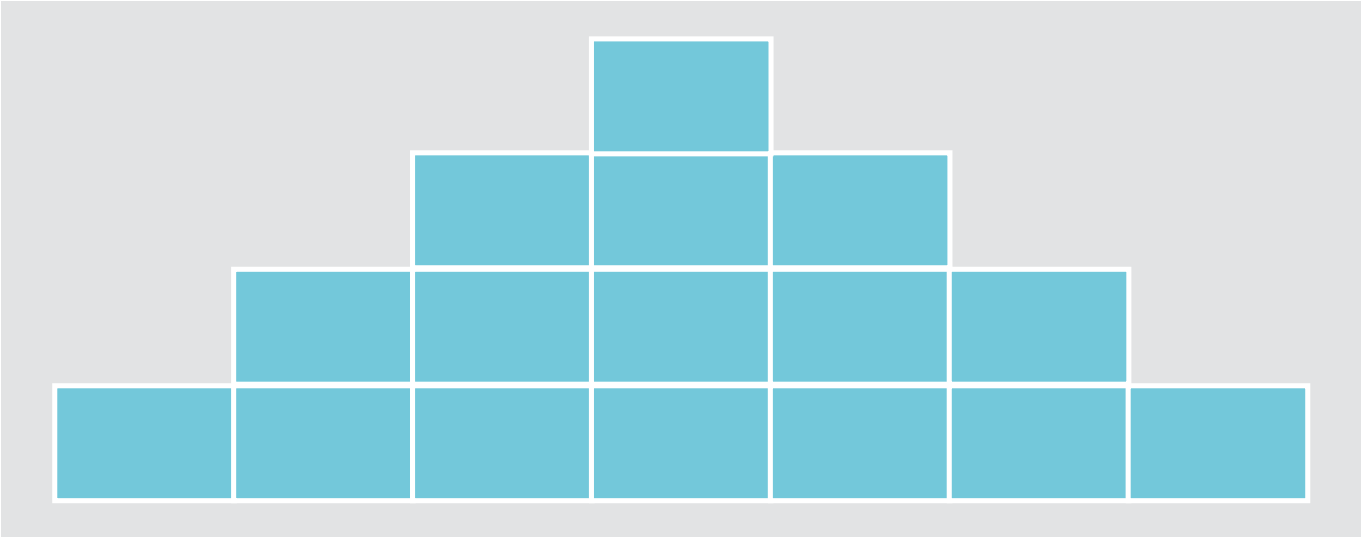
4. Internet use

Q3 **People also give a number of reasons for not using the internet.** I have a set of cards here with these printed on them. As before, I'd like you to arrange these on a grid based on the extent to which each was a factor for you.

STATEMENTS THAT WILL BE GIVEN TO RESPONDENTS:	
1.	I have no connection/computer available where I live or work
2.	I do not think there is anything of interest/use for me on the internet
3.	It's too expensive
4.	I am worried about privacy/SPAM/viruses/identity theft
5.	I do not have enough time to learn how to use it
6.	It is difficult for me to learn how to use it
7.	It's not for people of my age
8.	It's not for people like me
9.	I just prefer doing things in person or by telephone
10.	None of my friends or family are online
11.	I can ask family or friends to go online for me if I have to
12.	I don't know how to set it up/the options available are too confusing
13.	I wouldn't be able to/can't get a contract
14.	I don't want to get a contract for it
15.	I need help with using it and this is not available to me
16.	There are other things I would rather spend my money on

Interviewer to observe participant completing grid and to probe why they have chosen some cards over others.

Interviewer record how cards are sorted use card IDs:



Once participants have completed the grid interviewer to probe why people they chose certain reasons over others.

NOTE SPACE FOR INTERVIEWER

Q4 **Would you like to be able to access the internet from your home?**

Yes	1	GO TO Q5
No	2	GO TO Q6

ASK? If YES at Q4

Q5 **SHOWCARD B**

We are interested in the kinds of help people need to use the internet. What type of assistance would you like to help you access the internet?

Help from family or friends	1
Help from a neighbour	2
Help from someone at work/school	3
Help from someone at the Jobcentre	4
Help from someone at the library	5
Help from someone at an internet cafe	6
Help from someone at the Citizens Advice Bureaux	7
Help from someone else?	8
Help from somewhere else?	9
I would not like to receive any help	10

Q6 SHOWCARD C

I have a list here of the reasons some people give for why they use the internet.
I'd like to know if any of these reasons would encourage you to use the internet.

ASK? If NO at Q4

Is there anything else that would encourage you that is not on this list? What is it?		
A	To try it out, it might be interesting	1
B	Using it for work	2
C	Using it for school or a course	3
D	Someone else recommending it to you IF CODED PLEASE PROBE WHO/WHICH ORGANISATION AND WRITE IN:	4
E	Access to the internet provided at home/work/school	5
F	Using it to help your children with their home work	6
G	Keeping in touch with family/friends	7
H	Getting a better deal by buying products/services online	8
I	Applying/searching for a job	9
J	Looking for information that is of interest to you	10
K	Going on Facebook, Twitter or other social networking sites	11
L	Someone helping you set it up IF CODED PLEASE PROBE WHO/WHICH ORGANISATION AND WRITE IN:	12
M	Feeling left out because your family/friends are online	13
N	Nothing would encourage me	14
	OTHER WRITE IN:	15
	OTHER WRITE IN:	16
	OTHER WRITE IN:	17

Appendix 2 – Final Questionnaire USERS

1. Introduction

- thank respondents for their time
- introduce research: "My name is x and I work for Ipsos MORI, the research company. We have been asked by the Carnegie UK trust to speak to people about their lifestyle and how they carry out everyday tasks"
- confidentiality assurance
- re-confirm interview length and incentive

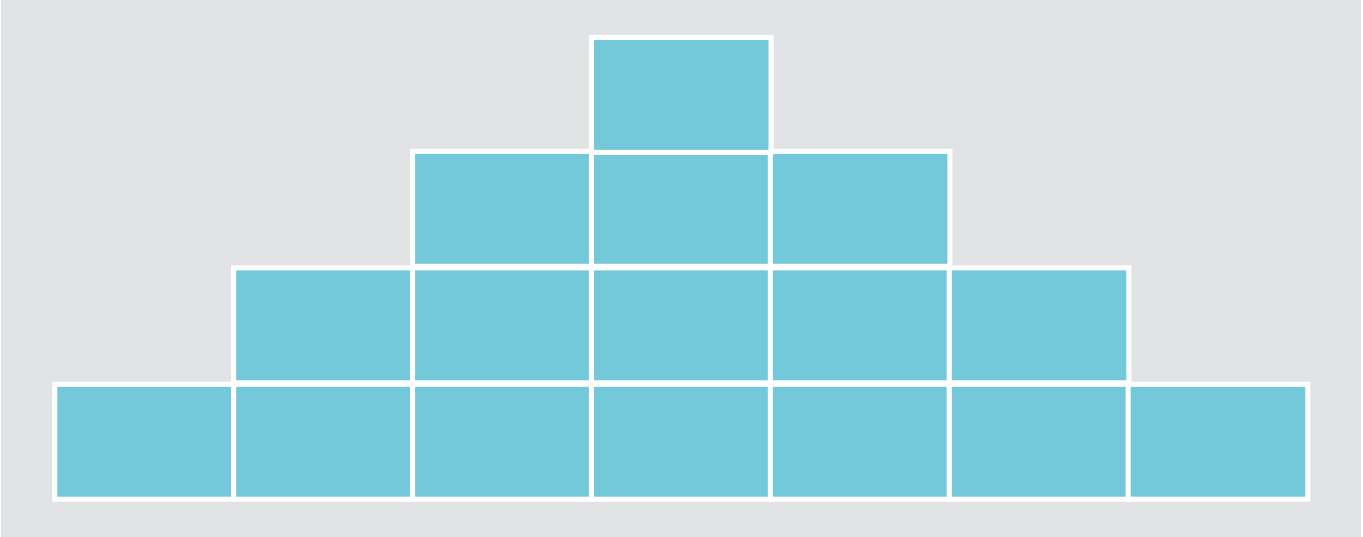
2. Card sorting exercise

Q1 I have a set of cards here with some statements that people use to describe themselves. I want you to place these cards on this grid based on how well you think each statement describes yourself. The statements that describe you the best should be placed towards the top of the grid – so the box here at the very top is for the statement that you feel describes you the best – while the statements that describe you least well should go towards the bottom.

STATEMENTS THAT WILL BE GIVEN TO RESPONDENTS	
17.	I like to speak to people face-to-face
18.	I send cards to my friends on special occasions (e.g. Christmas, birthdays)
19.	I like parties and social events
20.	I enjoy learning new things/visiting new places in my spare time
21.	I am too busy to have any hobbies
22.	I do not like to be in debt
23.	I prefer to shop every day for the things I need
24.	When I buy things, I mostly use my bank/cash card
25.	I like to see or touch things before I buy them
26.	I like to know the background to a news story
27.	I like to know what is going on in the world
28.	I like to know what is going on in my neighbourhood
29.	I prefer to keep my opinions to myself
30.	I prefer to stick with what I know than to try out new things
31.	The majority of my family and friends live within walking distance of my home
32.	I see a friend or a family member that I do not live with almost every day.

Interviewer to observe participant completing grid and to probe why they have chosen some cards over others.

Interviewer record how cards are sorted use card IDs:



NOTE SPACE FOR INTERVIEWER

3. Attitudes to technology

Q2 **People have different views about modern technology.** By that I mean anything from mobile phones, TVs and DVD players to computers, digital cameras and Sat Navs. Please tell me how much you agree or disagree with the following statements:

SHOWCARD A

ROTATE ORDER. TICK START. SINGLE CODE EACH ROW						
	Strongly Agree	Tend to Agree	Neither	Tend to disagree	Strongly disagree	Don't know
Often it is easier to do things without using technologies	1	2	3	4	5	6
I do not trust certain technologies because they fail when you need them the most	1	2	3	4	5	6
I get nervous using technologies, because I don't understand how to use them	1	2	3	4	5	6
When new technologies or gadgets are invented, it is a good idea to try and use them	1	2	3	4	5	6
Technology is making things better for people like me	1	2	3	4	5	6
I trust organisations to keep my online personal information private	1	2	3	4	5	6
The internet makes life easier for people who use it	1	2	3	4	5	6

NOTE SPACE FOR INTERVIEWER

4. Internet questions users

Q3 **You mentioned earlier to my colleague that you currently use the internet at home.** How often, if at all, do you use the internet for the following purposes?

SHOWCARD B

ROTATE ORDER. TICK START. SINGLE CODE EACH ROW							
	Several times a day	Daily	Weekly	Monthly	Less than monthly	Never	Don't know
General surfing or browsing the web	1	2	3	4	5	6	7
To buy things online (e.g. books, clothes, holidays)	1	2	3	4	5	6	7
To use an online service provided by government, council or health board	1	2	3	4	5	6	7
To do my banking online	1	2	3	4	5	6	7
Look for local/national/international news	1	2	3	4	5	6	7
Look for jobs/work	1	2	3	4	5	6	7
Take part in a learning or training course	1	2	3	4	5	6	7
Watching videos (e.g. You tube) or TV online (e.g. BBC iplayer)	1	2	3	4	5	6	7
Went on Facebook, Twitter or other social networking site	1	2	3	4	5	6	7
Used Skype or something similar	1	2	3	4	5	6	7

Q4 **How long have you been using the internet?** Approximately how many years or months?

WRITE IN NUMBER OF MONTHS

OR WRITE IN NUMBER OF YEARS

Q5 SHOWCARD C

I have a list here of the reasons some people give for why they start using the internet.
I'd like to know if any of these reasons relate to why you decided to use the internet.

Q6 And which of these reasons you just mentioned was the most important?

Where there any other reasons that you had that we have not included on this list? What were these?			
		Q5.1	Q5.2
A	To try out, thought it might be interesting	1	1
B	I had to use it for work	2	2
C	I had to use it for school or a course	3	3
D	Someone else recommended it to me IF CODED PLEASE PROBE WHO/WHICH ORGANISATION AND WRITE IN:	4	4
E	They provided access to the internet at home/work/school	5	5
F	I used it to help my children with their home work	6	6
G	I wanted to keep in touch with family/friends	7	7
H	I thought I might get a better deal by buying products/services online	8	8
I	To apply/search for a job	9	9
J	To look for information that was of interest to me	10	10
K	To go on Facebook, Twitter or other social networking site	11	11
L	Someone helped me set it up IF CODED PLEASE PROBE WHO/WHICH ORGANISATION AND WRITE IN:	12	12
M	I felt left out because my family/friends were online	13	13
	OTHER WRITE IN:	14	14
	OTHER WRITE IN:	15	15
	OTHER WRITE IN:	16	16

Q7 SHOWCARD D

We are interested in the kinds of help people need to use the internet. When you first started using the internet, what type of help, if any, did you receive? **Probe for whether respondent did the following things and outcome:**

Received help from family or friends	1
Received help from a neighbour	2
Received help from someone at work/school	3
Received help from someone at the Jobcentre	4
Received help from someone at the library	5
Received help from someone at an internet cafe	6
Received help from someone at the Citizens Advice Bureaux	7
Help from someone else?	8
Help from somewhere else?	9
I did not receive any help	10

Appendix 3

Further detailed analysis was used to interpret factors driving internet use and whether respondents would like to access the internet at home in the future.

The method of analysis used was CHAID (Chi-squared Automatic Interaction Detector). This method segments a population into different groups of people according to their tendency to exhibit a particular characteristic. This characteristic could be exhibition of a behaviour (ie using the internet) or holding a particular opinion (eg agreeing that they would like to access the internet at home in the future).

CHAID uses statistical techniques (based on CHI-squared analysis) to select:

- The key determinants or drivers (such as attitudes towards technology or ranking of personal attributes) of the characteristics
- For these key determinants (eg attitudes towards technology), which levels/groups (e.g. high levels of trust in technology) are the most likely to exhibit the characteristic (e.g. internet use) and which levels (eg low level of trust in technology) are least likely.

In order to conduct this analysis respondents were first classified into typologies for current and future internet use. As previously discussed, we first split respondents into two groups: 'users' (those who currently use the internet on a regular basis at any location and those who have used it on a regular basis in the past) and 'never-users' (those who had never used the internet on a regular basis, at least once a month). We then broke down the 'never-user' group further into 'potential users' (those who would like to access the internet at home in the future) and 'rejecters' (those who would not like to access the internet at home in the future).

The internet use ('users' versus 'never-users') CHAID analysis included the following key drivers:

- Attitudes towards technology: respondents were assigned a score based on their aggregated responses to the attitudes to technology questions. These scores were then banded in to three categories: low levels of trust in technology, medium levels of trust in technology and high levels of trust in technology.
- Trust in online privacy: respondents were asked the extent to which they agreed or disagreed with the statement 'I trust organisations to keep my online personal information private'.
- Lifestyle priorities: each respondent was asked to rank a series of 16 lifestyle priority statements based on the extent to which they felt each statement applied to them. The results were then recoded into three groups: ranked in the top four, ranked in the middle or ranked in the bottom four. Only those statements that appeared to have a correlation to internet use were included in the model; these were:
  - I enjoy learning new things/visiting new places in my spare time
  - I like to see or touch things before I buy them
  - I like parties and social events
  - I like to know what is going on in my neighbourhood
  - The majority of my family and friends live within walking distance from my home
  - I prefer to stick with what I know than to try out new things
  - I do not like to be in debt

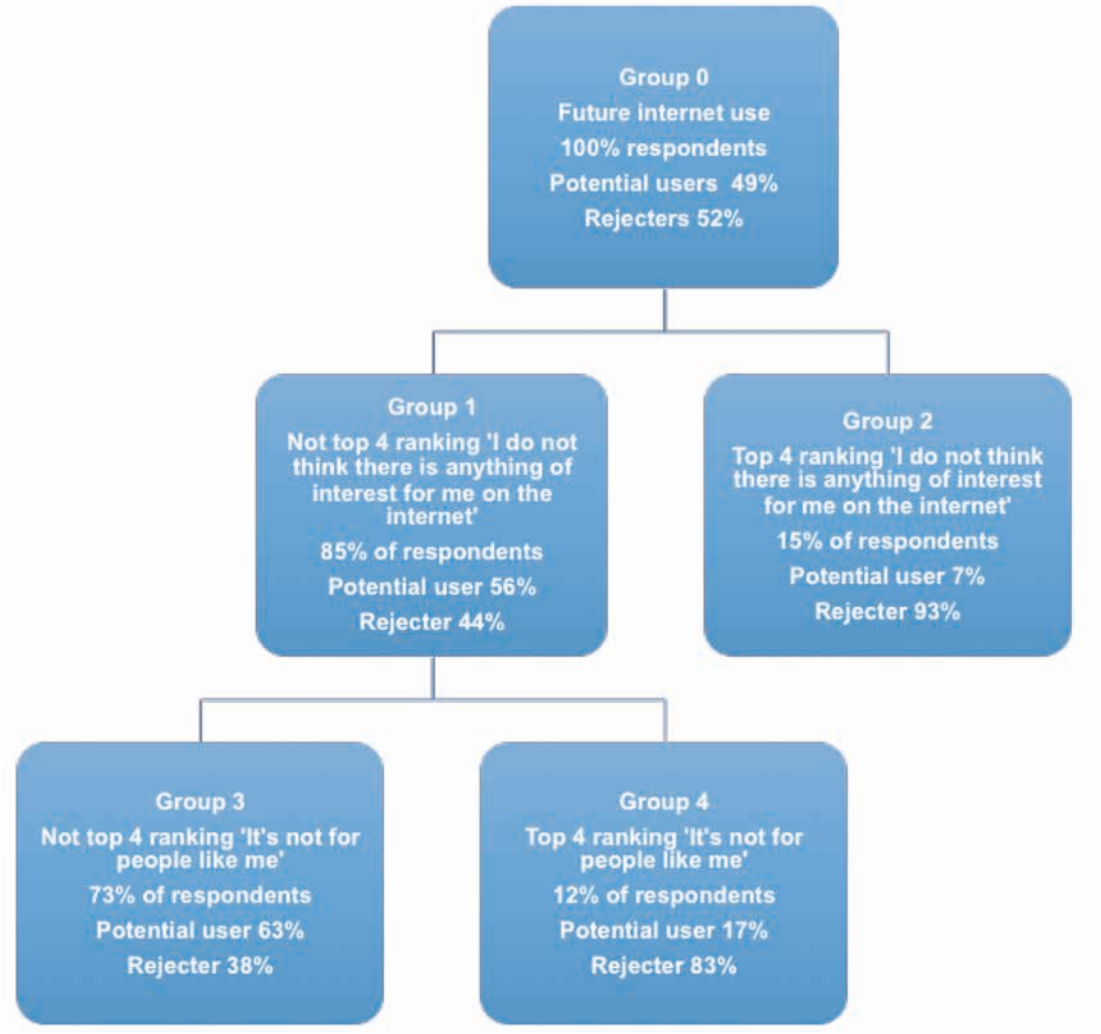
The future internet use ('potential users' versus 'rejecters') CHAID analysis looked specifically at

the impact of barriers to digital participation. Each respondent was given a list of 16 reasons that may prevent people from accessing the internet and asked to rank them based upon the extent to which they felt each applied to them. The results were then recoded into two categories: ranked in the top four or ranked lower than the top four. The analysis then identified which of these barriers to digital participation had the greatest impact on whether respondents would like to access the internet at home in the future.

In Dumfries, the barrier with the greatest impact was the perception that there is nothing online of any interest or use. The respondents were segmented into those who said this was one of their top 4 reasons for not using the internet (Group 2) and those who did not (Group 1).

Within Group 1, the perception that the internet is not for 'people like me' had the most impact, with respondents split into those who gave this barrier a low ranking (Group 3) and a high ranking (Group 4) (Figure 3.13).

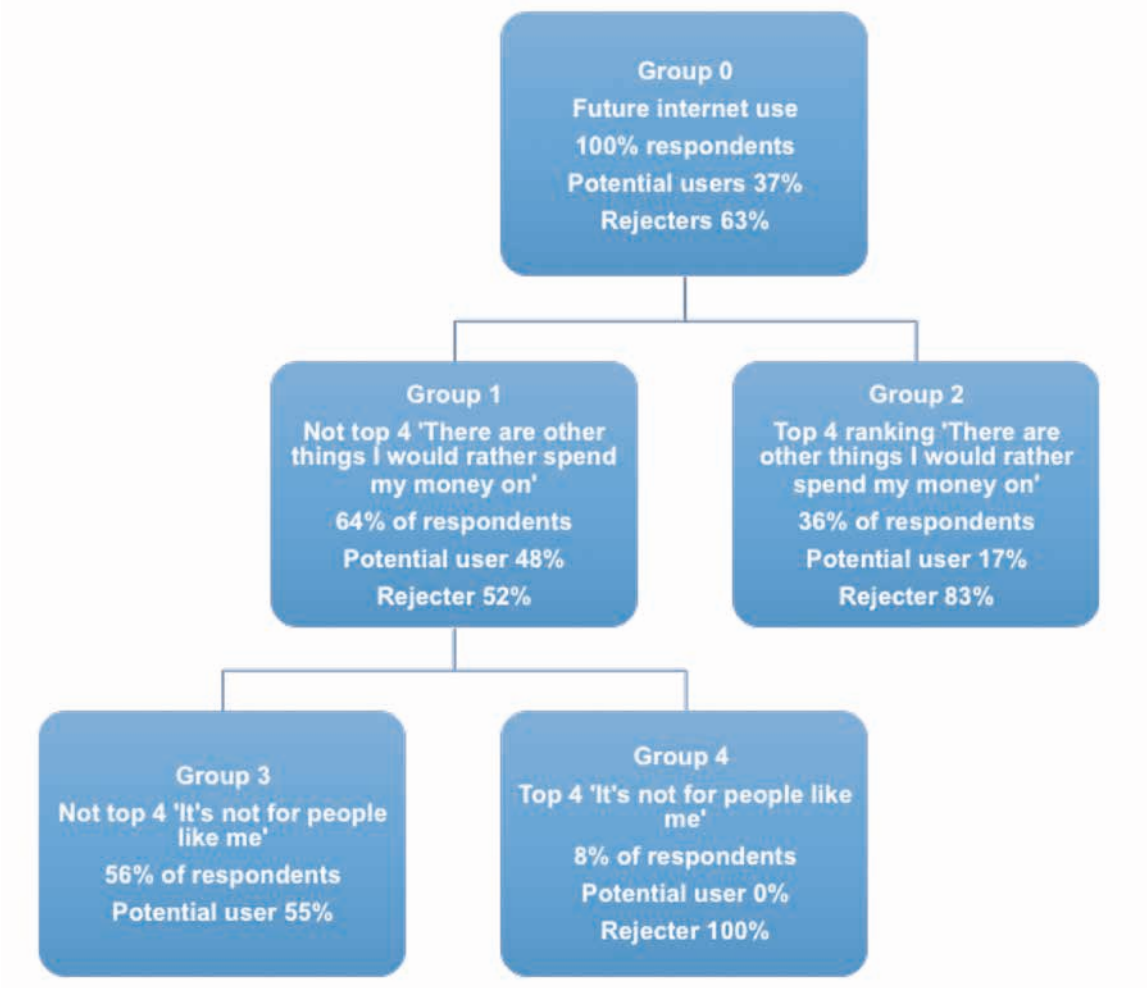
Figure A.7 – Factors which impact on whether respondents want to access the internet in the future – Dumfries



In Kirkcaldy, a slightly different model emerged. In this instance, the barrier with the greatest impact was financial. The respondents were segmented into those who reported that the statement 'there are other things I would rather spend my money on' was one of their top 4 reasons for not using the internet (Group 2) and those who did not (Group 1).

Within Group 2, the perception that the internet is not for 'people like me' had the most impact, with respondents split into those who gave this barrier a low ranking (Group 3) and a high ranking (Group 4) (Figure 3.14).

Figure A.8 – Factors which impact on whether respondents want to access the internet in the future – Kirkcaldy



Appendix 4

Logistic regression is used to predict the probability of an event occurring using several variables as potential predictors. In this analysis, it was used to explore what drives internet use. Attitudes to technology, trust in online privacy and the results from the question designed to elicit respondents' lifestyle priorities, were fed into the model.

As previously noted in the main report, agreement with the statement 'I prefer to stick with what I know than to try out new things' was the attitudinal/behavioural factor which had the most impact in predicting whether respondents had ever used the internet in Dumfries. However, agreement with the statements 'I like to know what is going on in my neighbourhood' and 'I like parties and social events' were also significant. The model explained between 18% and 24% of the variation in internet use in Dumfries.

Table A.1 – Regression analysis output – 'users'/'never-users' – Dumfries

	B	S.E.	Wald	df	Sig.	Exp(B)
Trust in technology (vs. low level of trust)			5.802	2	.055	
Medium trust in technology	-.780	.421	3.424	1	.064	.459
High trust in technology	.105	.433	.059	1	.808	1.111
I trust organisations to keep my online personal information private	-.157	.104	2.292	1	.130	.855
I don't like to be in debt	-.047	.037	1.631	1	.202	.954
I like to speak to people face-to-face	.008	.050	.024	1	.878	1.008
I prefer to keep my opinions to myself	.024	.035	.485	1	.486	1.024
I like to see or touch things before I buy them	-.010	.035	.086	1	.769	.990
I prefer to shop every day for the things I need	-.044	.034	1.612	1	.204	.957
I see a friend or family member that I don't live with almost every day	.014	.032	.184	1	.668	1.014
The majority of my family and friends live within walking distance of my home	-.017	.033	.270	1	.603	.983
I enjoy learning new things/visiting new places in my spare time	-.030	.035	.712	1	.399	.971
I like to know the background to a news story	.040	.040	1.012	1	.315	1.041
I like parties and social events	-.080	.037	4.681	1	.030	.923
I prefer to stick with what I know than to try out new things	.123	.038	10.435	1	.001	1.131
I send cards to my friends on special occasions (eg Christmas, birthdays)	-.028	.035	.657	1	.418	.972
I like to know what is going on in my neighbourhood	.087	.039	4.996	1	.025	1.091
I like to know what is going on in the world	-.034	.040	.713	1	.398	.966
I am too busy to have any hobbies	.013	.037	.135	1	.713	1.014
When I buy things, I mostly use my bank/cash card	-.057	.035	2.628	1	.105	.945
Constant	.770	.772	.996	1	.318	2.160

The logistic regression did not produce a reliable model for predicting internet use in Kirkcaldy.

Table A.2 – Regression analysis output – 'users'/'never-users' – Kirkcaldy

	B	S.E.	Wald	df	Sig.	Exp(B)
Trust in technology (vs. low level of trust)			3.859	2	.145	
Medium trust in technology	.710	.401	3.125	1	.077	2.033
High trust in technology	.655	.396	2.732	1	.098	1.924
I trust organisations to keep my online personal information private	.065	.105	.388	1	.533	1.067
I don't like to be in debt	-.261	591.138	.000	1	1.000	.770
I like to speak to people face-to-face	-.264	591.138	.000	1	1.000	.768
I prefer to keep my opinions to myself	-.265	591.138	.000	1	1.000	.767
I like to see or touch things before I buy them	-.211	591.138	.000	1	1.000	.810
I prefer to shop every day for the things I need	-.339	591.138	.000	1	1.000	.712
I see a friend or family member that I don't live with almost every day	-.281	591.138	.000	1	1.000	.755
The majority of my family and friends live within walking distance of my home	-.291	591.138	.000	1	1.000	.748
I enjoy learning new things/visiting new places in my spare time	-.385	591.138	.000	1	.999	.680
I like to know the background to a news story	-.306	591.138	.000	1	1.000	.736
I like parties and social events	-.317	591.138	.000	1	1.000	.729
I prefer to stick with what I know than to try out new things	-.326	591.138	.000	1	1.000	.722
I send cards to my friends on special occasions (eg Christmas, birthdays)	-.244	591.138	.000	1	1.000	.784
I like to know what is going on in my neighbourhood	-.225	591.138	.000	1	1.000	.798
I like to know what is going on in the world	-.260	591.138	.000	1	1.000	.771
I am too busy to have any hobbies	-.360	591.138	.000	1	1.000	.698
When I buy things, I mostly use my bank/cash card	-.269	591.138	.000	1	1.000	.764
Constant	38.953	8.04E+04	.000	1	1.000	8.27E+16

We also looked at which barriers to digital participation differentiated between those who did want to access the internet at home in the future, 'potential users', and those who did not, 'rejecters'. In Dumfries, thinking that there is nothing of interest on the internet was the greatest predictor between 'potential users' and 'rejecters'. This is in line with the findings in the CHAID model. The other barrier that had a significant impact on whether respondents wished to use the internet in the future was thinking that the internet is not for 'people like them'. Overall, the model accounted for between 29% and 38% of the variation in future internet use.

Table A.3 – Regression analysis output – 'potential users'/'rejecters' – Dumfries

	B	S.E.	Wald	df	Sig.	Exp(B)
I do not have enough time to learn how to use it	.200	.104	3.721	1	.054	1.222
I have no connection/ computer available where I live or work	.042	.085	.251	1	.616	1.043
It's not for people of my age	.112	.094	1.428	1	.232	1.119
It's not for people like me	.162	.081	4.019	1	.045	1.176
I do not think there is anything of interest/use for me on the internet	.258	.114	5.141	1	.023	1.294
I wouldn't be able to/can't get a contract	-.002	.090	.001	1	.982	.998
I am worried about privacy/SPAM/ viruses/identity theft	.030	.089	.116	1	.733	1.031
There are other things I would rather spend my money on	.160	.087	3.387	1	.066	1.173
None of my friends or family are online	.089	.111	.646	1	.422	1.093
It is too difficult for me to learn how to use it	.112	.093	1.436	1	.231	1.118
I don't want to get a contract for it	.085	.094	.820	1	.365	1.089
I don't know how to set it up/the options available are too confusing	.009	.108	.007	1	.932	1.009
It's too expensive	.083	.100	.685	1	.408	1.086
I can ask friends or family to go online for me if I have to	.097	.092	1.102	1	.294	1.102
I just prefer doing things in person or by telephone	.103	.130	.626	1	.429	1.108
Constant	-13.687	8.653	2.502	1	.114	.000

As with current internet use, the regression model for future internet use in Kirkcaldy did not generate reliable predictors for whether a respondent was a 'potential user' or 'rejecter'.

Table A.4 – Regression analysis output – 'potential users'/'rejecters' – Kirkcaldy

	B	S.E.	Wald	df	Sig.	Exp(B)
I do not have enough time to learn how to use it	.200	.104	3.721	1	.054	1.222
I have no connection/ computer available where I live or work	.042	.085	.251	1	.616	1.043
It's not for people of my age	.112	.094	1.428	1	.232	1.119
It's not for people like me	.162	.081	4.019	1	.045	1.176
I do not think there is anything of interest/use for me on the internet	.258	.114	5.141	1	.023	1.294
I wouldn't be able to/can't get a contract	-.002	.090	.001	1	.982	.998
I am worried about privacy/SPAM/ viruses/identity theft	.030	.089	.116	1	.733	1.031
There are other things I would rather spend my money on	.160	.087	3.387	1	.066	1.173
None of my friends or family are online	.089	.111	.646	1	.422	1.093
It is too difficult for me to learn how to use it	.112	.093	1.436	1	.231	1.118
I don't want to get a contract for it	.085	.094	.820	1	.365	1.089
I don't know how to set it up/the options available are too confusing	.009	.108	.007	1	.932	1.009
It's too expensive	.083	.100	.685	1	.408	1.086
I can ask friends or family to go online for me if I have to	.097	.092	1.102	1	.294	1.102
I just prefer doing things in person or by telephone	.103	.130	.626	1	.429	1.108
Constant	-13.687	8.653	2.502	1	.114	.000


ROBERT BURNS
WESTSCOTT

The Carnegie UK Trust works to improve the lives of people throughout the UK and Ireland, by changing minds through influencing policy, and by changing lives through innovative practice and partnership work. The Carnegie UK Trust was established by Scots-American philanthropist Andrew Carnegie in 1913.

Andrew Carnegie House
Pittencrieff Street
Dunfermline
KY12 8AW

Tel: +44 (0)1383 721445
Fax: +44 (0)1383 749799
Email: info@carnegieuk.org
www.carnegieuk.org

This report was written by Mark Diffley, Carolyn Black, Douglas White & Tara Murphy, February 2015

Ipsos MORI Scotland provides research focused on the distinct needs of policymakers and businesses in Scotland. We offer the full range of qualitative and quantitative research methodologies and have a detailed understanding of specific sectors in Scotland, their policy challenges and their research needs. The variety of research we conduct gives us a unique insight into many aspects of life in Scotland.

Ipsos MORI Scotland
4 Wemyss Place
Edinburgh
EH3 6DH

t: +44 (0)131 220 5699
f: +44 (0)131 220 6449
www.ipsos-mori.com
www.twitter.com/IpsosMORIScot

CarnegieUK TRUST

CHANGING MINDS • CHANGING LIVES

Ipsos MORI

Carnegie United Kingdom Trust
Scottish charity SC 012799 operating in the UK and Ireland
Incorporated by Royal Charter 1917

ISBN: 9781909447301