Cultures of the Internet: The Internet in Britain
William H. Dutton and Grant Blank
with assistance from Darja Groselj
Oxford Internet Survey 2013 Report
Acknowledgements

The authors wish to thank the entire OII team for their support of OxIS research. Our particular thanks to Dr Monica Bulger, Dr Cristobal Cobo, Dr Rebecca Eynon, Darja Groselj, Dr Bernie Hogan, Dr Eric Meyer and Dr Victoria Nash for their contributions to this report. We also wish to acknowledge Kunika Kono for her design input into the report, David Sutcliffe for his editorial support and Tim Davies for administrative support. For research assistance we are indebted to Darja Groselj. Thanks also to Dr Nicholas J. Cox for providing a special version of his slideplot program for use in this report.

For their early involvement with OxIS we would like to thank Dr Ellen J. Helsper, Professor Richard Rose, Dr Adrian Shepherd and Dr Corinna di Gennaro. All have helped shape the evolution of this research.

We are particularly grateful for the financial support of OxIS 2013 by the dot.rural Digital Economy Hub, Nominet Trust and Ofcom. Our colleagues from these sponsoring organisations offered useful suggestions and valuable comments, helping to ensure that OxIS continues to address issues of policy and practice.

Contact OxIS

Oxford Internet Institute
University of Oxford
1 St Giles
Oxford OX1 3JS
United Kingdom

Telephone: +44 (0) 1865 287210
Fax: +44 (0) 1865 287211
Email: oxis@oii.ox.ac.uk
Web: http://oxis.oii.ox.ac.uk/

The full report and the questionnaire are available at the OxIS website.

Please cite the source of text and data excerpts as:

© The University of Oxford for the Oxford Internet Institute 2013. This work may be copied freely for non-commercial research and study. If you wish to undertake any of the other acts restricted by the copyright you should apply in writing to the Director of the Institute at 1 St Giles, Oxford OX1 3JS, United Kingdom.
Cultures of the Internet: The Internet in Britain
William H. Dutton and Grant Blank
with assistance from Darja Groselj

Oxford Internet Survey 2013 Report

Oxford Internet Institute
University of Oxford
1 St Giles
Oxford OX1 3JS
United Kingdom

With contributions by Dr Monica Bulger, Dr Cristobal Cobo, Dr Rebecca Eynon, Darja Groselj, Dr Bernie Hogan, Dr Eric Meyer and Dr Victoria Nash.

http://oxis.oii.ox.ac.uk/
Introduction 3
Cultures of the Internet in Britain 4
Next Generation Users: An Update 10
I. Adoption 12
   A. Diffusion 13
   B. Ubiquitous Access 14
   C. Digital Households, Mobility & Changing Infrastructure 15
   D. Experience 17
   E. Skill and Expertise 17
II. Characteristics and Attitudes of Internet Users 19
   A. Characteristics of Users and Non-Users 19
   B. Attitudes Toward Technology and the Internet 23
III. Use 25
   A. Information Seeking 26
   B. Entertainment 28
   C. Online Services 29
   D. Creativity and Production 30
IV. Government and Politics 31
   A. Use of Government Services 31
   B. Civic and Political Participation 34
V. Reshaping Social Networks and Friendships 36
   A. Communication and Social Networking 37
   B. Social Network Sites 39
   C. Reconfiguring Social Networks 41
   D. Reconfiguring Friendships 43
VI. Impact of Internet Use 44
   A. Centrality of the Internet 44
   B. Media Habits: The Internet, Television and Newspapers 45
   C. Trust 46
   D. Personal, Financial and Economic Opportunities 47
VII. Regulation and Control 49
   A. Concerns: Bad Experiences and the Internet 50
   B. Children’s Regulation 52
   C. Government Regulation 53
VIII. Digital Divides 54
   A. Rationales for Non-Use 55
   B. Help and Proxy Use 57
Methodology 59
Introduction

The Oxford Internet Surveys

The Oxford Internet Surveys (OxIS) are core to the research of the Oxford Internet Institute (OII), a leading world centre for the multidisciplinary study of the Internet and society. A department within the Social Sciences Division of the University of Oxford, the OII focuses its research and teaching on the social shaping and implications of the Internet, and on informing related policy and practice.

Launched by the Oxford Internet Institute in 2003, OxIS has become an authoritative source of information about Internet access, use and attitudes—and the difference this makes for everyday life—in Britain. Areas covered include: digital and social inclusion and exclusion; regulation and governance of the Internet; privacy, trust and risk concerns; and uses of the Internet, including networking, content creation, entertainment and learning.

The OxIS 2013 survey is the sixth in a series, with previous surveys conducted in 2003, 2005, 2007, 2009 and 2011. Each has used a multi-stage national probability sample of 2000 people in Britain, enabling us to project estimates to Britain as a whole. In 2013 we received funding from dot.rural for an additional 600 rural respondents, so the total sample is 2,657. Sampling details are in the methodological appendix.

The UK in a Global Context

OxIS provides the UK’s contribution to the World Internet Project (WIP), an international collaborative project that joins over two dozen nations in studies of the social, economic and political implications of the Internet. More information about WIP can be found at: http://www.worldinternetproject.net/.

Key Findings

Key findings of the 2013 OxIS survey include the following:

- The use of the Internet is Britain has risen substantially over the last two years, reaching 78% of the population 14 years and over.
- There has been progress on narrowing digital divides with a rise in Internet access for lower income groups, people with no formal educational qualifications, retired people, and individuals with disabilities.
- The beliefs and attitudes of Internet users are diverse, reflecting five broad cultures, the largest of which, the “cyber-moderates”, have more tempered views about the value and risks of Internet use than most other groups of users.
- The rise of next generation users, who use multiple devices, one or more of which are mobile, has grown to represent 67% of users.
- Patterns of use have not changed dramatically, but the diffusion of social networking has stabilised at a plateau of 61% of Internet users.
- Use of digital government services has continued to progress, particularly around transactional services, such as renewal of automobile licences.
- Use of the Internet and social media tends to complement rather than substitute for traditional forms of communication, but is nevertheless tied to social changes, such as in meeting new people.
- The perceived benefits of Internet use accrue far more to the next generation users, creating a second digital divide beyond mere access to the Internet.
- A majority of users believe that the government should not regulate the Internet more than it does, but there is an increase in the proportion of the public that wants the government to do more to protect children online.
- Digital choice remains a key factor leading many non-users to remain offline, underscoring the value of support of non-users to experience the Internet.

Detailed results of relevance to all of these general points and more are presented in the following sections.
Cultures of the Internet in Britain

In 2013, 78% of the UK population said that they use the Internet. Does this large proportion of Internet users in Britain herald the rise of a common Internet culture, or are beliefs and attitudes about the Internet as diverse as opinions can be across the general population?

Analysis of the 2013 OxIS survey shows that most users in Britain can be grouped into five clusters, or cultures, each comprising individuals who responded in similar ways to questions about their attitudes and beliefs about the Internet (see Methodology).

Five Cultures of the Internet

These five cultures are overlapping, but each has a distinctive profile. They can be defined as the:

*e-Mersives:* This group of users is comfortable and naturally at home in the online world and happy being online. They are pleased to use the Internet as an escape, to pass time online, and think of it as somewhere they feel they can meet people and be part of a community. They see the Internet as a technology they can control—a tool they can employ—to make their life easier, to save time, and to keep in touch with people. They are immersed in the Internet as part of their everyday life and work. They comprise only about 12% of the UK's Internet users (Figure 1).

*Techno-pragmatists:* This cluster of users stands out by the centrality they accord to using the Internet to save time and make their lives easier. Like the *e-mersives*, they feel in control of the Internet, employing it for instrumental reasons that enhance the efficiency of their day-to-day life and work. Unlike the *e-mersives*, the pragmatists do not view the Internet as an escape, nor do they often go online just for the fun of it. Theyers is a more instrumental agenda of efficiency. Pragmatists constitute about 17% of the UK's Internet users.

*Cyber-savvy:* A third cluster of users expressed mixed feelings and beliefs about the Internet, holding somewhat ambivalent views. On the one hand, they enjoy being online, in order to pass time, easily find information, and become part of a community in which they can escape and meet people. On the other hand, they also feel as if the Internet is, to a greater or lesser degree, taking control of their lives, because it can be frustrating, wastes time and invades their privacy. Rather than always feeling in control, they feel that they might lose control to technology, which could drain them of time and privacy. Despite their concerns, they fully exploit the Internet as a pastime, as an efficient information resource, and as a social tool. For this reason, they are in some sense street wise, or cyber-savvy, living comfortably in an Internet world but aware of the risks. They represent nearly one in five (19%) of the UK's Internet users.

*Cyber-moderates:* The fourth cluster of users is most clearly defined by patterns of attitudes and beliefs that show them to be more moderate in their view of the Internet as a good place to pass the time, an efficient way to find information or shop, or a good way to maintain and enhance their social relationships. On the other hand, they are also not uniformly fearful that there is a risk that the Internet will expose them to immoral material, pose a threat to their privacy, or waste their time. They seem to be moderate in both hopes and fears, thus we have called them ‘cyber-moderates’. They are the largest single cluster of Internet users in Britain, accounting for 37% of users (Figure 1).

*Adigitals:* This final group does not feel that the Internet makes them more efficient, nor do they enjoy being online simply to pass the time or escape from the real world. To members of this culture, the Internet is likely to be perceived as out of their control, potentially controlled by others. For example, they feel frustrated because the Internet is difficult to use and harbours too much ‘immoral material’. Compared to the other cultures, the adigital group appears to resonate mostly with the problems generated by the Internet. They feel more excluded from a technological context that is ‘not made for them’. This adigital culture fits about 14% of the UK’s online population.

Cyber-moderates: The fourth cluster of users is most clearly defined by patterns of attitudes and beliefs that show them to be more moderate in their view of the Internet as a good place to pass the time, an efficient way to find information or shop, or a good way to maintain and enhance their social relationships. On the other hand, they are also not uniformly fearful that there is a risk that the Internet will expose them to immoral material, pose a threat to their privacy, or waste their time. They seem to be moderate in both hopes and fears, thus we have called them ‘cyber-moderates’. They are the largest single cluster of Internet users in Britain, accounting for 37% of users (Figure 1).

Adigitals: This final group does not feel that the Internet makes them more efficient, nor do they enjoy being online simply to pass the time or escape from the real world. To members of this culture, the Internet is likely to be perceived as out of their control, potentially controlled by others. For example, they feel frustrated because the Internet is difficult to use and harbours too much ‘immoral material’. Compared to the other cultures, the adigital group appears to resonate mostly with the problems generated by the Internet. They feel more excluded from a technological context that is ‘not made for them’. This adigital culture fits about 14% of the UK’s online population.

Figure 1: Internet Cultures in 2013
The following sections show how these cultures of the Internet were discovered and identified through analysis of our survey responses. They also show the stability of these underlying attitudes and beliefs over the years, the characteristics of these groups, and their implications for patterns of use, as well as for policy and practice. However, to preface this discussion, the next section focuses on why it is useful to explore these cultures of the Internet.

The Idea of Internet Cultures

In the early decades of the Internet, its diffusion was linked to the rise of a ‘cyberculture’—a particular pattern of beliefs and attitudes about the virtues of being online (Castells 2001; Bell et al. 2004). Many early discussions of a cyberculture were tied to particular kinds of users, such as the culture of participation in early virtual communities, which Howard Rheingold (1993) likened to ‘homesteaders’, or to intensely engaged programmers, such as ‘hackers’ (Weizenbaum 1976) and to the hacking ethic (Himanen 2002). In the founding decades of the Internet, cybercultures often defined these and other pioneering groups of those who created and were early users of the Internet.

Since the turn of the century, the Internet has diffused to large proportions of the populations of many nations, and the number of new settlers has long since overrun the early homesteaders. Nevertheless, the cultures of the early and contemporary creators of the Internet remain important and are often believed to be associated with the values and interests of the Internet’s evolving creative sector, from computer scientists to entrepreneurs, which continues to shape the Internet’s design and development (Castells 2010). However, characterisations of the early adopters have become increasingly removed from the values and attitudes of many users, who have begun to more closely mirror the general population of nations and regions. For example, with over three-quarters (78%) of people in Britain now online, the proportion of hackers will be almost undetectable in a general population survey. Internet users are no longer homesteaders. For this reason, it is becoming more common for people to speak of the Internet culture of Britain as a whole, as compared with other nations.

However, people within any nation are likely to have contrasting perspectives on the Internet. This is evident in everyday conversations as well as in national debates over such issues as content regulation and privacy online. It is not necessarily the case that some people are right and others wrong, but that groups of individuals within Britain have differing values, attitudes and beliefs about the Internet—that is, debates are shaped by different cultures of the Internet.

For example, since the earliest surveys of Britain, OxIS has found that a sizeable proportion of people (18% in 2013) say they have no interest in the Internet, and this is one key reason why many have chosen not to get online—what we have called ‘digital choice’ (Dutton et al. 2007). In 2013, 81% of non-users said they have no interest in the Internet.

Others are excluded from the online world due to their location, such as in a remote rural area, or their inability to afford being online. Yet, even among the online public in Britain—those who use the Internet—there are likely to be people with dramatic as well as subtle differences in views about how use of the Internet fits with their own values and interests. Are they (un)comfortable with living and working online, for example sharing information and photographs with people they may not know?

One of the conventional arguments is that there is a set of ‘digital natives’, primarily younger people who grew up around the Internet and who are more comfortable using the Internet in their everyday life (Palfrey and Gasser 2008). While the concept of the ‘digital native’ has been challenged by a number of researchers (e.g. Helsper and Eynon 2009), the idea squares with some anecdotal evidence, and reinforces the perception that there may be categories of users with systematically different perspectives on the Internet that might be tied to their cohort or to technologies that predominated when they were young.

Therefore, given the maturity of the Internet in Britain, we moved away from early notions of small communities of homesteaders or hackers, and did not take the idea of the ‘digital native’ for granted. We focused instead on empirically locating the attitudes of the large population of individuals in Britain who choose to (not) use the Internet in their everyday life and work. Are they sharing a set of beliefs and attitudes about the Internet that could be called a culture of the Internet, or, as we argue here, are there multiple cultures of the Internet in Britain? If so, how can we identify and characterise these cultures?
Defining Cultures of the Internet

To discover whether or not there is a coherent set of attitudes and beliefs about the Internet among users in Britain, we conducted a set of multivariate analyses (see the Methodology for a more detailed operational definition). We began with fourteen Likert-type agree–disagree questions that tapped the attitudes and beliefs of individuals about the Internet. These questions were developed and refined for our biennial survey that has evolved since 2003.

These fourteen items were analysed in order to determine whether there was a smaller number of dimensions that could summarise most of the variance among respondents. This analysis yielded four separate dimensions, or principal components, which represented the degree that respondents believed that the Internet led to:

1. Enjoyable escape: providing an enjoyable activity that is a good way to pass time and to escape from day-to-day activities, meet people, and not feel alone;
2. Instrumental efficiency: by making life easier, such as providing ways to save time, for example by finding information quickly;
3. Social facilitation: helping you keep in touch with friends, such as helping people to find information about you, and making it easier to meet people;
4. Problems: such as being frustrating to work with, wasting time with email, creating difficulties in controlling personal information, and exposing people to too much immoral material.

Each dimension was relatively independent of the others, so that someone could view the Internet as a wonderful escape, but still feel that it can generate problems (such as wasting time). These four dimensions of attitudes and beliefs were further analysed to locate clusters of people who tended to answer these questions in relatively similar ways. We identified five clusters of individuals among the Internet users, each corresponding to a particular culture.

As shown in Table 1, each cluster was defined by the dimensions on which 50% or more of the individuals in that cluster were above average. For example, 97% of techno-pragmatists agreed that the Internet is high on ‘instrumental efficiency’ in that it saves them time when they need to find information, and generally makes their lives easier. Large proportions of respondents classified as ‘e-mersive’ saw the Internet as an escape (99%), an efficient tool (88%), and a social facilitator (79%). Likewise, over three-quarters (78%) of the adigitals tended to see the Internet as a problem generator.

Table 1. Percentage of Cluster who Agree with Each Dimension

<table>
<thead>
<tr>
<th>Dimension</th>
<th>e-Mersive</th>
<th>Techno-Pragmatist</th>
<th>Cyber-Savvy</th>
<th>Cyber-Moderate</th>
<th>Adigital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyable Escape</td>
<td>99%</td>
<td>35%</td>
<td>100%</td>
<td>39%</td>
<td>3%</td>
</tr>
<tr>
<td>Instrumental Efficiency</td>
<td>88%</td>
<td>97%</td>
<td>63%</td>
<td>26%</td>
<td>12%</td>
</tr>
<tr>
<td>Social Facilitator</td>
<td>79%</td>
<td>81%</td>
<td>81%</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Problem Generator</td>
<td>0%</td>
<td>28%</td>
<td>70%</td>
<td>47%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Note: Table shows the percent above average on each dimension. Agreement of over 50% is shaded.

Cultures of the Internet and Attitudes towards Technology

The validity of these cultural groupings is reinforced by their relationship with general attitudes toward technology. Generally, the e-mersives have more positive attitudes toward technology, such as believing technology makes things better, and not finding that technologies fail when you need them most (Figure 2); 84% of e-mersives said they leave their mobile on in bed. The techno-pragmatists have a similarly positive attitude toward technology, unlike the cyber-modermates and adigitals, who more often fear that the Internet threatens their privacy and concentration, and that technologies often fail. Finding the Internet of value in most respects, the cyber-savvy are much more concerned than all other cultures over threats to privacy, and also harbour a general lack of trust in technology.

Figure 2: Internet Cultures by Technology Attitudes

As shown in Table 1, each cluster was defined by the dimensions on which 50% or more of the individuals in that cluster were above average. For example, 97% of techno-pragmatists agreed that the Internet is high on ‘instrumental efficiency’ in that it saves them time when they need to find information, and generally makes their lives easier. Large proportions of respondents classified as ‘e-mersive’ saw the Internet as an escape (99%), an efficient tool (88%), and a social facilitator (79%). Likewise, over three-quarters (78%) of the adigitals tended to see the Internet as a problem generator.

Table 1. Percentage of Cluster who Agree with Each Dimension

<table>
<thead>
<tr>
<th>Dimension</th>
<th>e-Mersive</th>
<th>Techno-Pragmatist</th>
<th>Cyber-Savvy</th>
<th>Cyber-Moderate</th>
<th>Adigital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyable Escape</td>
<td>99%</td>
<td>35%</td>
<td>100%</td>
<td>39%</td>
<td>3%</td>
</tr>
<tr>
<td>Instrumental Efficiency</td>
<td>88%</td>
<td>97%</td>
<td>63%</td>
<td>26%</td>
<td>12%</td>
</tr>
<tr>
<td>Social Facilitator</td>
<td>79%</td>
<td>81%</td>
<td>81%</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Problem Generator</td>
<td>0%</td>
<td>28%</td>
<td>70%</td>
<td>47%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Note: Table shows the percent above average on each dimension. Agreement of over 50% is shaded.

Cultures of the Internet and Attitudes towards Technology

The validity of these cultural groupings is reinforced by their relationship with general attitudes toward technology. Generally, the e-mersives have more positive attitudes toward technology, such as believing technology makes things better, and not finding that technologies fail when you need them most (Figure 2); 84% of e-mersives said they leave their mobile phone on in bed. The techno-pragmatists have a similarly positive attitude toward technology, unlike the cyber-modermates and adigitals, who more often fear that the Internet threatens their privacy and concentration, and that technologies often fail. Finding the Internet of value in most respects, the cyber-savvy are much more concerned than all other cultures over threats to privacy, and also harbour a general lack of trust in technology.

Figure 2: Internet Cultures by Technology Attitudes

As shown in Table 1, each cluster was defined by the dimensions on which 50% or more of the individuals in that cluster were above average. For example, 97% of techno-pragmatists agreed that the Internet is high on ‘instrumental efficiency’ in that it saves them time when they need to find information, and generally makes their lives easier. Large proportions of respondents classified as ‘e-mersive’ saw the Internet as an escape (99%), an efficient tool (88%), and a social facilitator (79%). Likewise, over three-quarters (78%) of the adigitals tended to see the Internet as a problem generator.
The Stability of Internet Cultures

While these attitudes and beliefs cluster in systematic ways, and are related to more general attitudes and beliefs about technologies, are they quite erratic—constantly changing? On the contrary, over the years, there has been remarkable stability in attitudes and beliefs about the Internet. While we did not conduct a panel survey, going back to the same people every two years, we did find that the proportion of the public that holds particular beliefs, such as about the instrumental value of the Internet, is relatively stable (see Section II of this report). There has been some change, such as a drop in the proportion of users who believe there is too much immoral material online, but the overall stability of attitudes and beliefs was one factor that led us to look at these attitudes and beliefs as indicators of cultures of the Internet, rather than more ephemeral reactions to recent events.

The Characteristics of Internet Cultures

Are these culturally similar clusters of individuals simply a surrogate for demographic factors? The evidence suggests that these cultures are not tied to any single demographic. There are some tendencies for different cultures to be associated with particular social and demographic characteristics, but they are far from deterministic. Table 2 describes the most distinguishing characteristics of each group.

For example, a conventionally accepted view is that students and younger people who grew up in the Internet world are the so-called ‘digital natives’, a description that comes closest to the group we call the e-mersives. While students are more likely than other age groups to be part of the e-merse culture, a larger proportion (35%) of students are cyber-moderates (Figure 3). Pragmatists are more likely to be 25 or older, employed and from managerial and professional occupations. The moderates tend to be from all walks of life, but are more prominent among those online who are older and retired. And the adigitals are typically over 45, often retired, managers and professionals living in urban areas.

Table 2. Background Characteristics of Cultural Categories.

<table>
<thead>
<tr>
<th>Culture</th>
<th>Age</th>
<th>Life Stage</th>
<th>Socio-Economic Status</th>
<th>Urban–Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-Mersive</td>
<td>14–24 yrs</td>
<td>Students, Unemployed</td>
<td>Blue Collar, Clerical / Lower Income</td>
<td>Urban</td>
</tr>
<tr>
<td>Techno-pragmatists</td>
<td>25–44 yrs</td>
<td>Employed</td>
<td>Manager–Professional / Higher Income</td>
<td>Shallow rural</td>
</tr>
<tr>
<td>Cyber-savvy</td>
<td>14–44 yrs</td>
<td>Students, Unemployed</td>
<td>Blue collar / Higher Income</td>
<td>Deep rural</td>
</tr>
<tr>
<td>Cyber-moderates</td>
<td>65 and over</td>
<td>Retired</td>
<td>Middle income</td>
<td></td>
</tr>
<tr>
<td>Adigitals</td>
<td>45 and over</td>
<td>Retired</td>
<td>Manager–Professional / Lower income</td>
<td>Urban</td>
</tr>
</tbody>
</table>

Figure 3: Internet Cultures by Lifestage

Implications of Cultural Differences for Patterns of Use

Do cultures of the Internet have real implications for how people use the Internet and for what purposes? Throughout the body of this report, you will see the many ways in which these cultures do indeed matter. The e-mersives are likely to use more devices, from more locations and for a greater variety of purposes than other cultural groups, particularly for entertainment, social networking, and content production, reflecting their digital immersion in everyday life and work. The pragmatists are the most disposed to search for information online, but not for flippant purposes. The adigitals are least likely to use...
the Internet for a wide variety of entertainment, social, and information purposes, but they are as likely or more likely to use the Internet for governmental and political activities.

For example, with respect to entertainment and leisure activities [Figure 4], the e-mersives are high users relative to other cultural groups, but with some exceptions. For instance, the cyber-savvy are higher than e-mersives on gambling. Adigitals are consistently low on all uses for entertainment or leisure.

Sharp differences also emerge around the production of content across the cultural groups [Figure 5]. For example, the e-mersives are more likely to post photos, visit social network sites, write a blog, and post videos or creative work, than are any other cluster of users. The techno-pragmatists are, in line with their instrumental perspective, less likely to write a blog, post videos, or creative work, than are the cyber-savvy, for example.

Each section of this report will highlight other differences across cultures of the Internet in Britain.

Relevance to Policy and Practice

The implications of these cultures of the Internet spill beyond use to shape opinions on policy and practice. For example, the adigitals are the most supportive of greater regulation of the Internet, with e-mersives being the least supportive. However, techno-pragmatists, who use the Internet to get things done, and who are less often using the Internet for entertainment and social purposes, are also somewhat more supportive of more government regulation of the Internet, even though a majority still believe that government should not be regulating the Internet more than at present (Figure 6).

Conclusion

The 2013 Oxis Report identifies five Internet cultures in Britain: the e-mersed, techno-pragmatists, cyber-savvy, cyber-moderates, and the adigitals. Each is characterised by different attitudes and values. Although they overlap in some respects these cultures define distinctive patterns. While these cultural patterns are not a simple surrogate for the demographic and social characteristics of individuals, they are socially distributed in ways that are far from random. Younger people and students are more likely to be e-mersives, but unlike the digital native thesis, for example, we find most young students falling into other cultural categories.

There are three broad issues that these Internet cultures bring into focus: issues of control, the proportion of moderates, and the diversity across Internet users. At the broadest level, these cultures are separated by differences with respect to control of the Internet. Two cultures, the e-mersives and the techno-pragmatists, feel that the Internet as a technology is more or less under their control, although the groups differ according
to whether they use the Internet for enjoyment. The three other cultures differ in the degree to which they believe the Internet can be used to serve their personal needs and interests, but also see their control to be limited in ways that put them at greater or lesser risk, such as with respect to privacy. At the extreme, one culture—the adigital—expresses views that suggest that the Internet is out of control (certainly not controlled by themselves), and they feel excluded from the world of the Internet. In line with this, they are the most supportive of increased government regulation.

Secondly, in some respects the cyber-moderates are the most interesting culture. While groups that feel strongly pro- or con- about the Internet are widely discussed by journalists, for example, groups like the moderates are not. Cyber-moderates underscore the degree to which a large proportion of Internet users in Britain do not fit into the stereotypes of enthusiasts like the e-meratives and the techno-pragmatists. They don’t see major payoffs from the Internet, but they don’t see great risks either. They have found a middle way in being online but without much fervour. Surprisingly, they are the single largest culture, exceeding one-third of the British population. Given their tempered views on the Internet, they are unlikely to be pressing the frontiers of Internet use, or exploring new applications. They are unlikely, for example, to feel happy about the government plans for services to be digital by default, or available only in digital form. The Next Big Thing is not their thing.

Third, a notable fact about these cultures is the diversity they expose among Internet users in Britain. They show that the Internet is not inhabited by groups of enthusiastic or by Luddites. There is a wide spectrum of viewpoints on the value of the Internet and also the risks. It is particularly striking that slightly over a third of users in Britain are cyber-moderates. They are online, they are users, but they are not completely convinced that it is altogether positive for their life and work. Getting the public online is not enough. Moreover, many online are among the adigitals, whose approach to the Internet could be a brake on its role in Britain and other nations of the new Internet world, for better or worse.

We hope this report begins to shift study of the Internet away from an overly narrow focus on comparing users and non-users, and focuses more research and debate on other variations among users and non-users that have equally significant implications for the future of the Internet.

References


of the 2,083 Internet users in the OxIS 2013 sample, only
34 own a tablet but not a PC. This illustrates how tablets
seem to be complementing rather than replacing PCs
in the UK. In the 2011 OxIS Report, we tried to capture
the growing pattern of access to the Internet over
multiple devices, some of which were mobile, with the
concept of the “Next Generation User”. Next generation
users were defined as people who both (1) use at least
two Internet applications on their mobile phone and (2)
own at least two of the following: a tablet, a reader, or
three or more computers. We anticipated that this idea
would have a continuing relevance because it is not
linked to the ups or downs of any particular commercial
product, or simply identified with the rise of mobile
phones. It is a growing pattern of access over a range of
devices, including some that are portable, that enable
access from anywhere at anytime. Next generation use
is making the Internet more central to the life and work
of networked individuals.

From 2011 to 2013, the proportion of next generation
users grew substantially, from 32% of the British
population in 2011 to 52% in 2013. There was a
corresponding decline in the proportion of first
generation users from 40% to 26%.

Next generation users are different from first
generation users in three major categories of Internet
use. They are far more likely to use the Internet for
every category of entertainment and for information
seeking. They are also major producers of content.
Figure 2 illustrates these differences by showing that
they are often twice as likely as first generation users
to use the Internet for entertainment. Differences
approach 40 percentage points in the case of listening
to music and downloading music. Next generation
users have thoroughly integrated the Internet into their
entertainment choices. In fact, the ready availability of
entertainment over the Internet might be one major
factor driving the rise of next generation users.

Often when a category comes to define the majority of a
population, it no longer maintains its initial homogeneity
as it becomes more diverse. Next generation users are
an exception. Although the proportion of next generation
users grew by 20 percentage points between 2011 and
2013, as a group they became more distinctive, not
less. In all categories of entertainment, information
seeking and content production the difference
between next generation users and first generation
users has widened. Figure 3 shows the percentage
differences between first and next generation users
for entertainment: for downloading music in 2011 the
difference was 28 percentage points, in 2013 it is 41
percentage points; for listening to music the differences
were 27 points in 2011 and 39 points in 2013. People
who use the Internet for entertainment have seen the
value of tablets and smartphones, and they use them to
do more of what they enjoy doing online.

Next Generation Users: An Update

Of the 2,083 Internet users in the OxIS 2013 sample, only
34 own a tablet but not a PC. This illustrates how tablets
seem to be complementing rather than replacing PCs
in the UK. In the 2011 OxIS Report, we tried to capture
the growing pattern of access to the Internet over
multiple devices, some of which were mobile, with the
concept of the “Next Generation User”. Next generation
users were defined as people who both (1) use at least
two Internet applications on their mobile phone and (2)
own at least two of the following: a tablet, a reader, or
three or more computers. We anticipated that this idea
would have a continuing relevance because it is not
linked to the ups or downs of any particular commercial
product, or simply identified with the rise of mobile
phones. It is a growing pattern of access over a range of
devices, including some that are portable, that enable
access from anywhere at anytime. Next generation use
is making the Internet more central to the life and work
of networked individuals.

From 2011 to 2013, the proportion of next generation
users grew substantially, from 32% of the British
population in 2011 to 52% in 2013. There was a
corresponding decline in the proportion of first
generation users from 40% to 26%.

Next generation users are different from first
generation users in three major categories of Internet
use. They are far more likely to use the Internet for
every category of entertainment and for information
seeking. They are also major producers of content.
Figure 2 illustrates these differences by showing that
they are often twice as likely as first generation users
to use the Internet for entertainment. Differences
approach 40 percentage points in the case of listening
to music and downloading music. Next generation
users have thoroughly integrated the Internet into their
entertainment choices. In fact, the ready availability of
entertainment over the Internet might be one major
factor driving the rise of next generation users.

Often when a category comes to define the majority of a
population, it no longer maintains its initial homogeneity
as it becomes more diverse. Next generation users are
an exception. Although the proportion of next generation
users grew by 20 percentage points between 2011 and
2013, as a group they became more distinctive, not
less. In all categories of entertainment, information
seeking and content production the difference
between next generation users and first generation
users has widened. Figure 3 shows the percentage
differences between first and next generation users
for entertainment: for downloading music in 2011 the
difference was 28 percentage points, in 2013 it is 41
percentage points; for listening to music the differences
were 27 points in 2011 and 39 points in 2013. People
who use the Internet for entertainment have seen the
value of tablets and smartphones, and they use them to
do more of what they enjoy doing online.
Who Are Next Generation Users?

Wealth is a distinctive characteristic of next generation users. Over 90% of people with incomes of £40,000 or more are next generation users. The proportion of next generation users has increased in all income categories but the increase has been greater in higher income groups. In 2011, the difference between the proportion of next generation users in the lowest and highest income categories was 24 percentage points (41% to 75%); in 2013 it is 36 percentage points (57% to 93%). Inequalities of use based on income have increased in 2013.

Age and lifestage are both related to next generation use. The proportion of next generation users has increased in all lifestage groups. Virtually all students (92%) and most employed people (74%) are next generation users. Retired and Unemployed continue to lag, remaining first generation users. As with income, the dominant groups have become more dominant: The proportion of students increased from 51% in 2011 to 92% in 2013—an increase of 41 percentage points. The proportion of employed next generation users increased by 23 percentage points. Retired and unemployed lagged behind: Retired increased by 29 percentage points while unemployed increased by 16 percentage points. Inequality between first and next generation users based on lifestage increased in 2013.

Cultures of the Internet are also related to these patterns of next generation use. Generally, e-Mersives, techno-pragmatists, and the cyber-savvy are most likely to be next generation users. Cyber-moderates are less so, and the adigitals are the least likely, with only 59% being next generation users. The cultural differences are large, with more than 30 percentage points dividing the adigitals from the e-mersives, but still, the majority of adigitals have become next generation users, underscoring the strength of the forces behind this trend in patterns of use.

The Future

One of the consequences of these trends toward next generation use is a new, growing digital divide between people who are next generation users and those who are not. Next generation users tend to be more effective users of the Internet for leisure activities and also for job and work information. This suggests that the benefits of the Internet will flow disproportionately to them. Their interest in content creation suggests they will disproportionately influence public debates. Research needs to continue to track the up-take and consequences of next generation use for individuals and for society.
I. Adoption

Access to the Internet has been boosted by about 5 percentage points during the past two years, to reach 78% of the UK’s population in 2013. This should provide new vitality to efforts to close digital divides, although some dimensions of digital divides have deepened as new devices tend to complement technologies already in the hands of users.

Mobile Internet use has had the most dramatic increase. Next generation use has risen by 20 percentage points: in 2013 half of the population (or 67% of Internet users) went online using multiple devices and locations. This continuing trend indicates that mobile Internet use is likely to make the Internet a more integral part of everyday life and work. The downside is that the likelihood that ex-users and non-users will get online in the future has declined; thus the about one-fifth of the population that is not online may become even more excluded. This last 20% will be the most difficult to bring online over the coming years.

The household remains far and away the most common location for Internet use for all groups of users. Work access remains important, and for some groups Internet cafés and libraries as well. The most dramatic shift is the rapidly increasing importance of Internet access on the move; over half of the population goes online while on the go.

British households are becoming more Internet-rich. While the number of computers and televisions has remained the same, there has been an increased adoption of portable Internet-enabled devices, such as tablets and readers. Concurrently, wireless Internet connection in British households and use of Internet-related mobile phone features is steadily increasing. In short, British Internet users are becoming less tethered to their desktop computer, and more mobile in terms of devices, locations and patterns of use.

Gender differences have virtually disappeared in Internet diffusion and use, but income and lifestage remain important factors sorting those who do and do not have access. The gap in Internet skills between different groups of people has not been closing over time.
“Do you, yourself, personally use the Internet on whatever device at home, work, school, college or elsewhere or have you used the Internet anywhere in the past?”

This chart tracks the gradual diffusion of the Internet along with the more recent and rapid rise of next generation users. Internet use by individuals increased to 78% in 2013, a five percentage point increase since 2011. By comparison, the increases from 2007–2009 and 2009–2011 were three percentage points each. The number of people who have never gone online (non-users) has fallen from 23% to 18%, whereas the number of individuals who have had access in the past but do not go online presently (ex-users), has decreased from 5% to 3%.

“Are you planning to get access to the Internet in the next year or so?”

Ex-users—that is, people who have used the Internet in the past but do not use it now—are more likely than non-users to plan to get access in the next year: 29% of ex-users were planning access compared to 9% of non-users. For both ex-users and non-users the likelihood of obtaining access has declined steadily from 2005 to 2013. This indicates that the challenge of getting the last fifth of the population online is growing every year, as the people who were most positively disposed to become users have already done so. An identical trend exists among households planning for future access (graph not shown).
I.B. Ubiquitous Access

"Now, could I ask about all of the places where you access the Internet? Do you currently go online...?"

The household remains by orders of magnitude the most common location of Internet use. Other locations, such as work, school and public libraries remain important, although use in all of them has slightly decreased compared to 2011. By contrast, use of the Internet on the move has continued to increase substantially: 57% of Internet users are going online while on the move in 2013, an increase of 17 percentage points since 2011. This trend is fuelling the rise of next generation users and underlines the increasing importance of always-on Internet access.
Everyone uses the Internet at home. The e-mersed and techno-pragmatists are central to the up-take in use of the Internet on the move. The gap is large: compared to the techno-pragmatists, cyber-moderates are 19 percentage points less likely to use the Internet on the move, and adigitals are 35 percentage points less likely. True to their interest in instrumental efficiency, the techno-pragmatists are the most likely to use the Internet at work (45%); they are 8 to 14 percentage points more than any other category. The e-mersed are high users in all locations, but use the Internet more than others at public libraries (21%) and Internet cafés (13%). The adigitals are the second-place culture in both locations (11% and 9%, respectively).

“Whether or not they are connected to the Internet, how many working computers are available for people to use in this household?”

Between 2005 and 2011 households in Britain became steadily more media-rich; since 2011, however, there has not been much change in the number of computers available in the household. In 2013, 61% of the population have two or more computers in their household. Over this period, households were acquiring access to new devices, such as tablets and readers, instead of additional home computers (see next graphs). Internet access has become more portable within and beyond the household, with greater access to WiFi at home and more devices that are portable.

“And how many television sets are there in your household?”

Television remains the focal point of households in Britain. The number of computers in the household has not yet reached the ubiquity of televisions: virtually all British households have a TV set in 2013, whereas 24% do not have a computer. Similarly, 71% of households have two or more TV sets but only 39% have two or more computers.
Almost all British households have mobile phones (91%), and more than half have digital cameras (70%), MP3 players (51%), satellite TV (55%), and games consoles (50%). The possession of these devices has been stable over the past years. By contrast, the acquisition of all sorts of Internet-enabled devices has increased sharply: 37% have gained access to tablet computers, 27% to e-readers and 22% to TV sets with an Internet connection in 2013.

Use of Features on Mobile Phones by Years

While people still say they use their mobile phones for calling and texting, their range of uses has increased over the years. In 2013, more people reported that they use Internet-related mobile functions: email, Internet browsing and accessing social network sites have increased to about half of the population. Mobile phones have also become important sources of entertainment: 43% of the population uses them for playing games and listening to music.
Adoption Section I

“Do members of your household get access to the Internet at home through a telephone company, or through a cable television company, or both?”

“Do you have wireless access in your household such as through WiFi?”

“Could you tell me if your household has:”

As households in Britain acquire more Internet-enabled portable devices the ways they connect to the Internet have been radically transformed. The number of people who report going online with WiFi connections has increased steadily to 96%, and the number of people going online via mobile phones to 57%. By contrast, telephone line and cable TV access has remained more or less stable at 78% and 26%, respectively.

“How long has your household had an Internet connection?”

“How long have you been going online?”

Experience on the Internet is positively associated with income. On average, individuals from higher income groups have been going online about three years longer than users from the lowest income group (10.9 vs 7.9 years). They have also had Internet access in their household about two years longer (9.7 vs 7.4 years).

“How would you rate your ability to use the Internet?”

The percentage of Internet users with good or excellent self-rated Internet use skills has steadily increased from 60% in 2003 to 74% in 2013. Self-rated ability still varies by lifestage and gender, however, compared to 2011, the gap between men and women has shrunk from 12 percentage points to 7 percentage points (in 2013: 77% vs 70%). By contrast, big differences between individuals at different stages of their lives persist: students (92%) are more likely to say they are confident of their skills than are employed (77%) and particularly retired people (49%).

I.D. Experience

Internet Access and Use by Income (QH3 and QC3 by SC2)

I.E. Skill and Expertise

Self-Rated Ability by Year, Gender and Lifestage (QC6 by QD2 and QO1)
Section I

Adoption

“How confident do you feel that you, yourself, are able to...?”

OxIS measures the confidence of Internet users in performing important online tasks such as uploading photos and making new friends. Confidence in different types of skills varies considerably between individuals at different stages of their lives. A large majority of students feel fairly or very confident they can perform creative, critical and social (all above 80%) activities online. Students are more confident than employed and much more confident than retired individuals in all four skills types. The biggest differences are in creative (95% vs 69% vs 33%) and social (80% vs 58% vs 29%) skills.

Interestingly, 72% of retired individuals feel confident in their critical skills, whereas only about one third of them trust their creative (33%), social (29%) or technical (34%) skills. Similarly, employed individuals feel most confident about performing critical activities online (82%), as opposed to other activities.

Internet cultures differ sharply in the self-assessment of their Internet skills. The adigitals are notable for consistently perceiving themselves to be the least skilled. In technical, social, and creative skills the adigitals are 30–40 percentage points less likely to say they are skilled than the e-mersed or techno-pragmatists, both clusters with strong self-assessment of their skills. The e-mersed, pragmatists, and cyber-savvy are similar, within 0–9 percentage points. Cyber-moderates are usually about halfway between the adigitals and the other, more skilled cultures. Perhaps lack of skills is one reason that the cyber-moderates and adigitals are less enthusiastic about the Internet; lack of skills may enhance their feelings of frustration with the online world and its perceived risks.
II. Characteristics and Attitudes of Internet Users

The overall increase in Internet use in Britain occurred across all age groups, lifestages, and educational categories. The most striking and positive change was among the lowest income groups, where Internet use increased by 15 to 23 percentage points. This accounts for most of the increase in Internet use from 2011 to 2013. However, there was a strong 11 percentage point increase in use by the disabled, as well as increased up-take by those without an educational qualification, and individuals who have retired. These gains are positive steps toward closing digital divides.

Use of the Internet at work continues to vary widely across occupations. There was almost no major change in Internet use within any given occupation, indicating that there has been no visible push for expanding use in the workplace during straitened economic times. As in 2011, the gender gap continues to diminish among British Internet users. The net result of this combination of change and stability is that Internet users remain disproportionately likely to be young, well educated, and wealthy. Consistent with these patterns, attitudes toward technology are positive among students, the employed, and Internet users generally. Non- and ex-users and the retired have more negative attitudes toward technology. One of the barriers to bringing non-users online is the fact that over half of them express fears about the Internet or technology.

II.A. Characteristics of Users and Non-Users

As seen in previous surveys, Internet use has increased modestly across all age groups. The general pattern of use by age has remained very consistent: younger people use the Internet the most, and the older age groups use the Internet the least. All teenage respondents said they use the Internet, and 85–94% of adult respondents in each age group between the ages of 18–54 reported that they are Internet users. Even amongst the oldest age group we see an increase over 2011, with Internet use rising among people aged 65 and over from 33% to 39%. Despite this progress, older people are the least connected of all age groups.
The likelihood of using the Internet at work is closely linked to occupation. Each of the bars above total 100%, so they are the same length. Their relative position to the right or left shows the extent of work use of the Internet: the left side indicates work use, the right no use at work. The more the bar is offset to the left, the higher the proportion of Internet users in that occupation. The main message is that people in higher-status manager and professional occupations are more likely than blue collar workers to use the Internet at work. Administrative and clerical workers are in between the other two categories, and are evenly divided between those who do use the Internet and those who do not.

The second message is stability: There was no marked change in work use of the Internet over the past two years. Within no occupational category did a sizeably greater proportion of people start using the Internet since 2011. Over the past two years, new Internet users emerged largely through the Internet impinging on other areas of life outside the workplace. More detail on occupational use is reflected in Internet use broken down by the British Standard Occupational Classification 2010 (SOC2010) categories. The chart is generally ordered with white collar information work at the top of the graph and blue collar jobs at the bottom. The general trend from the top to the bottom of the graph is of declining Internet use as jobs become less information-oriented and more focused on blue collar work. Some occupations deviate from the general pattern; for instance, Health Professionals and those in Culture, Media and Sport are somewhat less likely to use the Internet at work than similar high status occupations. Among blue collar and clerical occupations, Customer Service and Leisure and Travel Services are somewhat more likely to use the Internet at work. Some occupations have nearly universal Internet access at work (Science and Engineering, for instance, along with Corporate Managers, Business, Media and Public Services, and occupations associated with Health and Social Care). This pattern has not changed since 2011.
“Now I’d like you to think about the different things people do online at work. Have you ever used the Internet to...”

What do people who use the Internet at work do? Learning skills is the most important across all occupational categories, although more so for managers and professionals (68%) and clerical workers (62%) than blue collar workers (32%). Managers and professionals are the most likely to use the Internet to collaborate (65%), meet colleagues (47%), or hold meetings (43%), but a sizeable proportion of clerical staff employ the Internet for these activities as well. Leisure-related activities are similar across occupational categories, with one-quarter to one-third of respondent categories saying they update their Facebook page or tweet at work. It is often said that the Internet and social media blur the boundaries between work and home, and this is reflected here.

This graph highlights one of the sources of Internet growth: lower income groups. Internet use in the lowest income group, earning less than £12,500/year, jumped 15 percentage points, from 43% in 2011 to 58% in 2013. In the second lowest income group of £12,500 to £20,000/year, Internet use grew from 65% to 88%, a notable rise of 23 percentage points. The increase declines in higher income categories, until the highest category, earning over £40,000/year, where Internet use is stable at nearly 100%. This rise in use among lower income groups is a step towards addressing digital divides.

Use by Household Income (QH13 by SC2)

The digital divide has mostly disappeared for those with any formal educational qualifications in Britain, with 84–95% of those with basic qualifications or higher using the Internet. Only those with no educational qualifications at all tend to be left out, with only 40% of that group using the Internet. However, as in the case of lower income groups, those with no educational qualifications saw a major increase in access to the Internet from 2011, when 31% of this group used the Internet.
Across the years, the retired respondents have been the least likely to be Internet users. However, in the most recent data, nearly half (45%) of retirees are currently using the Internet, a nine percentage point increase on 2011. 100% of students are Internet users, and nearly all employed respondents (93%) use the Internet in 2013.

While disabilities, such as health-related problems, are a continuing source of digital exclusion, over half (51%) of people with a disability use the Internet. This is a rise of 11 percentage points from 2011 (from 40% to 51%). Unfortunately, 51% is still considerably less than the 84% of non-disabled respondents who use the Internet, leaving a major digital divide for the disabled.

The gender divide has been steadily decreasing ever since this survey was first conducted in 2003. Since 2011, it has fallen to within the margin of error of the data. There is no longer a statistically significant gender gap in access to the Internet in Britain. Gender in general seems to be largely irrelevant to the Internet in Britain. Because of this diminishing role, there are few gender graphs included in the 2013 Report.
II.B. Attitudes Toward Technology and the Internet

Technology Attitudes by Lifestage
(Q11 and QB1 by QO1)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Students</th>
<th>Employed</th>
<th>Retired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology makes things better</td>
<td>94%</td>
<td>75%</td>
<td>60%</td>
</tr>
<tr>
<td>I leave my mobile phone turned on in bed</td>
<td>83%</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>CCTV cameras threaten privacy</td>
<td>51%</td>
<td>36%</td>
<td>32%</td>
</tr>
<tr>
<td>I turn off all media in order to concentrate</td>
<td>43%</td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>Technologies fail when you need them most</td>
<td>42%</td>
<td>16%</td>
<td>10%</td>
</tr>
<tr>
<td>I fear I might break technologies</td>
<td>43%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Non-users have a less positive attitude toward technology than users. Non-users are much more likely to fear that they might break new technologies (59%, compared to 14% of Internet users) and to feel that technology fails when it is most needed (59%, compared to 15% of users). Non-users are also correspondingly less likely to think that technology makes things better (44%, compared to 79% of users), and to always be connected by doing things like leaving their mobile phone turned on while in bed (37% of non-users, compared to 67% of users).
Section II

Characteristics and Attitudes of Internet Users

"Here are things people sometimes say about going online. Can you please tell me to what extent do you agree or disagree with each statement?"

When we compare next generation users with both first generation users and non-users, the general pattern is that next generation users are more likely to be positive towards the Internet in a variety of categories, and correspondingly less likely to be wary of some of the perceived negative aspects of the Internet. So, next generation Internet users feel that the Internet makes life easier (93%), helps them stay in touch (87%), and helps them save time (87%), while being much less likely to agree that the Internet has too much immoral material (37%) or is frustrating to work with (24%).

The eight attitudes in this graph are some of the 14 attitudes we have used to define the cultures of the Internet. The notable point is that most attitudes are stable across the six years of data. This suggests that cultures based on attitudes are also likely to be stable. There are two attitudes that appear to be changing: respondents are more likely to say email takes too much time (rising from 18% in 2007 to 30% in 2013) and, surprisingly, given media coverage, less likely to say there is too much immoral material on the Internet (declining from 48% in 2007 to 41% in 2013). This perception has continued to decline over the years.
III. Use

The ability of the Internet to change or shape people’s lives is directly tied to their patterns of (non)use. Online activity is extremely diverse: from reading books and watching films to taking courses, from blogging to making and distributing videos to the world, from exchanging emails with friends to video conferencing with work colleagues. The effect of the Internet may vary depending on whether people use it as a passive entertainment medium or an active tool for content creation. Since 2003, OxIS has increasingly focused on how people use the Internet. However, as the diversity of use increases, it is less valuable to focus on merely whether or not a person uses the Internet; and more valuable to focus on how and why they use it, as we examine in this section.

The overall pattern of use is a complex pattern of some steady states, small declines and increases. One small increase is especially noteworthy: after years of rapid growth, social network site use may have stabilised. We explore this in detail in Section V. Other forms of content production show either relatively small increases (like posting photos) or are proportionately stable (like writing a blog or owning a personal website). All forms of content production are most common among students. The decline in search engine use that we first observed in 2011 has continued in 2013, attributed partly to time on social network sites, which serve some of the functions of search. The various forms of information seeking seem to be stable, which means that any increases or decreases are within the margin of error of the survey. “Looking at pictures” was added to entertainment activities for the first time in 2013, and it turns out to be one of the most common leisure activities, displacing listening to music, which has moved to second place. e-Commerce activities continue to show small but consistent increases. In contrast to entertainment, where the e-mersed are the most active users, e-commerce is usually most common among employed people. This pattern may indicate some degree of maturity in online activities.
III.A. Information Seeking

Looking for Information on Different Media [QA1]

<table>
<thead>
<tr>
<th>Issue for professional school or personal project</th>
<th>Planning a trip</th>
<th>A book you heard about</th>
<th>Information about local schools</th>
<th>A company or if you have a problem with a product or service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the Internet</td>
<td>Use a telephone</td>
<td>Personal visit</td>
<td>Directory or book</td>
<td>Use a smartphone</td>
</tr>
<tr>
<td>5%</td>
<td>14%</td>
<td>7%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>48%</td>
<td>62%</td>
<td>59%</td>
<td>57%</td>
<td>47%</td>
</tr>
<tr>
<td>21%</td>
<td>21%</td>
<td>21%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>2%</td>
<td>13%</td>
<td>33%</td>
<td>13%</td>
<td>13%</td>
</tr>
</tbody>
</table>

OxIS 2013 N=2,657

“Where would you go first if you were looking for information on...?”

The British public continues to turn first to the Internet when looking for professional and personal information. In 2013, people used the Internet first especially when they were looking for information on issues for a professional, school or personal project (68%), when planning a trip (62%), or looking for a book they had heard about (59%). When people had a problem with a product or service, however, only 47% went first to the Internet. Nevertheless, the Internet was more likely to be the first port of call than other destinations, with only 33% preferring telephone and 13% making a personal visit.

Ways to Look for Information Online by Year [QC24]

<table>
<thead>
<tr>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainly search engine</td>
<td>Mainly specific pages</td>
<td>Both about the same</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33%</td>
<td>61%</td>
<td>56%</td>
<td>64%</td>
<td>61%</td>
</tr>
<tr>
<td>23%</td>
<td>15%</td>
<td>26%</td>
<td>26%</td>
<td>21%</td>
</tr>
<tr>
<td>10%</td>
<td>10%</td>
<td>20%</td>
<td>20%</td>
<td>19%</td>
</tr>
</tbody>
</table>

OxIS current users: 2005 N=1,309; 2007 N=1,578; 2009 N=1,401; 2011 N=1,498; 2013 N=2,083
Note: Question changed in 2007.

“In general, when you look for information on the Internet, do you go to specific pages, use a search engine, such as Google or Yahoo!, or do you do both about the same?”

Search engine use has continued to decline in 2013. Over half (53%) of Internet users continue to use a search engine when looking for information, but that is 8 percentage points lower than 2011 and 11 percentage points lower than 2009. Using specific pages has increased 11 percentage points over the last four years, from 10% in 2009 and 15% in 2011 to 21% in 2013. This change might be an effect of social media. Instead of search, people could be spending more time on social media sites, and relying more on links recommended within their social media network to find information. Also, with experience online, some individuals may be developing preferences for particular sites, such as Wikipedia, as a first port of call. Finally, increasing numbers of users employ other sites, such as YouTube, for search, and may not perceive themselves to be using a search engine.
“How frequently do you use the Internet for the following purposes?”

The overall stability and popularity of information seeking is notable. Of those queried the most popular types of information seeking continue to concern local events (81%), travel plans (80%), and news (77%). While some categories showed slight changes—job-seeking rose modestly from 47% in 2011 to 50% in 2013, while seeking information related to travel plans declined from 86% to 80%—these are generally within the margin of survey error.

There are marked differences in the information sought by different cultures of the Internet. For example, e-merseds are often interested in information about other people, celebrity news, and humour, while adigitals are far less interested in such content. Likewise, the pragmatists are more focused than others on information about local events, making travel plans, finding information to settle an argument, and health and medical information. While adigitals are generally not as interested in information seeking online, they are frequently using the Internet for information about local events and travel. The Internet can serve a wide variety of values and interests.
III. B. Entertainment

**Entertainment and Leisure Online by Year (QC11 and SC6)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Look at photos**</th>
<th>Listen to music**</th>
<th>Download music</th>
<th>Play games</th>
<th>Watch movies, videos**</th>
<th>Gamble*</th>
<th>Look at sexual content***</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>70</td>
<td>661</td>
<td>65</td>
<td>54</td>
<td>59</td>
<td>48</td>
<td>101</td>
</tr>
<tr>
<td>2007</td>
<td>616</td>
<td>59</td>
<td>65</td>
<td>59</td>
<td>56</td>
<td>61</td>
<td>28</td>
</tr>
<tr>
<td>2009</td>
<td>546</td>
<td>444</td>
<td>52</td>
<td>50</td>
<td>52</td>
<td>444</td>
<td>144</td>
</tr>
<tr>
<td>2011</td>
<td>568</td>
<td>444</td>
<td>52</td>
<td>50</td>
<td>52</td>
<td>444</td>
<td>144</td>
</tr>
<tr>
<td>2013</td>
<td>59</td>
<td>444</td>
<td>52</td>
<td>50</td>
<td>52</td>
<td>444</td>
<td>144</td>
</tr>
</tbody>
</table>

OxIS current users: 2005 N=1,399; 2007 N=1,578; 2009 N=1,601; 2011 N=1,498; 2013 N=2,083
**Note: Question not asked in all years.

**Entertainment and Leisure Online by Lifestage (QC11 and SC6 by Q01)**

<table>
<thead>
<tr>
<th>Lifestage</th>
<th>Look at pictures</th>
<th>Download music</th>
<th>Listen to music</th>
<th>Watch movies, videos</th>
<th>Watch TV programs</th>
<th>Play games</th>
<th>Gamble*</th>
<th>Look at sexual content*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>93</td>
<td>73</td>
<td>661</td>
<td>70</td>
<td>59</td>
<td>48</td>
<td>101</td>
<td>61</td>
</tr>
<tr>
<td>Employed</td>
<td>92</td>
<td>65</td>
<td>65</td>
<td>59</td>
<td>59</td>
<td>56</td>
<td>28</td>
<td>144</td>
</tr>
<tr>
<td>Retired</td>
<td>90</td>
<td>54</td>
<td>59</td>
<td>59</td>
<td>56</td>
<td>52</td>
<td>144</td>
<td>144</td>
</tr>
</tbody>
</table>

OxIS current users: 2013 N=2,083
*In self-completion questionnaire.

**Entertainment and Leisure Online by Internet Cultures (QC11 and SC6 by Q12 and Q18)**

<table>
<thead>
<tr>
<th>Internet Culture</th>
<th>Look at pictures</th>
<th>Listen to music</th>
<th>Watch movies, videos</th>
<th>Download music</th>
<th>Watch TV programs</th>
<th>Play games</th>
<th>Gamble*</th>
<th>Look at sexual content*</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-Mersed</td>
<td>93</td>
<td>86</td>
<td>83</td>
<td>83</td>
<td>78</td>
<td>74</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td>Pragmatists</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>Cyber-savvy</td>
<td>70</td>
<td>45</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Moderates</td>
<td>79</td>
<td>47</td>
<td>47</td>
<td>47</td>
<td>47</td>
<td>47</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>Adigital</td>
<td>77</td>
<td>43</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
</tbody>
</table>

OxIS current users: 2013 N=2,083
*In self-completion questionnaire.

“How frequently do you use the Internet for the following purposes?”

To measure changing Internet use, sharing photos (70%) was added in 2013. Looking at photos is so popular that it has replaced listening to music (65%) as the most frequent activity. Downloading music (59%), playing games (52%), and watching movies and videos (50%) share similar levels of popularity. Watching movies and videos has demonstrated a substantial increase, from 39% in 2011 to 50% in 2013. While gambling continues to be a minority activity, it increased from 13% in 2011 to 20% in 2013.

Although all groups increased their online entertainment and leisure activities, students were far and away the most active entertainment users. They were more likely to look at pictures (93%), download music (92%), listen to music (90%), and watch movies online (81%). Gambling substantially increased among employed users, from 15% in 2011 to 25% in 2013. Gambling and looking at sexual content are the only activities that employed people do more than students. Retired users are the least likely to find entertainment on the Internet.

Internet cultures shape use of the Internet for entertainment in major respects. The e-mersives are the most avid users of activities we’ve classified as entertainment and leisure content, except for gambling. However, even most (60%) of adigitals say they look at pictures online. Interestingly, the cyber-savvy, who are very engaged in all uses of the Internet, but more aware of the risks, are relatively avid users of all forms of entertainment and leisure, including use of the Internet for gambling and sexual content. Even most cyber-moderates look at pictures, listen to music, download music and watch TV programs online.
Within the last year, how frequently have you used the Internet for the following purposes?

Engagement with personal finance and e-commerce activities have steadily increased from 2005 to 2013. Using bank services substantially increased during this time, from 45% of British online users in 2005 to 61% in 2013, as did paying bills online, from 39% in 2006 to 57% in 2013. The increase in online banking practices may indicate growing trust in Internet security for financial transactions. Commercial activity is one of the few areas where Internet use has shown continuous increases for the past eight years. This is one of the best indicators of the strong challenge that the Internet poses for bricks-and-mortar stores, and the real transformation of shopping and other commercial activities.

Those earning over £30,000 per year remain the most active participants in e-commerce. They are especially more likely to compare products and prices (92%), buy products (94%), make travel reservations (90%), and find the location of a house or store (88%). Ordering groceries online among people earning £12,500-30,000 jumped from 29% in 2011 to 34% in 2013 and similarly increased for those earning over £30,000, from 32% in 2011 to 51% in 2013. Use of banking services decreased somewhat for those earning less than £12,500, from 50% in 2011 to 42% in 2013, as did paying bills online, from 49% in 2011 to 38% in 2013. Generally, people with lower incomes make less commercial use of the Internet. Since many prices are lower online, it is a puzzle that lower income people don’t take more advantage of the Internet to stretch their incomes. The opposite is the more typical case.
After substantial increases between 2005 and 2011, social network participation may be stabilising. Yet posting photos, an activity commonly done on social network sites, increased to 64% in 2013 from 53% in 2011. More established communicative uses of the Internet, such as posting messages, writing a blog, and owning a personal website seem to be stable or declining. While the proportion of users visiting a social network site has stabilised, the time spent on these sites is likely to have grown over the last two years, but is not shown in this graph.

Students remain the most frequent producers of online content. They are much more likely to post their own photos (92%), re-post photos taken by others (84%), and re-post videos made by someone else (56%), suggesting engagement with both content creation and curation. Similarly, employed and unemployed (not shown) users share their own photos (66% and 67%) and repost others’ photos (58%). Employed and unemployed users tend to post content at rates more similar to each other than with either students or retired people. Retired people are the least likely to produce online content; generally they are about half as likely as employed people and one-third as likely as students. Still, over one-third of retired users post their own photos.

The e-mersed are top of the content producers. They are posting their own photos and videos, re-posting the photos and videos of others, and putting creative material online. Surprisingly, the pragmatists are close to the top in using the Internet for posting content although not posting their own video or creative content. Cyber-moderates are clearly moderate in their distribution and creation of online content, but well ahead of the adigital, who nevertheless are still posting content online. Content production is not simply for the e-mersives but is spread across different cultures, albeit at different levels of activity.
IV. Government and Politics

Use of the Internet has been positively associated with involvement in politics and government. However, the two areas of activity vary dramatically. With respect to governmental activity, more and more services are moving towards easier online provision. Moreover, the entire population is potentially in need of one or more governmental services that are increasingly digital. Therefore, we expect that over time, an increasing proportion of the public will use government services provided online. In the UK, as in many other nations, the take up of digital government has been slow, although incremental advances have been made year on year. There are many reasons for this, but it is a particularly difficult arena for hundreds of services at all levels of government that may be accessed less than once a year. In contrast, banking services can involve millions accessing only a few services, such as looking at account balances. Nevertheless, in 2013, there was a significant advance from 2011 in the take-up of digital government services in the UK.

With respect to politics and civic affairs, it is important to remember that most people are not interested in politics and limit their participation to a few activities for which there is a strong sense of civic duty to participate, such as voting. Therefore, in the political arena, it would be unrealistic to expect large proportions of the public to be participating in politics online, unless this was defined very broadly, such as to include following the news. Nevertheless, the Internet creates an infrastructure that networked individuals could employ to learn more about politics and participate in political activities, and there are some grounds for expecting the Internet to become even more influential in politics over the coming years.

IV.A. Use of Online Government Services

Use of Online Government Services by Year

Public engagement with digital government is continuing to evolve. 65% of Internet users said they had used at least one of a set of government information and service delivery applications in the past year. This represents a continuing increase since 2005 when we began to track uptake of electronic service delivery by government. It is also a substantial increase from 2011, when 57% said they had used at least one service.
What digital government services are used by Internet users? We asked users to indicate whether or not they used each of a number of services over the past year. Our list was not comprehensive, but indicative of the range of services available. The most general observation is that there was an increase in every service we listed. There seems to have been a strong increase over 2009 and 2011 in every aspect of digital government. More users are getting information about government online, and more people are paying for services and fines online. The most dramatic increase was in paying a central government tax, licence fee or car tax disc online, where the proportion more than doubled from 2011. This means that transactional services, where the payoff of digital government could be great, are succeeding, as well as more information-centred services, such as getting information about your local politician. This suggests that not only are users adapting to digital government services, but also that government service delivery is improving in ways that make it easier and more efficient for individuals to complete transactions online.

In addition to improved digital services, the rise of next generation users is another possible factor contributing to the increased take-up from 2011 to 2013. For example, these figures show that next generation users are more likely to have done every information or transactional service linked to digital government. These users are more likely to get information online about government services at every level and also to be involved in transactions, such as payments for public services or fines. Of course, as digital government services continue to evolve in positive ways, they will be an impetus for more individuals to become next generation users, able to obtain information and services from anywhere at any time.
Cultures of the Internet also relate to the use of digital government services. For example, techno-pragmatists are the most likely to have said they use every government service online. This squares with their more instrumental approach to saving time and increasing the efficiency of their work. Interestingly, the cyber-moderates are also more likely than others to use digital government services, perhaps because they are older on average. In line with this, the e-mersives are among the less inclined towards digital government, and in their case, perhaps due to being younger on average. While adigitals are not especially high in their digital government use, they are also not as low as in other categories of use. Government and politics might be one reason that adigitals are online, despite their perceptions of online risks.

"In the last year, have you done any of the following?"

Respondents were asked about their participation in a variety of civic and political activities, both offline and online, including: finding information that helps them form an opinion; sending a message that supports a political cause; signing a petition; forwarding jokes or other humour about politicians or political issues; commenting on politics in social media; contacting a politician; forwarding political news commentary; or deliberately buying or boycotting certain products. All these activities are the exception, done by at most 20% of the respondents. Given these low levels, differences across Internet cultures are not large. However, it is one area in which adigitals appear as engaged or more engaged than other cultures. For example, they were the most likely to say they bought or boycotted products, or signed a petition.
IV.B. Civic and Political Participation

We have combined all of these civic and political activities to determine who undertook at least one activity either offline or online. Two cultures are most likely to undertake civic activity. 23% of adigitals say they do one or more of these activities. Of techno-pragmatists, 19% say they participated. The e-mersives and the cyber-savvy, among the most active in many leisure and entertainment and content production activities, are not the most active in civic and political participation. Cultural differences are related to the differential use of different kinds of content and services online. More use does not translate into more of everything.

"Some people think that the Internet will change the way people influence politics, others think that this is not the case. How much do you agree or disagree with the statement that "Through the use of the Internet people will have more political influence"?

We asked respondents whether they thought the Internet was making people more influential. A majority (55%) of users believe that people are becoming more influential. Men are more likely than women to believe this to be the case, and students and the employed are more likely to believe this to be true than are those who are retired (who are more likely not to be using the Internet).
“In the last year, have you done any of the following?”

Until 2013, offline participation in politics was more common than online participation across every income group. However, in 2013 we see a rise in the proportion of users in the higher income bracket that participate in politics online, and for the first time, this surpasses their level of offline participation. This could indicate a turning point in the perceived relevance of online political activity. This would not be surprising in the aftermath of the Arab Springs and related movements, and higher income users might be the first to seize the opportunity. This is a statistic to follow in 2015.

“People have different opinions about the way society functions, please tell me how much you agree or disagree with each of the following statements:”

Political efficacy refers to a person’s belief that they can influence politics. There is a clear positive relationship between political efficacy and Internet use. Next generation users are more likely to have high scores on political efficacy (53%) than first generation users (36%). Those with low efficacy are far more likely to be non-users (55%). Non-users tend to report a low level of political efficacy, but there is no relationship between efficacy and use among ex-users, who are a small proportion of the population. Whichever the direction of causality, this relationship also points toward a likely increase in online political activity with the rise of next generation users.
This section contains one of the most intriguing results from the 2013 survey. Social network sites made it very easy for many people to participate in a range of attractive social activities like posting pictures, writing personal thoughts and commenting on friends’ thoughts. Contributing content requires very few technical skills. As large numbers of people join social network sites, they become places where friends, neighbours, colleagues and relatives are all present and interacting; this makes them even more valuable and draws more participants. Social network sites have transformed the online experience for many people. However, while these sites have experienced years of explosive growth, growth in the proportion of users seems to have levelled off in the last two years.

Social network sites have become part of popular culture. Everyone knows what they are and what they can be used for, so people who are not using them are likely to be doing so by choice. This raises all sorts of questions. Why the sudden stability at about two-thirds of Internet users? Why are the attractions not appealing to those who are not using them? Have users been put off by journalistic coverage of privacy concerns on social media sites? Were social network sites something of a fad that has now peaked, or have we reached some natural limit of the number of people interested in social media?

As we have seen in previous years, writing blogs and maintaining a personal website remain stable. These are time-consuming, demanding activities and they are likely to remain attractive to relatively small minorities. On the other hand the story is not always about stability. There has been a continuing increase in at least two forms of communication: posting photos online and making online phone calls (VoIP). The increase in posting photos could reflect the use of new sites, as well as more intensive use by existing social media users. The rise of online phone calls masks another trend toward greater use of video communication. It is noteworthy that both of these activities—posting photos and making person-to-person calls—are among those made much cheaper and easier by the Internet and related digital technologies.
How often do you use the Internet for the following purposes?

The striking message of this graph, as discussed above, is that the proportion of Internet users involved in social network sites has stabilised, growing only 1 percentage point in the past two years to 61% in 2013. This does not mean that social media are any less popular among their users, but that the diffusion of social media may have reached a plateau at around two-thirds of Internet users.

There have been increases in only three types of communication. There has been a large jump in the use of Internet phone calls (from 25% in 2011 to 45% in 2013), as well as a steady increase in posting photos (from 53% to 64%) and in the use of instant messaging (from 64% to 73%).

There is a clear positive relationship between household income and the use of every form of Internet communication. This relationship is not merely about access to technology, as virtually everyone checks email. Although phone calls over the Internet (VoIP) require a webcam and a reliable Internet connection, the other activities can be done by any user who can check email. Further work is thus needed to understand why the Internet is not more widely used by those in low-income households. Are communication services less important to the needs of those with low incomes, or are they perceived to be costly, risky, or both? Few studies have focused specifically on this digital divide in the use of communication services.
Differences by life stage are especially dramatic. In fact, they are even more pronounced in 2013 than in past years. In the 2011 survey, at least 10% of retirees mentioned doing all activities, whereas in 2013 several activities such as participating in chat rooms, writing blogs, and maintaining websites were done by 7% or less. Unsurprisingly, students are still the most connected, while retirees are the least connected and employed persons remain in the middle. There are no differences in email use, which has always been the most common single activity. There are amazingly large differences in instant messaging (students are 62 percentage points more likely than retired people), posting photos (students are 59 percentage points more likely than retired) and visiting social network sites, where students exceed the retired by 68 percentage points.

Generally, adigitals are low on all communication activities except email, which is common across all cultures. In contrast, the e-mersives are the most likely to blog (47%), and participate in chat rooms and social network sites. The cyber-savvy are also more likely to blog, have a personal website, and participate in chat rooms than are the techno-pragmatists, who are more likely to post photos, send attachments and post on a message board than are the cyber-savvy.
“How often do you go online for the following purposes?”

The major growth in the use of social network sites occurred from 2007 to 2011. In the 2011 survey we wondered if this growth was levelling off or merely slowing down. In 2013 the results are clear: the diffusion of social networking sites is levelling off. Moreover, it is no longer reasonable to suggest those not on SNSs are simply unaware of such sites. Without a disruptive innovation it is unlikely that we will see significant growth by the next survey; what we are seeing is a plateau of the diffusion curve as social network site use reaches about two-thirds of the Internet population in the UK.

“Thinking about all of the social network sites you use, how often do you?”

Social network sites enable new connections between people. Are these connections mainly for sharing or for access to new information? As was the case in the 2011 survey, only one fifth [21%] of users say they use these sites for information on news and social issues, whereas four fifths (80%) indicate using these sites for social purposes like personal connections and sharing. Given the lack of change from the previous survey in 2011, it appears that people may have stable expectations for social network site participation that centre on social activity.

The vast majority of those under 34 participate on social network sites. The vast majority of those over 65 do not. Yet social network sites are not only for youth; those aged 45-54 have leap...
Not only are retirees much less likely to be on social network sites than either employed persons or students, those who are on these sites are much less likely to contribute content. The differences are the smallest for “receive information or news” and “follow a politician” or “join/start a politics-related group,” and largest in posting creative content, reposting content, and commenting on someone else’s content. This also points to different perceptions of social network sites among people by lifestage. Over 90% of students on social network sites post status updates, comment on others’ content and post photos. Also, contrary to much public speculation, students care about privacy; 90% check these settings compared to two thirds of employed people and less than half of retirees (43%).

People with little or no schooling participate less on social network sites by every measure. However, among those with some schooling, the differences are more ambiguous and often fall within the margin of error of the survey. Generally speaking, those with further education are most likely to post and repost. Those with higher education are the most likely to engage in politics or consume news on the site.
“When you send a message to someone over the Internet, do you primarily use e-mail, or do you message from a social network site such as Facebook or LinkedIn?”

Differences in communication strategies by age groups suggest stark differences in patterns of accessibility between cohorts. Looking only at social network site users, we can see that a majority of students would rather communicate through social network site messages than email. By contrast, people who are working prefer a balance between email and social network communications. This may reflect that business and government communication is much more likely to be via email than social network site messages. Retirees clearly prefer communication via email than via social network sites (56% vs 23%).

“How often do you contact family or friends who live nearby by...?”
“How often do you contact family or friends who live far away by...?”

There is a perennial concern about whether Internet technologies substitute for in-person contact or contact by other means. Next generation users tend to communicate more on the Internet, although their communication is not associated with a substantial difference in calling or visiting. As such, next generation users appear to be more connected online, but not more connected offline. In general, then, the Internet seems to complement rather than substitute for offline means of communication.

Interestingly, next generation users use text messages more frequently than any other mode of staying in touch with those who are both local and far away. There are a number of possible reasons for this finding, but most point to the greater ease and lower cost of text messaging over the Internet.

V.C. Reconfiguring Social Networks

Communication via Email or Social Network Sites by Lifestage (QC36 by Q01)

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Employed</th>
<th>Retired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly social network site messages</td>
<td>61%</td>
<td>34%</td>
<td>23%</td>
</tr>
<tr>
<td>Both about the same</td>
<td>23%</td>
<td>23%</td>
<td>14%</td>
</tr>
<tr>
<td>Mostly email</td>
<td>14%</td>
<td>27%</td>
<td>56%</td>
</tr>
</tbody>
</table>

Current social network site users. OxIS 2013 N=1,276

Communication with Family and Friends Who Live Nearby by Users and Non-Users (QB4 by QH13)

<table>
<thead>
<tr>
<th></th>
<th>Next generation users</th>
<th>First generation users</th>
<th>Non- and Ex-users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily 1 per day</td>
<td>3.4</td>
<td>2.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Weekly 3</td>
<td>2.8</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Monthly 2</td>
<td>2.0</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Less than 1 per month</td>
<td>2.0</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Text messaging</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Phone</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Visit</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Email</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Letter</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

OxIS 2013 N=2,657

Communication with Family and Friends Who Live Far Away by Users and Non-Users (QB5 by QH13)

<table>
<thead>
<tr>
<th></th>
<th>Next generation users</th>
<th>First generation users</th>
<th>Non- and Ex-users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily 5 per day</td>
<td>2.6</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Weekly 3</td>
<td>2.4</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Monthly 2</td>
<td>2.4</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Less than 1 per month</td>
<td>2.0</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Text messaging</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Phone</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Visit</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Letter</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

OxIS 2013 N=2,657
Reshaping Social Networks and Friendships

“When you are online, how often do you interact with the following groups of people?”

This graph shows how people interact with others based on three categories: personal interests, occupation and political views. Each category shows a different pattern. For personal interests, all age groups interact more with people who have shared interests than with people with different personal interests. There is a sharp level of age stratification: much more interaction among the young, less among the older. For occupation, people aged 25–34 interact more with people with a different occupation than with the same occupation; the age stratification is much less and the overall amount of interaction is also less. The notable thing about politics is that there is relatively little interaction, which is consistent with other political activity variables. In contrast to interests and occupation, there is essentially no difference in amount of interaction with people who have the same, or different political views.

“Have you ever met someone online that you did not know before, through...?”

People meet others on the Internet for any number of activities including dating, shared interests, or political mobilisation. However, it is becoming increasingly clear that the number of people who do this is not influenced by advances in mobile technologies, social network sites or other recent fashions. In the last three waves of OxIS, the proportion of people who met someone online they did not know before has remained virtually the same at approximately 40%.

---

**Interaction Online with Different Groups of People by Age (QC13 by QD1)**

- **14-24**
- **25-34**
- **35-54**
- **55+**

**Online Contacts by Year (QC15)**

- **No, have not met anyone online**
- **Yes, have met at least one person**

---

OxIS current users: 2013 N=2,083

Note: Question changed in 2009.
The most common way to meet new people online is through social network sites. These sites often recommend friends of friends, which probably allows people to consider such new people as trustworthy or at least ‘not strangers’. On the other hand, meeting people through the open web, via a discussion group or website is still relatively frequent, if not common. The numbers in this chart add up to much more than 100% as people who meet others online tend to do this through multiple online contexts.

“When you first met them online were any of these people...?”

This chart is especially interesting because it is one of the few that shows employees and retirees doing an online activity as much or more than students. Employed persons are the most likely to meet both friends of friends and complete strangers online, perhaps for their business and work but also possibly for dating. This may point to fewer face-to-face friend opportunities for employed people compared to students. That retirees are the most likely to say they meet people through a shared interest should be one cue about how to further engage this demographic.

“Thinking back to the all the people you have met online, have you gone on to meet any of them in person?”

Over half (59%) of those who met someone online have gone on to meet them in person. This is slightly higher than in 2011. Thus both meeting someone online and the proportion who also meet people offline has levelled off, but at a significant level. This may indicate some emerging stability in the ways that the Internet is reconfiguring how we come to know other people. The Internet is becoming an accepted point in a series of stages involved in meeting someone offline.
VI. Impact of Internet Use

This section addresses one of the most important questions about Internet use: who benefits? Previous sections of this report have shown how the Internet reconfigures how people meet and even who people know (Section V). Here we discuss other effects of the Internet. Media use is changing: users say the Internet is more important than television, newspapers or radio and not only for information, but also for entertainment. Given concerns about the detrimental impact the Internet might have on newspapers, some in the newspaper industry may take comfort in the fact that reading online vs offline newspapers has been largely stable for four years. This suggests that one of the impacts of the Internet may have already played itself out, finding a settled ecology of news provision on and offline. The strongest beneficiaries of the Internet tend to be next generation users, higher income people, the more highly educated and students or employed people. This raises the question: why are lower-income, less-educated, poorer people unable to capture more of the benefits of the Internet? This raises perennial concerns over digital divides.

VI.A. Centrality of the Internet

Average Importance of Media for Information by Users and Non-Users [QA2 by QH13]

Next generation users  First generation users  Non- and Ex-users

% who say it is essential

0 10 20 30 40 50 60 70 80 90 100

The Internet  Television  Newspapers  Radio

OxIS 2013 N=2,657

For information in general, how important is each of the following to you as a source?

Next generation users are almost twice as likely to agree that the Internet is an essential source of information (41%) compared to first generation users (24%). There are no differences between these groups in the importance of television (14% vs 18%), newspapers (6% vs 7%) or radio (5% vs 7%). For non- and ex-users the proportion saying television is an essential source of information (30%) is twice as large as radio (14%) or newspapers (11%). There is a clear divide in the relative importance of the Internet across these categories of users and non-users.
VI. Media Habits: The Internet, Television and Newspapers

Reading Online Newspapers by Gender and Lifestage

The proportion of users reading online newspapers has been stable for the past four years, at between 52% and 57%. Men (55%) are marginally more likely to read online newspapers than women (50%). Students read more (61%) online newspapers than employed people (56%), while retired people lag behind at 42%.

Reading online vs offline newspapers has been largely stable for four years. This suggests that the switch to online reading may have already reached a plateau. The proportion who read only offline newspapers rose slightly from 2009 to 2011 (34% to 38%) and then dropped back to 31% in 2013. Similarly, the proportion who read only online newspapers rose marginally from 4% in 2009 to 5% in 2013.
Impact of Internet Use

Section VI

Hours of Use of the Internet by Year

(QS1)

OxIS current users: 2007 N=1,578; 2009 N=1,401; 2011 N=1,498; 2013 N=2,083
Note: Internet at school only for student users. Internet at work only for employed users.

Hours of Use of the Internet by Internet Cultures
(QS1 by QI2 and QI8)

OxIS current users: 2013 N=2,083
Note: Internet at school only for student users. Internet at work only for employed users.

VI.C. Trust

Reliability of Information on the Internet by Year
(QA4)

“On a scale of 1 to 5, where 5 is totally reliable and accurate and 1 is totally unreliable and inaccurate, how reliable and accurate would you rate the information found in...?”

Trust in the reliability of the information on the Internet has changed very little in the last 10 years. There may have been a slight increase in 2003–2009, but there is no increase at all for the past four years. This stability suggests that users have learnt to what extent they can trust information online. In this light, we can see that people have a learned level of scepticism about information that can be found online, which is contrary to many expectations of people being unduly influenced by misinformation distributed online.

The number of hours per week of Internet use at home has been roughly stable from 2007 (av=10.9) to 2013 (av=11.3). By contrast, use of the Internet at work has decreased from 7.3 hours/week to 5.5 hours/week over the same period. Use of the Internet at school has not changed in the past six years. In 2013, we added the category of using the Internet ‘on the go’, and users indicate spending over two hours per week online when they are mobile. The continuing centrality of the home and the rise of Internet use on the go are two clear trends to note and watch for in 2015.

The e-mersives are decidedly immersed in the Internet, spending over 18 hours per week at home on the Internet, in addition to hours at work, school and the most hours (4.2 per week) on the go. They are followed by the cyber-savvy but their use of the Internet is concentrated at home, rather than at work, but they also use the Internet frequently at school and on the go. The techno-pragmatists, true to their instrumental focus, are more limited in their Internet use at home, but are high users at work or school. The cyber-moderates are the most intensive users at school.

During a typical week, including weekdays and weekends, about how many hours do you usually spend...?

During a typical week, including weekdays and weekends, about how many hours do you usually spend...?

During a typical week, including weekdays and weekends, about how many hours do you usually spend...?
Internet users believe that the Internet is the most reliable source of information (av=3.6), and certainly as reliable as television (av=3.4) or radio (av=3.3) sources. Non- and ex-users believe that television (av=3.7) and radio (av=3.6) sources are more reliable. All groups thought that newspapers are the least reliable source of information, except for non-users who said the Internet is least reliable. While this is not surprising in light of the furore over phone hacking by those working for tabloid newspapers, this relative rating has held over the years of OxIS. It is not a new phenomenon.

“Now I’d like to ask you about some organisations. Please tell me how much trust you have in the people running each.” “What about the Internet? How much trust do you have in the people providing Internet services?”

Internet users and non- and ex-users agree that the Government is the least trusted organisation (av=2.3 and av=2.2), followed by newspapers, major companies and television news. Users indicate that the Internet is similar to the most trustworthy source, television news (av=3.3). In contrast, non- and ex-users say that the Internet is similar to the least trustworthy source, roughly the same as the government (av=2.2).

“Have you ever used the Internet for...?”

The Internet is increasingly a key source of information. Interestingly, the biggest change from 2005 to 2013 has been the increase in informal learning practices such as finding or checking a fact (an increase from 78% to 90%) or looking up the definition of a word (an increase from 47% to 74%). Formal learning activities, such as getting information for school projects (ranging from 39% to 46%) or distance learning for academic degree/job training (ranging from 22% to 29%), have continued to increase over time, but only incrementally. Investigating topics of personal interest also seems to have been stable, ranging from 78% to 90% but with no clear trend.
Effectiveness of Use by Internet Users and Ex-Users (QC22 and QE10 by QH13)

Effectiveness in using the Internet is clearly different among next generation, first generation and ex-users. On all four measures the benefits of the Internet have been more likely to flow to next generation users; in the case of finding out about an event and finding a job they are over 20 percentage points higher than first generation users. Both first generation users and ex-users seem to be about as likely to have found a job online, both under 10% compared to 33% of next generation users. Both next generation and first generation users are much more effective than ex-users in saving money and finding health information. This might indicate that some people became ex-users because they were unable to realise some of these benefits online.

Effectiveness of Internet Use by Lifestage (QC22 and QE10 by QO1)

Over 50% of all three lifestage groups are likely to have saved money or found out about an event via the Internet. However, students and employed people are more likely to have done so compared to retired respondents. Employed (45%) and retired (39%) people are more effective than students (32%) at finding information to improve their health, perhaps because they are more focused on their health as they age. Employed people (34%) are much more likely to have found a job compared to students (16%) and retired people (3%). Except for finding health-related information, retired people are the least likely to benefit from the Internet.

Effectiveness of Internet Use by Education (QC22 and QE10 by QO4)

Regardless of the benefit considered, people with more education are more likely to take advantage of that benefit. The effect here is very strong. People with higher education are more than twice as likely to be able to benefit from Internet use compared to people with no education. In the most striking case, compared to people with no educational qualifications, respondents with higher education are over seven times more likely to have found a job using the Internet (36% vs 5%). This echoes research on the ‘knowledge gap’—a finding that even when presented with the same information, people from more educated households are likely to benefit more, and thereby reinforce or exacerbate knowledge gaps in society.
VII. Regulation and Control

Internet regulation has become an increasingly controversial topic as governments have sought to deal with issues arising from the growing centrality of the Internet and the perceived risks to children and other important segments of the public. The Internet has never been the ‘Wild West’, as users are subject to existing laws and regulations, such as laws against consumer fraud and product misrepresentation, but many feel that laws written for a non-digital world fit poorly in the online environment and are difficult to enforce across national boundaries. Part of the debate is over where the Internet needs new regulatory approaches. This section addresses several issues over which legal and regulatory debate has centred, such as whether government should be more active in regulating the Internet.

Four trends are apparent in 2013. First, the public’s perceived exposure to certain problems like spam and viruses continues to decline. Second, other problems like online credit card theft and product misrepresentation appear to be increasing, possibly due to increased use of the Internet for commerce. A noticeable difference is that the declining problems are unique to the Internet while the perception of increasing problems is also true offline. Third, children’s regulation shows trends that appear contradictory. Although the percentage of parents establishing rules about Internet use is declining, parents also are increasingly installing filtering software. Opinions about the assignment of responsibility for protecting children are stable: respondents overwhelmingly think parents should be responsible.

Fourth, although there is a high level of concern about privacy, and journalistic coverage of privacy issues has mushroomed, the percentage of users who say they are concerned has been stable for the past eight years. Almost half of all users think that the Internet is a threat to privacy. However, about 70% are comfortable giving out their email address and name online, and about 50% are comfortable giving out their postal address and date of birth. These answers are not necessarily contradictory, as users generally trust Internet service providers and benefit from people finding them online, but they do illustrate the complexity of privacy issues. Do people believe that the risks of reduced privacy are outweighed by the benefits of e-commerce and other services, such as social networking?
VII.A. Concerns: Bad Experiences and the Internet

Bad Experiences Online by Year (QC39)

<table>
<thead>
<tr>
<th>Year</th>
<th>Had credit card stolen</th>
<th>Received obscene emails</th>
<th>Bought something which was misrepresented</th>
<th>Asked for bank details*</th>
<th>Accidentally arrived at pornographic website**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>2005</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>2009</td>
<td>3</td>
<td>2</td>
<td>9</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>2013</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>20</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Had credit card stolen</th>
<th>Received obscene emails</th>
<th>Bought something which was misrepresented</th>
<th>Asked for bank details*</th>
<th>Accidentally arrived at pornographic website**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>2005</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>2009</td>
<td>3</td>
<td>2</td>
<td>9</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>2013</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>20</td>
<td>12</td>
</tr>
</tbody>
</table>

OxIS current users: 2003 N=1,202; 2005 N=1,309; 2007 N=1,578; 2009 N=1,401; 2011 N=1,498; 2013 N=2,083
*Note: Question not asked in 2003.

“In the past year have you ever...?”

Since 2003 the public’s reporting of bad experiences online in the last year has trended in both positive and negative directions. On the one hand, the probability of receiving viruses or obscene emails appears to have generally declined. Both of these declines are on the order of 10 percentage points: the probability of receiving obscene mails declined from 23% in 2003 to 11% in both 2011 and 2013, while viruses, after a surge from 18% in 2003 to 44% in 2005, declined to 30% in 2013. On the other hand, some bad experiences have increased, specifically the likelihood of buying misrepresented products (rising from 3% in 2003 to 12% in 2013), credit card theft (from 1% to 6%), and being asked for bank details (from 12% in 2005 to 19% in 2012). These increases might be associated with the steady increase in e-commerce activity, as these three categories are all commerce issues.

The notable issue illustrated here is how cyber-savvy users are the most likely to have had negative experiences. This may provide a clue about why the cyber-savvy hold simultaneous positive and negative attitudes. They like the Internet but they are disproportionately likely to have had bad experiences, but also are more likely to engage in risky activity, such as online gambling (see Section III). Bad experiences do not deter them from online activity, but it may make them more careful. Interestingly, the adigital—who are most negative about the Internet—are usually the least likely to report negative experiences. Bad experiences are most likely to result from greater use of the Internet for more purposes. This suggests that bad experiences are not the source of the antipathy of the adigitals.
“How comfortable are you about revealing your … online?”

Most Internet users say they are comfortable or very comfortable giving out their email address and name online. About half are comfortable giving out their date of birth and postal address. This might be surprising in light of media coverage of the threats of credit card theft and identity theft, which could be fostered by access to such information. Fully one-quarter of users are comfortable giving out their credit card number. These percentages have not changed in any statistically significant way in the past four years.

E-mersives and the techno-pragmatists are the most comfortable with providing personal information online. The cybersavvy are as cautious, if not somewhat more cautious, than the cyber-moderates and adigitals. The significance of these different comfort levels are great; 41% of techno-pragmatists feel able to provide their credit card number when appropriate online, compared to only 16% of adigitals. In such ways, the adigitals rule themselves out of the benefits of online shopping and banking services, creating a cultural divide in access to major online services.

“How concerned, if at all, are you about…?”

“And have you done something to prevent…?”

The most common concern about bad online experiences is focused on the receipt of viruses via email, with 69% worrying about this, compared to 54% concerned about ‘unpleasant experiences’, and 55% concerned about spam. Users were also more likely to have taken action against viruses (77%) than against spam (61%) or unpleasant experiences (51%). Surprisingly large percentages say they have not done anything about bad experiences: 40% say they have done nothing about spam (presumably including not using a spam filter). These results are similar to 2011.
Attitudes toward privacy have been relatively stable for the past six years. 90% of respondents are concerned about protecting credit card details, and most people (67%) believe that people should be able to express their opinion anonymously. After a spike of 59% in 2007, belief that the use of computers and the Internet threaten privacy ranged from 37% in 2009 to 47% in 2013.

Although the presence of children in a household continues to make it much more likely that a household will have Internet access, access is still not universal even for these groups. In 2013 10% of households with children under 10 lacked Internet access, as did 5% of those with children between 10 and 17. Such inequality of home access is a recognised source of educational disadvantage for which Internet use at school cannot fully compensate. It is notable that the growth in Internet use has been mostly among childless households.

Few people believe that children’s content should be unrestricted, and the vast majority continue to lay the primary responsibility for this with parents (98% in 2013, 97% previously). However, when it comes to children, everyone tends to be held responsible. Most people believe responsibility should be taken by parents first, but also by Internet Service Providers and teachers, and increasingly by government. Whilst there has been little change in attitudes towards the role of ISPs and teachers in 2013, there seems to have been a rise in support for government intervention, with 75% of respondents agreeing that government should be responsible compared to 66% in 2011 and 71% in 2009.
57% of parents in connected households claimed to have placed restrictions on their children’s Internet use. This might be a case of the glass more than half-full, but child protection groups are likely to view this as a disappointing statistic. This might indicate that parents with children are not as concerned as the general public and do not see as great a risk. Alternatively, it could be that efforts to make parents more aware of online risks are not reaching all families who could benefit. Parents with children between the ages of 10 and 13 were most likely to report restricting use in some way, perhaps reflecting the growing online skills combined with continued vulnerability of this age range.

For connected households the most commonly set rules advise children not to meet people they meet online or to give out personal information (both 84% in 2013). In both cases though, the prevalence of these rules seems to have dropped somewhat since 2007, when comparable percentages were both 95%. The proportion of parents restricting online time and restricting access to certain sites also seems to have declined since 2007: time restrictions have dropped from 88% to 81% of households, site restrictions have dropped from 93% to 78%. On the other hand, there appears to be a slow upward trend in the adoption of parental control filters, rising gradually from 35% in 2007 to 44% in 2013.

“Some people think governments should regulate the Internet more than they do today, others think governments should regulate the Internet less. Do you think the British government should regulate the Internet far more, more, about the same, less or far less?”

Between 2011 and 2013 there appears to have been no change in support for more government regulation of the Internet amongst Internet users [43% in 2011 vs 44% in 2013], but a sharp rise amongst non- and ex-users (67% in 2011 vs 79% in 2013). Such a rise in support is evident across several demographic groups, with only students showing greater resistance towards government intervention [19% supported more government regulation in 2013, compared to 26% in 2011]. Non- and ex-users, with less personal experience online, are the most susceptible to calls for greater regulation of the Internet, as are retired people, who have steadily backed more government regulation of the Internet.
VIII. Digital Divides

Non-use of the Internet has declined substantially during the past two years. In 2013 about 18% of the population had never used the Internet, compared to 23% in 2011. This five percentage point decline in two years is greater than the five percentage point decline in the four years from 2007–2011. This is real progress in addressing the digital divide, but one in five remain without access, making the digital divide a continuing issue even at the basic level of access.

There is no single stated reason for not using the Internet; instead reasons are multiple and interrelated. Cost, access, interest and skills are all important; however, their relative importance varies across individuals and their circumstances. Lack of interest remains the most important reason for non-users. Many non-users are simply not interested in being online. Retired people also give “not for people my age” as a major reason, but that is very similar to lack of interest. There is an element of choice at work here: this reason suggests that many people choose to remain offline. There is no evidence that they are opposed or resistant or restricted from going online, rather the Internet is not important to them: they just don’t care.

The proportion of ex-users has declined somewhat to about 3%. For the first time, the most cited reason for giving up the Internet is lack of interest, followed by the familiar exclusion barriers of expense and not having a computer available. The rising importance of lack of interest may reflect a decline in the proportion of young people who are ex-users. In 2011 the age category with the most ex-users was 18–24-year-olds, in 2013 the most ex-users are in the 65–74-year-old age group. This age-related shift may also be the reason for a sharp decline in the proportion of ex-users who say they would like to use the Internet in the future.

Proxy use remains very important: almost 90% of ex-users and almost 70% of non-users said they could find someone to access the Internet for them. Over two-thirds of non-users have a link to the Internet if they need it, but their access is indirect via another, proxy user. Proxy access may not be quick access or high quality access—depending on someone else means going online at their convenience—but it can make the Internet accessible to many who would otherwise be offline completely. These issues are important as the UK Government embarks on tests of a “digital by default” strategy.

Internet users remain surprisingly self-reliant. People who find they are unable to do something online say that they most often work it out themselves. However, other networks such as family, friends, school and work remain important, especially for some people. Institutional factors are at work here: students are especially likely to turn to school sources for help, employed people find help at work, while retired people depend more on friends and family. Throughout the history of computing, informal one-on-one help by a friend or associate, in contrast to formal training, has been a key ingredient of learning how to use new technologies.
“I will read a number of reasons that some people give to explain why they don’t use the Internet. Could you tell me which of these reasons apply to you?”

Lack of interest remains the most important reason non-users do not use the Internet. In fact, nearly every non-user cites a lack of interest as one reason for not being online. Retired non-users were more likely than employed non-users to cite age (67% vs 28%), lack of a computer (70% vs 59%), and lack of knowledge (67% vs 57%) as important reasons for not using the Internet. Employed non-users were more likely than retired non-users to say privacy (55% vs 44%) and bad experiences (32% vs 27%) were the main reasons for not using the Internet.

While lack of interest dominates the reasons why non-users do not use the Internet, age-related reasons are the next most prominent. People in blue collar occupations are much more likely than managerial or clerical users to raise agerelated reasons. Skills are a third reason for non-users not to use the Internet regardless of their occupation, with over 60 percent of non-users saying they “do not know how to use it”. Managerial and professional non-users were less likely than other groups to identify privacy (35%), cost (29%) and bad experiences (18%) as reasons not to use the Internet. Blue collar non-users were more likely than other groups to identify age (78%), access (69%), and cost (53%) as reasons not to use the Internet.

And which of these reasons was the most important?

Lack of interest is the most important reason non- and ex-users give for not using the Internet. 82% of non-users and 44% of ex-users give lack of interest as their most important reason. For non-users lack of interest prevails so strongly that none of the other reasons reach even 10%. For ex-users expense and lack of a computer/Internet connection are important, as is lack of skill.
People have given a number of reasons for stopping their use of the Internet. We would like to know if any of these reasons were important to your decision?

There is no one reason why people stop using the Internet. Perhaps most striking is the rise in the number of people who are just not interested in using the Internet, with 61% of ex-users giving this reason for stopping using the Internet. No longer having a computer available and cost remain important reasons for more than half of ex-users. Interestingly, finding the Internet difficult to use has become a more common factor this year, possibly reflecting growing complexity of access with the rise of more devices and modes of access. Also, privacy issues and bad experiences have become more prominent among the reasons cited by ex-users. Given the small number of ex-users in our sample, it is difficult to generalise confidently about this rise in the proportion citing privacy concerns and bad experiences online, but both are plausible reasons for people moving off-line.

Managerial and professional ex-users were more likely to say that no longer having a computer available was the reason to stop using the Internet. Clerical workers were most likely to give "not interested" or "never figured it out" as the most important reasons, and blue collar workers were more likely to give cost as a reason compared to other groups. Overall, clerical and blue collar workers were more likely than professional and managerial ex-users to say they never really figured out how to use the Internet or indicate privacy concerns as important reasons for not using the Internet.
Internet ex-users felt more strongly that they would miss out by not using the Internet than did non-users: 37% of ex-users said they would like to use the Internet in the future (compared with 10% of non-users), 31% said that they missed out by not using the Internet (12% of non-users), 19% sometimes felt left out when their friends talked about the Internet (10% of non-users), and 14% thought they could perform better in their daily tasks if they used the Internet (6% of non-users). Non-users were more likely than ex-users to say that they were better off not using the Internet (60% vs 46%). Compared to 2011 the most striking difference was a decline in the proportion of ex-users who would like to use the Internet in the future, from 51% in 2011 to 37% in 2013.

"We are interested in the kinds of help people get to use the Internet. In the past year, have you…"

In 2013, Internet users were most likely to work things out for themselves before they asked for help with the Internet (64%), but this represents a decline from previous years. The most frequently used sources of help were family and friends (45%), followed by asking people at work / school (22%), then taking a training course (13%). The least common approach was to pay someone for help (4%). Overall, there have been few changes in this pattern of help-seeking behavior since 2007, except for a slight decline in the proportion of users who work things out for themselves or get help from family and friends or colleagues. Is use of the Internet becoming so widely expected that it is becoming more difficult for people to ask for help?
Students are more likely than other groups to work things out for themselves before they ask for help with the Internet (71%), but they are also the most likely to turn to their associates, ‘people at school’ (58%), compared to only 22% of employed people and only 8% of the retired. This illustrates the advantageous support network available to students, relative to other users. Retired people were more likely than other groups to get help from family and friends (58%) or pay someone for help (7%). Retired people are about as likely to take a training course as are others.

All cultural groups are most likely to try to work things out for themselves, led by the techno-pragmatists. Cyber-moderates are least likely to work things out for themselves, and most likely to ask their friends and colleagues for help. Interestingly, the e-mersed and the techno-pragmatists are the least likely to ask for help from their family and friends, perhaps because they are the more proficient. The cultures do not differ appreciably in the extent to which they use training courses, libraries, Internet cafés, or pay someone.

“"If you needed to use the Internet to send an e-mail or something, do you know someone who could do this for you?"”

Ex-users were more likely than non-users to know someone who they could ask for help using the Internet (58% vs 45%). Non-users were much more likely to not know a potential proxy user (21% vs 3%). These results are very similar to 2009 and 2011. Given the value of personal assistance, one critical problem in addressing the digital divide remains focused on helping more isolated non-users, who could not otherwise find a proxy user, or get the help they require to move into the online world.
Methodology

A. Sampling Technical Report

The 2013 Oxford Internet Survey employed an identical sampling method to previous waves of the research programme. This year, however, the core survey was boosted by interviews in rural areas. The sampling process for the rural sample was separate to the core sampling process; details of how Primary Sampling Units (PSUs) were selected are detailed below. The data from the core survey and the booster element can be treated independently of each other, or merged, depending on user preferences. Separate weighting schemes have been constructed for each sample base.

Survey Outcomes

A total of 2,657 interviews were conducted in-home, face-to-face, using traditional pen and paper methods. Interviews were conducted on 2 February–14 April 2013 among a representative sample of each of the target populations. Data have been weighted to the profile of each target population.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Main sample</td>
<td>2,053</td>
</tr>
<tr>
<td>Rural booster sample</td>
<td>604</td>
</tr>
<tr>
<td>Total</td>
<td>2,657</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow rural base</td>
<td>826</td>
</tr>
<tr>
<td>Deep rural base</td>
<td>264</td>
</tr>
<tr>
<td>Combined total rural base</td>
<td>1,090</td>
</tr>
<tr>
<td>Urban base</td>
<td>1,567</td>
</tr>
</tbody>
</table>

Geographical Area Definitions

The core survey was a fully representative sample of the population of Great Britain, aged 14+. The rural booster sample (and rural area PSUs contained within the main sample) were defined using Office of National Statistics (ONS) urban–rural definitions for England and Wales. A separate classification system is used for Scotland. Each definition was labelled as urban, shallow rural, and deep rural on the following basis:

<table>
<thead>
<tr>
<th></th>
<th>Urban 1: Urban – less sparse (Scotland: large urban)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban 2: Urban – sparse (Scotland: other urban)</td>
<td>2</td>
</tr>
<tr>
<td>Shallow rural 3: Town &amp; fringe – less sparse (Scotland: accessible small town)</td>
<td>4</td>
</tr>
<tr>
<td>Deep rural 4: Town &amp; fringe – sparse (Scotland: remote small town)</td>
<td>5</td>
</tr>
<tr>
<td>Shallow rural 5: Village, hamlet &amp; isolated dwelling – less sparse (Scotland: accessible rural)</td>
<td>6</td>
</tr>
<tr>
<td>Deep rural 6: Village, hamlet &amp; isolated dwelling – sparse (Scotland: very remote small towns, remote rural areas, very remote rural areas)</td>
<td>7</td>
</tr>
</tbody>
</table>

Sampling Design

Although the sampling process for both elements of the survey (main sample plus rural booster sample) were sampled separately, the process of selecting PSUs was common to both. Sampling was based on a two-stage design. Firstly a random sample of 105 paired Output Areas (210 OAs) stratified by region was selected on the main sample; a total of 33 paired Output Areas (66 OAs) stratified by ‘deep rural’ and ‘shallow rural’ geographical areas on the rural booster. Then within each selected OA a random sample of 20 addresses was selected from the Postal Address File (PAF), with a further 10 addresses also selected but held back as reserves to be issued upon request.

First Stage: Selection of OA Sample Points

1) Sampling points were allocated to each of the 10 Government Regions in proportion to the population in each region. On the rural booster, sample points were selected in proportion to incidence of deep and shallow rural areas within each region.

2) In each Government Region all OAs were paired with an adjacent OA that is most similar in terms of its ACORN type.

3) Within 2) above, all paired OA were listed in descending order of ACORN type, the most affluent pair at the top of the list and the poorest pair at the bottom.

4) The populations of each set of paired OAs [of all adults aged 14+] were then accumulated down this list. Using a random start and fixed sampling interval the required number of paired OAs was selected giving each OA a probability of selection proportionate to its size.

Second Stage

Within each selected OA, interviewers were issued with 20 randomly selected addresses from which they were asked to achieve a minimum of a 50% response rate. An additional 10 addresses were issued to be used in full or in part only if their required number of interviews could not be achieved with the original 20 addresses. Interviewers had to contact the office to request them before they could be issued.
Response Breakdown

<table>
<thead>
<tr>
<th></th>
<th>Main</th>
<th>Rural booster</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of primary sample points (PSUs):</td>
<td>210</td>
<td>66</td>
<td>276</td>
</tr>
<tr>
<td>Total (base) sample addresses generated:</td>
<td>4200</td>
<td>1320</td>
<td>5520</td>
</tr>
<tr>
<td>Pre failure to cover PSU (9/7 PSUs x addresses)</td>
<td>-180</td>
<td>-140</td>
<td>-320</td>
</tr>
<tr>
<td>Total addresses issued to interviewers before substitutes:</td>
<td>4220</td>
<td>1180</td>
<td>5400</td>
</tr>
<tr>
<td>Substitute addresses issued:</td>
<td>201</td>
<td>20</td>
<td>221</td>
</tr>
<tr>
<td>Addresses not used (In-PSU failure):</td>
<td>-76</td>
<td>-27</td>
<td>-103</td>
</tr>
<tr>
<td>Total number of addresses visited:</td>
<td>4145</td>
<td>1173</td>
<td>5318</td>
</tr>
<tr>
<td>Successful interviews:</td>
<td>2053</td>
<td>604</td>
<td>2657</td>
</tr>
<tr>
<td>Preliminary Response rate:</td>
<td>49.5%</td>
<td>51.5%</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

REFUSALS:
- Soft refusal: 143 71 214
- Hard refusal: 975 214 1189
- Non respondent refusal: 138 57 195
- Quit interview refusal: 11 16 27
- NO CONTACT:
  - Cursory contact household level: 183 34 217
  - No contact after 3+ visits: 517 87 604
- INELIGIBLE PROPERTY:
  - Business address: 1 10 11
  - Holiday home: 0 11 11
  - Vacant property: 36 9 45
  - Under construction: 1 0 1
  - Institution: 13 1 14
  - Non-existent property: 74 59 133
- ELIGIBLE ADDRESSES: 4020 1083 5103
- Final response rate: 51.1% 55.8% 52.1%

Weighting: Sample Type Weighting Targets

<table>
<thead>
<tr>
<th>Britain (%)</th>
<th>Rural (net) (%)</th>
<th>Shallow rural (%)</th>
<th>Deep rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>49.3</td>
<td>49.4</td>
<td>49.2</td>
</tr>
<tr>
<td>Age</td>
<td>14-17</td>
<td>18-24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.5</td>
<td>3.6</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>11.2</td>
<td>7.9</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>16.2</td>
<td>10.8</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>16.0</td>
<td>15.4</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>16.8</td>
<td>19.2</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td>13.8</td>
<td>17.3</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>10.9</td>
<td>13.5</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td>8.8</td>
<td>7.5</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td>2.8</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Region</td>
<td>East Midlands</td>
<td>East of England</td>
<td>London</td>
</tr>
<tr>
<td></td>
<td>7.4</td>
<td>14.2</td>
<td>15.4</td>
</tr>
<tr>
<td></td>
<td>9.7</td>
<td>6.6</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>11.4</td>
<td>8.6</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>8.5</td>
<td>12.7</td>
<td>33.9</td>
</tr>
<tr>
<td></td>
<td>14.1</td>
<td>14.9</td>
<td>17.0</td>
</tr>
<tr>
<td></td>
<td>8.7</td>
<td>13.9</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>8.3</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>9.0</td>
<td>6.7</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>8.8</td>
<td>8.3</td>
<td>8.6</td>
</tr>
<tr>
<td>ACORN Group</td>
<td>A - Lavish Lifestyles</td>
<td>B - Executive Wealth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.4</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.0</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.8</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14.9</td>
<td>13.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.7</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.8</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.7</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.5</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.0</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.1</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Urban rural</td>
<td>1. Urban – less sparse (Scotland: large urban)</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>76.0</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Urban – sparse (Scotland: Other urban)</td>
<td>71.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.8</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Town &amp; fringe – less sparse (Scotland: Accessible small town)</td>
<td>49.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.0</td>
<td>49.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Town &amp; fringe – sparse (Scotland: Remote small town)</td>
<td>56.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.7</td>
<td>56.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Village, Hamlet &amp; isolated dwelling – less sparse (Scotland: Accessible rural)</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.6</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Village, Hamlet &amp; isolated dwelling – sparse (Scotland: Very remote small towns, Remote rural areas, Very remote rural areas)</td>
<td>88.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.9</td>
<td>88.8</td>
<td></td>
</tr>
</tbody>
</table>

Selection of Respondent

At each address respondents for interview were selected by asking the person who answered the door if it would be possible to interview the person normally resident at that household aged 14 or over with the next birthday.

A person normally resident was defined as someone living in the household who is related to the person answering the door or living with someone in the household as a partner. In cases where the person answering the door did not know which household member had the next birthday a respondent was selected by choosing the person with a first name starting with a letter nearest the beginning of the alphabet. This rule was employed by interviewers on the first such occasion, and a person with a first name starting with a letter nearest the end of the alphabet on the second such occasion and so on. In all, only 124 respondents (5% of the total sample) were selected by the alphabet rule.
Weighting Limitations

The main Great Britain sample was weighted to all the variables shown with an efficiency of 63.1%. For Rural areas as a whole (base 1090) the data were weighted by gender, age, region, rurality (shallow/deep), ACORN, and household size, with weighting efficiency of 62.1%. For the shallow rural sample (base 826), the data were weighted by gender, age, region, rurality (less sparse/sparse), ACORN, and household size with a weighting efficiency of 61.6%. For the deep rural sample (base 264), the very small base implied that we had to cut out ACORN and rurality from the weighting scheme due to low levels of weighting efficiency. The data were weighted to gender, age, region, and household size only, with a weighting efficiency of 60.3%.

B. Identifying Cultures of the Internet

Identifying the five cultures of the Internet was a three-step process. First, using principal components analysis (PCA), we constructed a set of cultural dimensions from 14 variables measuring attitudes toward the Internet. After varimax rotation, four components showed eigenvalues above 1.0 (see the table below). We named them Enjoyable escape, Instrumental efficiency, Problem-generator and Social-facilitator. This solution is based on 1,448 of Internet users who had no missing values on the 14 Internet attitude variables.

PCA Items and Factor Loadings

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item (Agreement with statement)</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyable escape</td>
<td>Going online helps me escape from things I would rather not deal with.</td>
<td>0.4882</td>
</tr>
<tr>
<td></td>
<td>Going online helps me pass the time when I am bored or have nothing to do.</td>
<td>0.4443</td>
</tr>
<tr>
<td></td>
<td>When I am online I don’t feel lonely.</td>
<td>0.4121</td>
</tr>
<tr>
<td></td>
<td>I just enjoy being online to see what comes up.</td>
<td>0.4034</td>
</tr>
<tr>
<td>Instrumental efficiency</td>
<td>Going online is an efficient means for finding information.</td>
<td>0.8008</td>
</tr>
<tr>
<td></td>
<td>The Internet makes life easier.</td>
<td>0.4661</td>
</tr>
<tr>
<td></td>
<td>The Internet helps me save time.</td>
<td>0.3799</td>
</tr>
<tr>
<td>Problem-generator</td>
<td>It is difficult to delete personal information once it is online.</td>
<td>0.5350</td>
</tr>
<tr>
<td></td>
<td>The Internet is frustrating to work with</td>
<td>0.5010</td>
</tr>
<tr>
<td></td>
<td>There is too much immoral material online.</td>
<td>0.4624</td>
</tr>
<tr>
<td></td>
<td>Dealing with email takes up too much time.</td>
<td>0.4518</td>
</tr>
<tr>
<td>Social-facilitator</td>
<td>People can find personal information about me online.</td>
<td>0.7254</td>
</tr>
<tr>
<td></td>
<td>Going online allows me to keep in touch with people.</td>
<td>0.3861</td>
</tr>
<tr>
<td></td>
<td>It is easier for me to meet people online than in person.</td>
<td>0.3254</td>
</tr>
</tbody>
</table>

Second, to identify groups of people who share their beliefs about the Internet, we generated factor scores for each dimension and used cluster analysis to indicate how respondents grouped. We looked for a similarity measure and distance metric that generated a small number of well-defined clusters. After trying several methods, we found that Ward’s Method with squared Euclidean distances produced the most interpretable clusters.

Third, to characterise each group of Internet users, we positioned them along the four cultural dimensions. Our procedure was to calculate the percentage of respondents in each cultural group who had factor scores above the mean (see the table below).

Cultural Groups’ Characteristics

<table>
<thead>
<tr>
<th>Culture Dimension</th>
<th>e-Mersive</th>
<th>Techno-pragmatist</th>
<th>Cyber-savvy</th>
<th>Cyber-moderates</th>
<th>Adigital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyable escape</td>
<td>99%</td>
<td>35%</td>
<td>100%</td>
<td>39%</td>
<td>3%</td>
</tr>
<tr>
<td>Instrumental efficiency</td>
<td>88%</td>
<td>97%</td>
<td>63%</td>
<td>26%</td>
<td>12%</td>
</tr>
<tr>
<td>Problem-generator</td>
<td>0%</td>
<td>28%</td>
<td>90%</td>
<td>47%</td>
<td>78%</td>
</tr>
<tr>
<td>Social-facilitator</td>
<td>79%</td>
<td>81%</td>
<td>81%</td>
<td>30%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Note: Cells where over 50% of the respondents in a cultural group agreed with the dimension are highlighted in grey.