Project Authors: Rick Williams and Steve Brownlow

Freeney Williams Ltd / Click-Away Surveys Ltd

Brighton, December 1st 2016

The Click-Away Pound Report 2016

Assessing the online shopping experience of customers with disabilities, and the costs to business of ignoring them.

Contents

Foreword by Susan Scott-Parker OBE

I think you will find this report surprising, if, like me, you naively assume that customers matter to the average business…isn't it only logical to make it as easy as possible for as many people as possible to spend their money with you?

Apparently not.

It seems I am woefully out of touch with the reality of modern business. Apparently, there are so many customers to go around that UK business has decided it can ignore the 15% - 20% with disabilities, ignore the 10% of consumers who are dyslexic, ignore the older customer with visual impairments, ignore the fact that the average reading age in the UK is between 9 and 11 years of age….and …

For some reason I just can't fathom, it has been decided to make it needlessly difficult for millions of us to spend our money.

The Click Away Pound report makes it clear that either customers do not matter to most companies, or that somehow business leaders are so completely out of touch that they don't understand the impact of disability and aging on their customers and potential customers.

Have they simply not noticed that they have an aging customer base – not just in the UK but in major markets worldwide from Europe to Japan to the USA?

Why don't they care that with age come the visual and dexterity and other impairments that get in the way when trying to shop on badly designed websites?

Have they really not noticed how many customers are affected and 'clicking away'? – that, for example, there are more blind internet users in the USA than there are people online in Spain?

Can it be possible that they don't realise how the digital channels which they see as so liberating, cost effective and 'cool' – are

experienced by millions of consumers as hostile, time-wasting and 'aggravating'?

With luck this report will make it much more difficult for the average business to justify the status quo – if logic doesn't work then hopefully these research findings will do the trick:

- Most disabled and older customers are 'clicking away' from badly designed online shopping sites as they look for sites that are accessible and usable …and most commercial sites are badly designed.
- Sites that are accessible and usable for those the CTO regards as 'extreme' users will work better for every customer. Sites that are accessible for dyslexic customers, for example, are easier to use by people with English as a second language.
- And yes, these customers have money to spend. This report shows some £11.75 billion is up for grabs…

Add to the equation the minimal costs associated with good website design and surely we come back to the logic: "why would anyone make it needlessly difficult for so many potential customers to spend their money? "

Any senior business leader wishing to deliver excellence at every stage of the customer experience for as many customers as possible now has even more 'ammunition' to use when persuading colleagues to up their digital game …not because the law requires it (which by the way it does) but because the business rationale for meeting the needs and expectations of such a large and growing customer base - which then makes it easier for every customer - is logical… isn't it?

Am I missing something here?

Susan Scott-Parker, OBE

CEO, Business Disability International

Executive Summary

- 71% of disabled customers with access needs will click away from a website that they find difficult to use.

- Those customers who click away have an estimated spending power of £11.75 billion in the UK alone, around 10% of the total UK online spend in 2016.

- 82% of customers with access needs would spend more if websites were more accessible.

In the UK in 2016, around 6.1 million internet users have impairments that affect the way they use the Internet. Those 6.1 million people will spend £16.55 billion online this year.

The Survey shows that over 80% of these customers will spend their money not necessarily on the website that offers the cheapest products, but where fewest barriers are placed in their way. In fact, 71% of these customers will click away from websites that do not cater for their access needs.

Those customers who click away have an estimated spending power of £11.75 billion in the UK alone; that is almost 10% of the projected total UK online spend in 2016[1].

Selling online offers global opportunities but also global competition. Providing services with access barriers to millions of people in the UK equates to tens of millions through Europe and hundreds of millions worldwide.

Most businesses will be unaware that they are losing income because more than 90% of customers who have difficulty using a site will not contact them. Unless businesses actively develop an understanding of accessibility, many will be unaware that the barriers even exist. Yet it is within the control of website owners to take down the barriers which are actively discouraging disabled and older customers.

---

[1] £126 billion by the beginning of 2016 (IMRG Capgemini: *e-Retail Sales Index*. 2015)

Section 1: Introduction and Background

It is generally accepted that the internet has the potential to revolutionise disabled people's life chances, independence and social engagement. As long ago as 2004, the former Disability Rights Commission (DRC) produced a major report on this issue in the UK which concluded, *"Most websites… have characteristics that make it very difficult for people with certain impairments… to make use of the services provided."* [2]

Despite the work of the Web Accessibility Initiative, UK legislation, Government guidelines, a British Standard, as well as pressure from disabled people and their organisations, the potential offered by the internet to disabled people remains largely unfulfilled.

Freeney Williams Ltd has been assessing websites for accessibility and usability for more than 12 years and our experience suggests that the situation reflected in the DRC report remains much the same. In that time, we have been invited to review over 120 sites from both the private and public sectors, and assessed more than 70% of them as 'red' on our traffic light system; indicating that the organisations responsible for those sites are exposed to potential commercial loss, PR damage and legal challenge. Yet, despite this assessment being made available to those site owners, only a handful of organisations did anything about the issues.

> "Many companies do not seem interested if accessibility issues are raised with them. It's as if they don't value the custom of the disabled person, assuming that they don't need us."

By contrast, after 20 years of legislation most high street stores in the UK understand that they need to take the needs of their disabled shoppers into account, even if they don't always get it right. Although the same law applies to

---

[2] Disability Rights Commission: *"The Web: Access and Inclusion for Disabled People"*, 2004.

their online presence, many of the same businesses seem oblivious to the need to make their websites and apps accessible.

Customer experience demonstrates the low level of priority given by businesses to accessibility, perhaps because the mistaken perception remains that accessibility issues affect a small number of visually impaired people. Although visual impairment is the most obvious barrier which can impact on someone's ability to use what is still thought of as a predominantly visual medium, people with a wide range of auditory, physical, cognitive, neurological and speech disabilities also demand consideration. Taken together, there are very significant numbers of people with a broad range of impairments who face barriers and frustrations when using the internet. Yet no user with any of these impairments need be excluded if their access needs[3] are considered appropriately.

> Based on this Survey's findings, we estimate that 6.1 million disabled
> internet users in the UK have access needs.

If the law, advice, guidance and campaigning has not persuaded business of the need for universal access to websites then perhaps the argument needs more commercial clarity. The Survey quantifies the commercial implications of this issue to show that e-retailers ignore disabled shoppers at a direct risk to their balance sheet and their brand reputation.

> "Using the internet for disabled people should, in theory, improve their lives but... so many sites are poorly designed and it makes me feel like they don't care about me as a customer; indeed, some sites make me feel like my access needs, and by extension me, are irrelevant."

The Click-Away Pound Survey is designed to inspire positive change among UK businesses as the move to selling goods and services online grows ever faster.

---

[3] Those needs which arise because of the effects of someone's disability when interacting with a website or app.

Survey Methodology

Based on our experience of website testing over the past 12 years, we are aware of the typical issues experienced by many disabled people when using websites. We used this experience to develop an online survey which sought to gather information about disabled internet users':

- age and geographical location
- devices used and technical skills
- market sectors in which users shop regularly
- typical spend by month and year
- experiences and barriers encountered during the shopping process
- users' reactions to inaccessible or difficult-to-use sites
- projected behaviours if sites were more accessible

We also encouraged participants to add their own comments about their online experience. Some of these have been used to illustrate the personal impact of the issues raised throughout the report, while others appear in several User Profiles in Appendix 1.

In developing our approach to the Survey, we decided that we would not use someone's impairment as the starting point of the research. We felt that the wide variety of factors which might have an adverse impact within any given impairment would make this unfeasible. Instead, the Survey focusses on the barriers that users with impairments find on retail websites, and on what customers do when they come across them.

The Survey was preceded by a pilot study which provided us with the opportunity to test out both its accessibility and whether it gave the baseline data needed to undertake the analysis. After some amendment, the Survey was launched on 14 January 2016 and closed on 8 July 2016. The Survey was completed by 362 participants with 280 being from the UK and 82 from overseas. It is important to recognise that results from surveys are estimates and not precise figures.

It should be noted that the data was analysed to see if respondents' location (either within the UK or from outside) made any difference to the issues and

outcomes identified. We found that there was a remarkable degree of consistency in the responses irrespective of where participants live, and therefore we have not separated out the results by location.

The survey was carried out entirely online using the BOS Survey tool developed at the University of Bristol. The Survey was launched from a dedicated website at ClickAwayPound.com, and participation was sought through website promotion, word of mouth, disability organisations and networks, social media and publicity through supporting organisations, e-mailshots and briefings at events. Participants were entirely self-selecting.

The development of the survey and resulting report was supported by Enterprise Rent-A-Car and by a Steering Group of representatives from interested organisations and individuals with specialist interest, knowledge and experience in the field of such research (see acknowledgements section for a list of our supporters).

In interpreting the Survey responses for this report, we have included our observations and understanding of the issues based on our work and experience. This places the analysis into a practical framework from which organisations may begin to consider their next steps.

Website accessibility and usability

There are two interrelated issues for disabled people with access needs when using a website – its accessibility and its usability. In general terms:

- Accessibility considers how the technical aspects of a site such as coding and structure might affect the user who relies on assistive technology or adapts a site to their needs. Accessibility is assessed against the Web Content Accessibility Guidelines (WCAG2).
- Usability considers how users with disabilities interact with the site in practice. Usability, however, has no established standards and can only be measured against what is perceived to be good practice. Nevertheless, usability is equally important because it is possible for a site to be 'accessible' in terms of the WCAG standard but very difficult to use in practice for a disabled user.

These issues are not mutually exclusive, and either or both can affect disabled users. Indeed, it would be usual to find that a website which presents disabled users with access barriers also exhibits overlapping accessibility and usability issues. Nevertheless, throughout this report we have used the word 'accessibility' to mean both accessibility and usability.

Standards

There are internationally recognised standards for accessibility of websites. The generally recognised benchmark is the Web Content Accessibility Guidelines 2.0 (WCAG2) published in December 2008 by the World Wide Web Consortium (W3C) through its Web Accessibility Initiative (WAI). WCAG2 became an ISO[4] standard in 2012.

The first British Standard to address the issue of digital accessibility was issued in late 2010. BS 8878:2010[5] is designed to introduce non-technical professionals to the idea of a digital accessibility framework and the processes necessary to

---

[4] International Organisation for Standardization; ISO/IEC 40500:2012
[5] British Standards Institution; BS 8878:2010, *Web Accessibility Code of Practice*

improve accessibility, usability and user experience for disabled and older people.

Accessibility Testing

There are several accessibility evaluation tools available that can be useful during the design and development phases of a project. Careful application of these tools in knowledgeable hands during the early stages of development can help to prevent accessibility barriers, saving time and effort later in the process. However, developers need to be aware of the limitations of such tools. Many tests can only be conducted manually, and automated testing needs knowledgeable interpretation to be effective. Even when it is carried out with care and authority, accessibility testing cannot reveal the full picture on its own; it needs to be combined with testing by users with disabilities. Ultimately there is no substitute for authoritative human judgement and the involvement of people with disabilities in determining how accessible and usable any site might be in practice.

Usability Testing

It is not enough to simply seek to comply with accessibility standards. A website can pass all the standard accessibility tests and yet still present significant barriers to some disabled people with a range of access needs. This is where usability testing is required and which uses task based testing by people with varying access needs and using a variety of Assistive Technology. These might include, for example, visually impaired people using text-to-speech applications (screenreaders) or magnification software, others with Dyslexia, learning difficulties, or disabilities which make it difficult or impossible to use a mouse; all of which affect how someone might interact with a website.

Who is affected

It is not straightforward to define precisely what types of disabilities might, as a matter of course, cause users to experience barriers when using the internet.

The variation in people's conditions, their specific access needs, level of competence, personal preferences and attitudes, and changing needs over time, all have an impact on potential barriers. However, from our experience it is possible to identify, in general terms, what types of disabilities are potentially more likely to experience barriers unless a website is overtly designed to be accessible and usable. The extent to which an accessibility issue becomes a barrier will often vary with the individual and the degree to which they can work their way around the problems placed in their way.

However, this doesn't help businesses understand the size of the issue and the potential implications for their business. For ease, therefore, and recognising the limitations of such generalisation, there are impairments the effects of which are more likely to encounter barriers when using the internet.

- Visual impairment: varying degrees of vision and issues such as colour-blindness
- Hearing: varying degrees of hearing and hearing loss
- Manual dexterity: limited ability to use a mouse, keyboard or touch screen
- Neuro-diversity: such as dyslexia, autism, learning disabilities, Asperger syndrome, etc.

The Department of Work and Pensions (DWP) statistics from 2014-2015 [6] (for which disability is self-reported) recorded the numbers of people who placed themselves in these categories of disability as follows:

- Visual impairment: 1.8 million
- Hearing: 1.9 million
- Manual dexterity: 3.8 million
- Neuro-diversity: 2.4 million

Statistics in this field vary widely and the DWP figures are usually seen as conservative. These statistics are significant even though not everyone in each category will have internet access or online access needs. By contrast, given the way the statistics are collated and recorded, other impairments that could create

6 Department of Work & Pensions: *Family Resources Survey for 2014/15. June 2016*

access needs might be omitted. Indeed, other organisations make significantly higher estimates of the numbers of people who might be affected by disability. One fact that is not disputed is that the number of people is growing.

In addition, the UK has, in line with many other countries, an ageing population with a consequential increase in the levels of age-related impairments. According to ONS, in mid-2015 there were more than 11.6 million people (17.7% of the population) over the age of 65 [7]. ONS estimates that this figure will increase by 6.1% by 2039. ONS also estimates that 45% of people over 65 have a disability. If the same trends apply as currently illustrated in the Survey, 71% of this group with internet access will have associated access needs when shopping online – in effect the same issues but bigger numbers. Consequently, businesses need to consider the accessibility of their digital presence as an integral part of customer care strategy; not doing so fails both the online customer with access needs and the business itself.

Critically, the Survey takes an approach that is less concerned with the nature of an individual's impairment as much as the effect of that impairment on the person's ability to use a website. It analyses and assesses the effect of inaccessible websites by analysing the experiences of disabled shoppers and their consequent behaviour.

---

[7] Office of National Statistics: *Population Estimates*. June 2016

The Rationale

The business benefits of ensuring barrier-free websites for disabled people have been highlighted from the earliest days of the internet, but the arguments have failed to deliver ease of use for everyone. As mentioned above, the former DRC reported on this issue as long ago as 2004 and sought to exert pressure on companies and the government to make their websites accessible. The DRC warned that organisations would face legal action and the threat of unlimited compensation payments if they failed to act in this area. 12 years later these 'threats' have not materialised and lack of accessibility remains a major issue. This is despite specialists and experts in the field emphasising the positive business implications of barrier-free websites, such as maximising universal ease of use, enhancing brand reputation for inclusivity, minimising reputational and legal risk, and increasing potential market share.

The approach to date has relied on generic business case arguments with no quantifiable link between having a barrier-free website and the direct impact on business. Within this context, the Click-Away Pound Survey sets out to:

- establish the link between potential spend in the UK and the accessibility and usability of a website
- identify the number of potentially lost customers where a site is not accessible
- illustrate the potential spend which might be lost to those with inaccessible websites and which goes to competitors whose sites are accessible
- reveal the behaviours and attitudes of disabled people when faced with a problematic website

Section 2 of this report sets out the detailed findings of the Survey whilst this Section puts them into the wider business context.

The components of the business case

There are three key aspects to the broader business case: Legal, Public Relations, and Commercial. These three issues are, of course, inter-related but are worth considering individually.

Appendix 2 discusses the legal issues and risks for UK companies associated with an inaccessible digital product. In reality, the risks are relatively low in the UK. To make a case a customer would need to demonstrate a breach of the Equality Act which affected them personally and this would need to be done in a County or High court which would be expensive and time consuming. No cases in this field have been pursued to their conclusion; the RNIB has initiated several cases against businesses with inaccessible sites but the cases were settled out of court, with the organisations involved agreeing to address the issues. The lack of cases coming to court probably explains why the law has had little impact in this area since its introduction (in the form of the Disability Discrimination Act) in 1995, although challenges are always a possibility. In the USA, the *Americans with Disabilities Act* and *Section 508 of the Rehabilitation Act of 1973* allows for class actions and the imposition of much higher compensation payments. Even so, the US approach has not delivered a fully accessible web presence.

There are potential public relations risks if website accessibility is ignored and this has implications, albeit limited, for loss of reputation. Any business strategy based on customer-focus and inclusivity is quickly undermined by an inaccessible or hard-to-use website. Such stories are unlikely to generate the level of mainstream media coverage that might result in PR damage unless a legal challenge is mounted. Nevertheless, they do attract attention on social media and generate negativity about the business's understanding of disability issues which can be damaging to the brand, long-lasting and hard to reverse.

In 2015, the Extra Costs Commission[8] report published by Scope indicated that 75% of disabled shoppers 'walked away' from a business because of poor customer care and lack of understanding of their needs. Similarly, one of the headline figures from the Click-Away Pound Survey is that 71% of disabled people 'click away' from a website which presents access barriers and look for

---

[8] Extra Costs Commission: *Final Report*. Scope, March 2015

another supplier. Both surveys indicate that there are significant potential losses of disabled customers and income where the issue of inclusiveness is not addressed. This goes largely unnoticed by the business as a large majority of those who experience website barriers don't raise the issue with the organisation - the Survey found that 93% of disabled users who came across a website with access barriers did not bother to contact the Helpline.

> "It's about time retailers and service providers realised that people with disabilities have money to spend and that we aren't second class citizens."

The Scale of the Click Away Pound

Considering the trends identified in the Survey and applying them to the national data is illuminating.

- The most recent estimate of the UK population by the Office of National Statistics (ONS) is 65.11 million in mid-2015 [9]. 52.87 million are aged over 16, of whom 87.9% (46.47 million) have internet access [10].

- In 2016, ONS estimated there were 8.6 million internet users with a disability in the UK [11].

- This Survey found that 71% of internet users with a disability have access needs; this translates to 6.1 million people (Figure 1).

---

[9] ONS. *UK Population mid-year estimate 2015*. June 2016
[10] ONS: *Statistical Bulletin: Internet Users in the UK*. May 2016
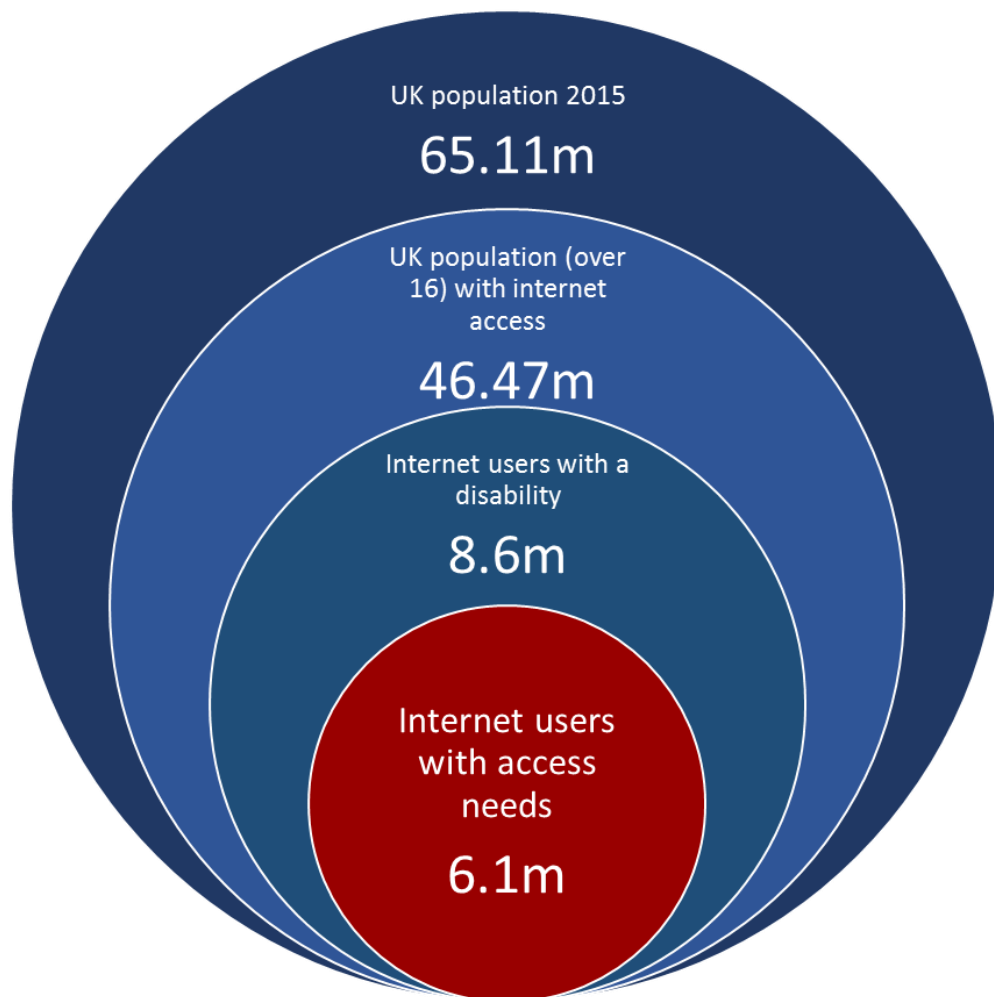[11] Ibid.

Figure 1: UK Internet users with access needs.

- CAPGemini projected overall UK online spending to be £126 billion by the beginning of 2016 [12] equating to an average spend per person over 16 in the UK with internet access of £2710.

- Taking an average spend per head of £2710, the online spending power of 6.1 million disabled people with access needs in 2016 is £16.55 billion.

- The Survey found that 71% of the total 6.1 million disabled internet users with access needs (4.3 million people) simply click-away when confronted with a problematic website.

- These figures equate to a click-away figure in the UK alone of £11.75 billion lost in 2016 from those sites which are not accessible (Figure 2).

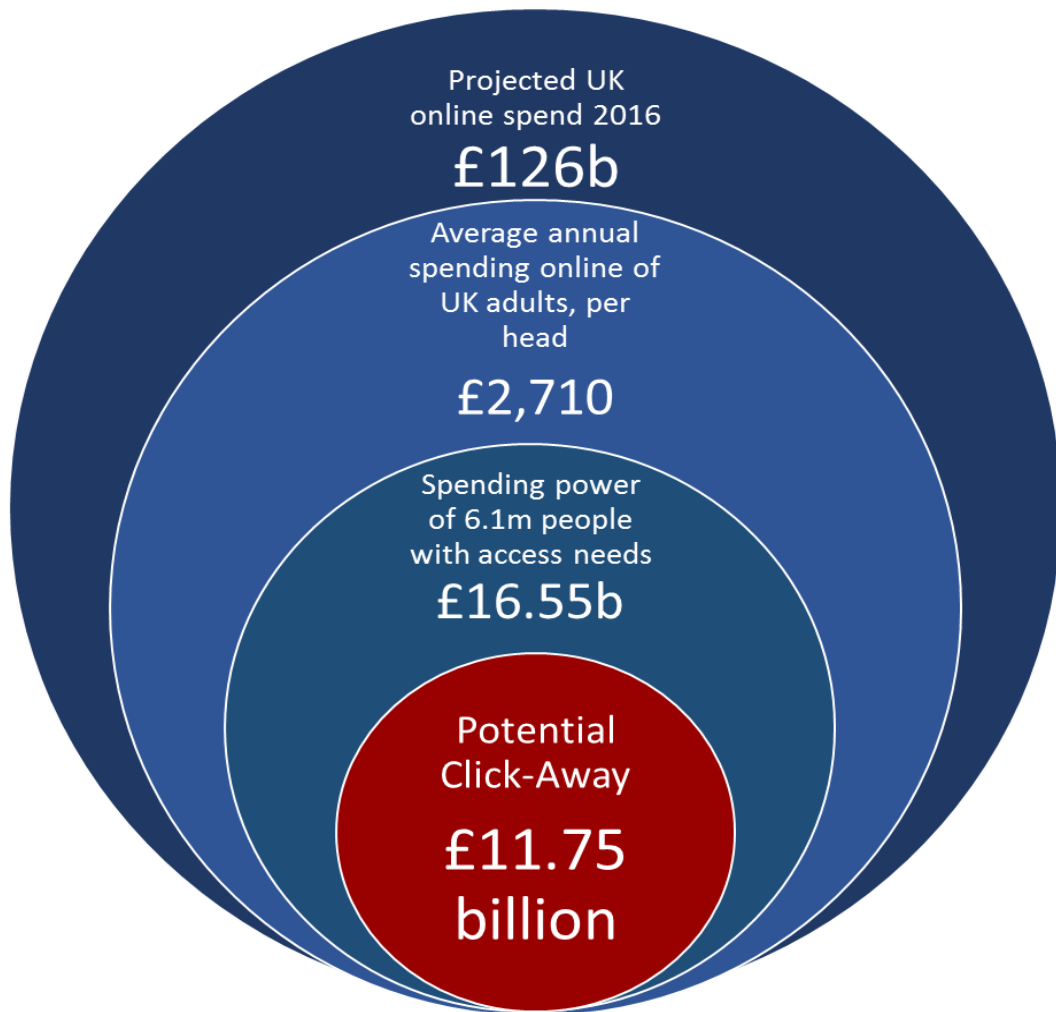[12] IMRG Capgemini: *e-Retail Sales Index*. 2015

Figure 2: Potential re-directed spending because of inaccessible websites

These calculations are extrapolated from the Survey's findings so care must be taken when considering them. Nevertheless, these figures are so large that even allowing for a significant margin of interpretation they are too large to be ignored.

This assessment is supported by findings from our wider work in this field which indicates that over 70% of websites present significant accessibility and usability barriers to disabled users. This means that over two-thirds of businesses are significantly undermining their own potential online customer base. This spend is not lost but simply moves elsewhere as disabled users with access needs turn to a website which is more user friendly. Two-thirds of online retailers are passing customers and sales to their competitors.

What about the costs?

The additional cost of building accessibility into a new website is minimal. Developers already work to recognised coding standards for HTML, CSS, JavaScript, PHP, etc. and could be working to accessibility standards in the same way. The testing process, likewise, should include accessibility and usability testing alongside the validation and conformance processes that are an accepted part of any development programme.

Some additional testing costs might be incurred in user testing and accessibility expertise. The cost of such expertise and testing will vary depending on the size and nature of the site but an indicative figure would be around £5000 per site[13] and could be far less if expertise is developed in house. A best-practice approach would also undertake research into user experience (mystery shopping and so on) in line with that carried out for non-disabled customers. Additional costs would represent a marginal increase in the overall development budget.

What is incontrovertible is that it is significantly easier and more cost-effective to develop a website to be accessible from the start, rather than retrofitting accessibility and usability after it has gone live.

The fundamental requirements are an understanding of the issues from both the commercial and the customer care viewpoints, effective underpinning management protocols, having access to expertise to ensure the issues are addressed and, most importantly, a management approach which recognises accessibility as a necessity.

Conclusion

In answer to the question 'Is there a business case for making it easier for more customers to engage with a retailer's website, the answer is an unequivocal 'yes'.

---

[13] The estimated cost of outsourced accessibility expertise; to include accessibility testing of a representative selection of site pages against WCAG2, user testing by a panel of disabled people, and a collated report of findings.

A brief look at the numbers in this report should be enough to persuade organisations that they are excluding millions of potential customers. Businesses also need to bear in mind that if a disabled shopper clicks away from their site to one of their competitors, they show little inclination to return.

> "I would love to expand where I shop for ethical reasons, but often find myself unwilling to leave the comfort of a site I know well."

Section 2: Survey Findings

Introduction

This section analyses the findings of the Survey in key areas of participants' experiences, spend and behaviours when shopping online. Before doing so, however, there are several issues which should be born in mind.

For the purposes of the Survey and report we have defined 'users with access needs' as those participants who said that their disability "has an impact on the way they use the Internet".

> 71% of survey participants said their disability had an impact on their internet use.

The report considers participants in three main categories:

- People with access needs who use assistive technology (AT)
- Those with access needs but who do not use AT
- Those whose disability does not have an impact on their internet use and therefore have no specific access needs.

In this section of the report, we discuss some of the key issues for these three categories of respondent. We have discussed these issues separately although there are overlaps where individuals develop their own techniques and work-arounds.

Assistive Technology

There is a wide variety of assistive technology (AT) which is designed to help disabled people to interact with computers in general and the internet in particular. However, for the purposes of the Survey we have interpreted the term to cover the four main types of AT readily available and in widespread use to help users with a range of impairment types to overcome barriers in the digital world; screen readers, screen magnifiers, refreshable braille, and speech dictation. Participants were also given the opportunity to identify other types of AT they used for online shopping and these are included in the analysis.

> 53% of all survey respondents use some form of Assistive Technology

53% of all survey participants use some form of AT. 58% of respondents who use any form of assistive technology are using a screenreader (see Table 3).

The specific type of AT used by an individual will depend first and foremost on the effect of their disability, but also on other factors such as:

- Their main device (desktop PC, laptop, tablet, smartphone)
- AT compatibility with any given device
- The wider uses required from the device
- Cost and availability

Whilst much AT is effective and enables a person with access needs to use the internet and IT more broadly, all of it has limitations which depend on a range of factors including:

- AT design and functionality
- The device and OS in which it works
- The programmes which the user wishes to use
- The competence, confidence and attitudes of the user
- The hardware on which it is installed

A proportion of AT users might need to combine technologies. For example, someone might need to use speech input with speech output, screen

magnification together with speech output, soft braille with speech output and so on.

With AT as with other software, there are always likely to be legacy access issues. Not all AT users will be using the latest version of their software or hardware. In a survey of screenreader users, WebAIM recently reported that 18% of users had not updated their primary screenreader in the previous year and that… "many users may still be using screenreaders that are several years old".[14] AT essentially must play 'catch up' with new developments in operating systems, browser development, website design and innovation. AT should be regularly updated to ensure it maintains an optimum working relationship with new software, hardware and web technologies. Where AT software is paid for, users are less likely to update with the same regularity because of the cost.

Increasingly, new devices come with AT built in at no extra cost. *VoiceOver* features on all Apple devices, while Android phones include the Google screenreader *TalkBack*. Microsoft has further developed the inbuilt accessibility features of Windows, including an updated version of their *Narrator* screenreader; this is receiving positive feedback and forms part of Microsoft's new initiative in the field of IT accessibility.

It is true to say that without AT many people would be unable to use the internet or shop online. However, it is not an automatic solution to access needs. AT has its limitations which are magnified by the environment in which it works. The design of a website plays a key role in access to online shopping. No matter how sophisticated or efficient AT might be or how competent its user, unless a website is designed and developed to take access needs into account, the capacity of AT to overcome access barriers will always be limited.

---

[14] WebAIM: *Screen Reader User Survey #6*. Utah State University, July 2015.

Main device usage

The Survey sought to establish the hardware context of respondents' internet usage. For UK respondents in 2016, 75% of people with access needs who also use AT are doing so either on desktop or laptop computers. Amongst screenreader users, this rises to 83%.

Table 1: Most commonly-used devices for online shopping (UK only).

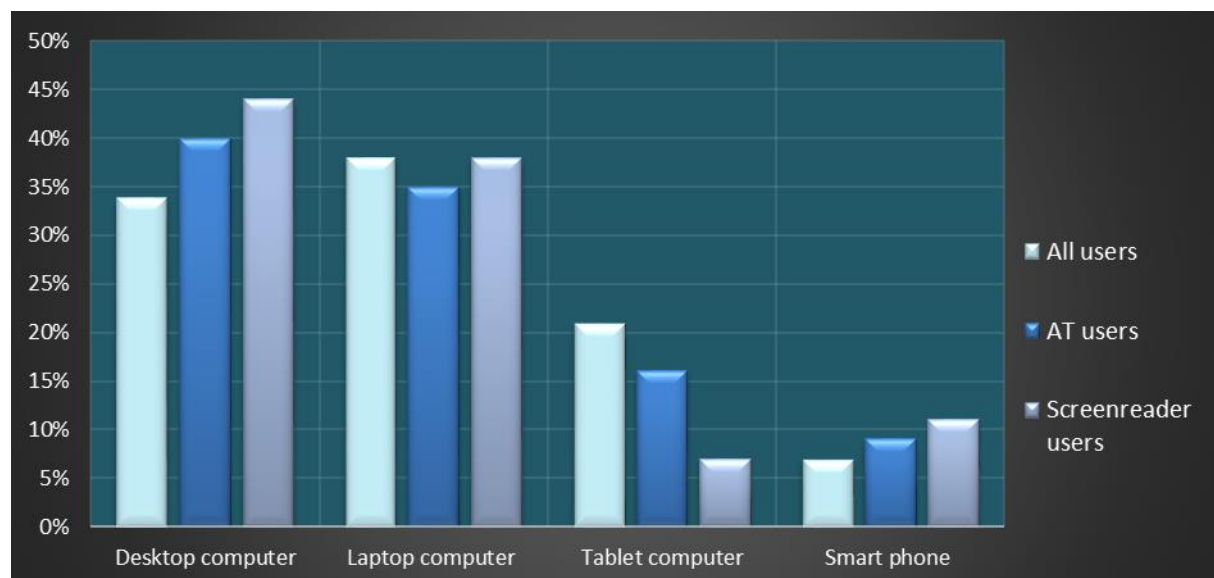| Preferred device	All respondents	AT users	Screenreader users
Desktop computer	34%	40%	44%
Laptop computer	38%	35%	38%
Tablet computer	21%	16%	7%
Smart phone	7%	9%	11%
Total	100%	100%	100%

Figure 3: Most commonly used devices for online shopping (UK only)

The relatively low use of tablets for online shopping amongst UK screenreader users is noticeable when compared to the Survey responses as a whole. Tablet usage stands at 21% of all respondents, 16% of AT users, and just 7% of screenreader users. Several users made comments about the additional accessibility and usability barriers they had found when using mobile platforms.

> "I use pinch zoom heavily. A common issue for me is with sites which do not allow pinch zoom on a tablet."
>
> "Sometimes using the app is better than using a website because it's been made a lot simpler, but even so the lack of descriptions is usually bad."

Smartphone usage reverses the trend of tablet usage, with a higher proportion of screenreader users (11%) using a smartphone compared to the baseline of all respondents (7%). This tendency is most likely due to the success of new devices with built-in screenreaders as we mentioned earlier. As technology continues to develop, it will be interesting to see how these outcomes change.

Access Barriers

For the purposes of the Survey, access barriers are defined as website issues which may at best disadvantage or at worst exclude people who have disabilities that affect the way they are able to use the internet (i.e. people with access needs).

> 73% of participants with access needs experienced barriers on more than a quarter of websites they visit for the first time; a third experience such barriers on more than half of websites.

The focus of this Survey is on the impact of access barriers on users with disabilities. Therefore, we asked participants to tell us about the effect of their disability on website access rather than ask them about the nature of their disability. The Survey made no assumptions about the individual user's impairment and its effect, not least because respondents may have multiple disabilities and any website issue or combination of issues may create a barrier for users across a range of impairments.

The user's familiarity or level of expertise with their main device cannot be seen as a complicating factor in the user's experience of website barriers, as 97% of

respondents rated their proficiency on their preferred device as 'advanced' or 'intermediate'.

Table 2 shows that there is a broad range of issues which can, singly or in concert, have a negative impact on ease-of-use of a website, and which call for the coordinated implementation of access adaptations.

Participants were asked for examples of the sort of website issues that present them with particular challenges. Participants were not limited to one answer as the Survey recognises that the effect of an individuals' impairment may be accentuated by several features on a website.

Table 2: Ranking of most-common website issues faced by all users with access needs (includes those using AT)

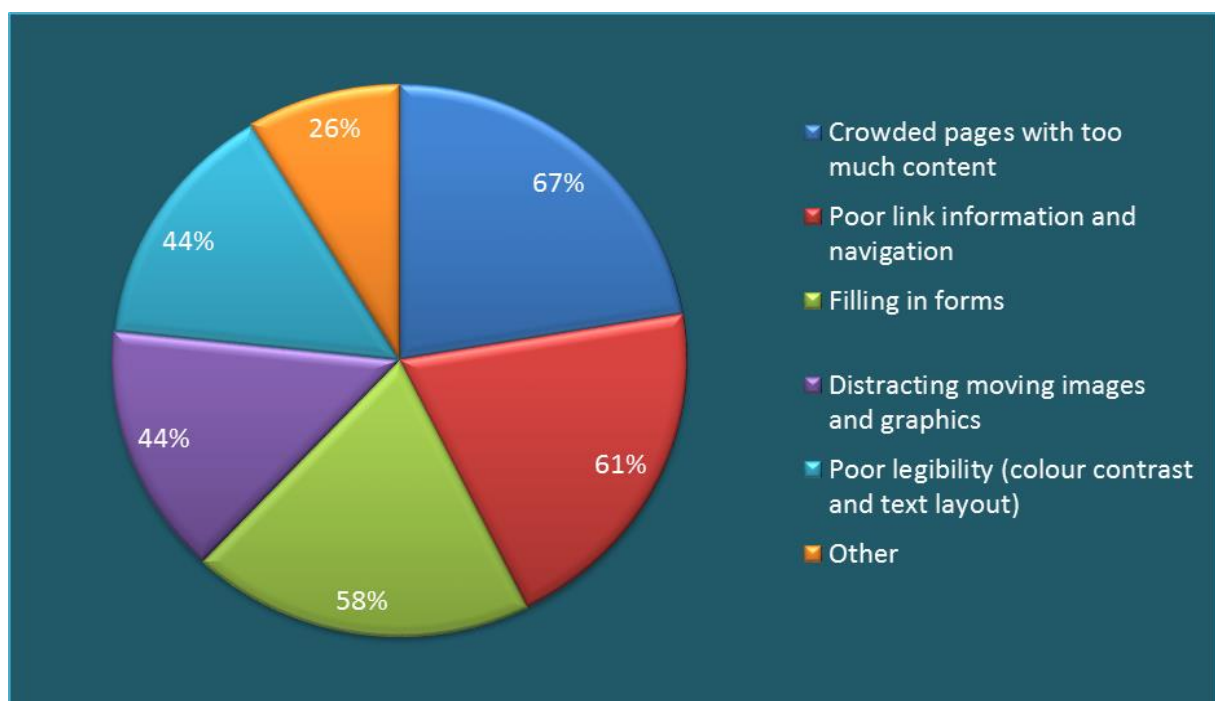| Website issue	%
Crowded pages with too much content	67%
Poor link information and navigation	61%
Filling in forms	58%
Distracting moving images and graphics	44%
Poor legibility (colour contrast and text layout)	44%
Other	26%

Figure 4: Most common website issues faced by respondents with access needs

> 67% of respondents with access needs cited crowded pages as the most-common issue that makes online shopping difficult for them.

Website accessibility is often discussed in terms of construction and coding according to WCAG and other technical guidelines. This approach overlooks the major role that design plays in how easily websites can be used by everyone, whether they have access needs or not. Design in these terms is not referring to graphic design, but to the process of analysis and planning that lies behind an intuitive and straightforward user journey.

It would be a mistake to think of design as simply a visual factor that only has impact for sighted users. 58% of screenreader users mentioned crowded pages with too much content as a significant usability issue, second only to poor link information and navigation (67%). As one screenreader user put it, *I find most shopping websites way too busy"*.

Everyone who uses the internet will be familiar with issues that make the online experience challenging: cluttered screens, illegible text, inconsistency in layout, the distraction of constantly moving images, videos without sub-titles or transcripts, low contrast colours, etc. These issues can have a negative impact on anyone. For users with access needs, these same issues can make a site not just challenging but unusable.

Simply ensuring that a site meets accessibility standards such as WCAG2 does not ensure that users with access needs have an acceptable experience of any given site because design, layout and functionality may also take too little account of the needs of disabled people. As we have discussed, users with access needs can be divided into two categories – those who use AT and those who do not.

Access Barriers for Users of Assistive Technology

53% of all respondents said they use some form of assistive technology. Of those who said that their disability has an effect on the way they use the

internet (i.e. the 71% of all respondents we have described as having access needs), 69% are AT users. Of all AT users, 58% are screenreader users.

Table 3: Type of technology amongst AT users

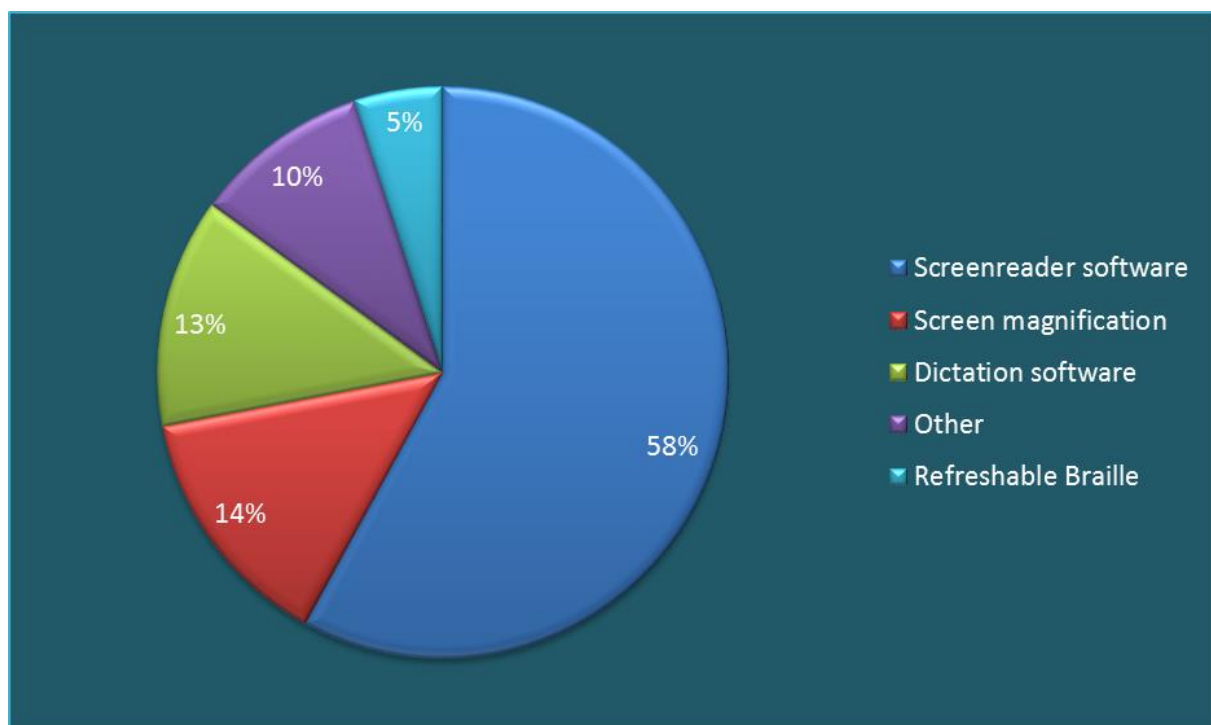| Type of Assistive Technology	%
Screenreader software	58%
Screen magnification	14%
Dictation software	13%
Other	10%
Refreshable Braille	5%

Figure 5: Type of technology amongst assistive technology users

The 'other' category contained a variety of AT adjustments such as using speech input and output packages, using scanning and reading software and specialist AT for specific impairments such as dyslexia. Responses in this category confirmed our experience that technologies are often used in combination to suit the need and purpose of the individual, and that people may use different technologies on different platforms and devices. This feedback also confirmed our decision to focus the Survey on the effects of disability on the user's online retail experience, rather than the nature of the disability.

> "I use magnification together with a screenreader. Supernova Access suite when using a laptop or desktop, and VoiceOver and zoom when using iOS."

Of Survey respondents who use a screenreader, 86% said that they found websites difficult to use with their software.

Beyond that general problem, 67% of screenreader users cited poor link information and navigation, and 64% mentioned filling in forms, as the issues which caused them most difficulty. 58% also cited crowded pages with too much content. This complaint is particularly relevant in the retail environment where catalogue pages may display long lists of individual items. At the time of writing, the landing page of one major supermarket brand displays 43 headings and 1,336 links. Screenreader software offers the facility to list the links and headings on a page to help the user to navigate more easily by 'scanning' the page, rather as a sighted newspaper reader will scan the headlines. For a screenreader user, this example is the embodiment of a crowded page.

Of course, not all screenreader users are blind; other impairments make reading text difficult for a much wider range of users. Nevertheless, we know from our work elsewhere that developers often behave as if access to websites is all about visual impairment and believe that relatively few people are affected. This view might go some way to explain the low priority accorded to the issue of accessibility more generally.

The most effective way that developers can ensure that any form of assistive technology works efficiently is to write code that is machine-readable. In this context, it is worth noting that the most frequent visitors to any public website will not be people but search engine robots; computer programmes that cannot see or hear and rely on the same fundamentals of accessibility.

The Survey asked AT users what types of issues created barriers when accessing websites; they could identify as many as applied.

Table 4: Website issues compared by type of AT

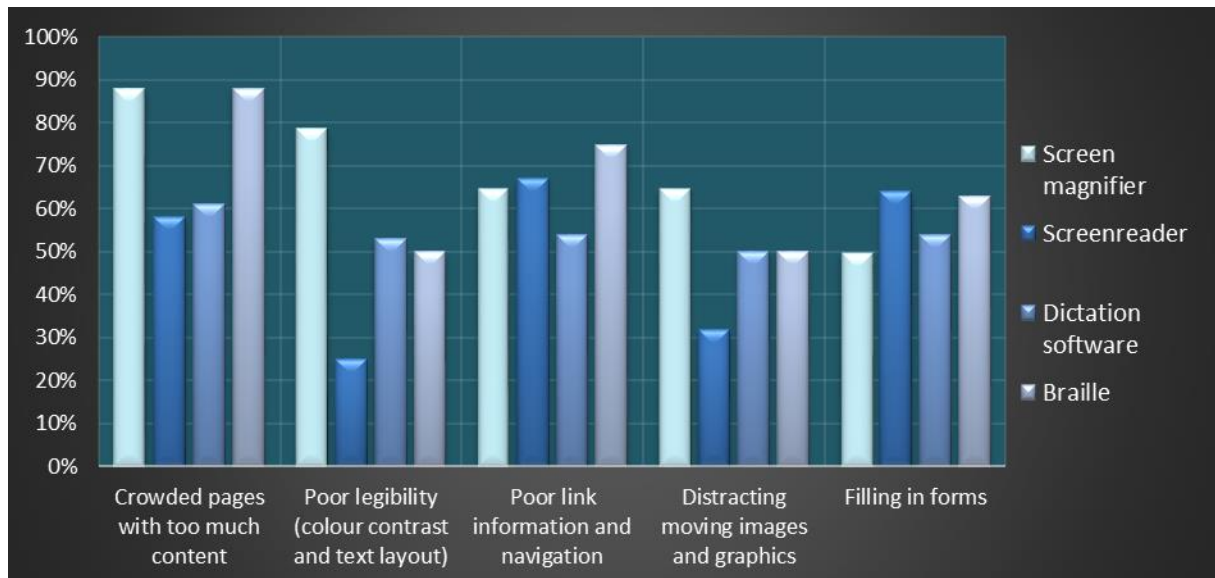| Website issue	Screen magnification	Screen reader software	Dictation software	Refreshable Braille
Crowded pages with too much content	88%	58%	61%	88%
Poor legibility (colour contrast and text layout)	79%	25%	53%	50%
Poor link information and navigation	65%	67%	54%	75%
Distracting moving images and graphics	65%	32%	50%	50%
Filling in forms	50%	64%	54%	63%

Figure 6: Website issues compared by type of AT

In practice, screenreaders and refreshable braille rely on the same software to interpret the content of a web page; one driving a text-to-speech synthesiser, the other driving a Braille output device. The differences in user experience can be interpreted as due to the fact that Braille users will be almost certainly blind, while screenreaders may benefit people with different disabilities as well as those with differing degrees of visual impairment. These users might be expected to be most affected by access barriers generated at the coding level, and indeed the responses confirm that inadequate link information, navigation and form labelling create real difficulties.

> "Poorly labelled buttons/edit boxes/combo boxes/radio buttons, graphics without meaningful alt-text, links which do not read well out of context, pages which do not follow a logical tab order, links which trigger a pop-up to appear somewhere else on the page, can all make pages unusable."

However, the Survey also confirms the fact that AT users are significantly inconvenienced by what might be considered as usability issues, such as crowded pages, poor legibility, and distracting movement.

Access Barriers for Users with Access Needs not using AT

A significant proportion of web users with disabilities either have impairments which cannot be addressed effectively using AT, or choose not to use such technological aids. Such impairments might include mild forms of neuro-differences such as dyslexia or learning difficulties, as well as other sensory issues such as colour blindness or hearing impairments.

31% of respondents with access needs do not use Assistive Technology

Table 5: Most-common website issues - users with access needs who do not use AT

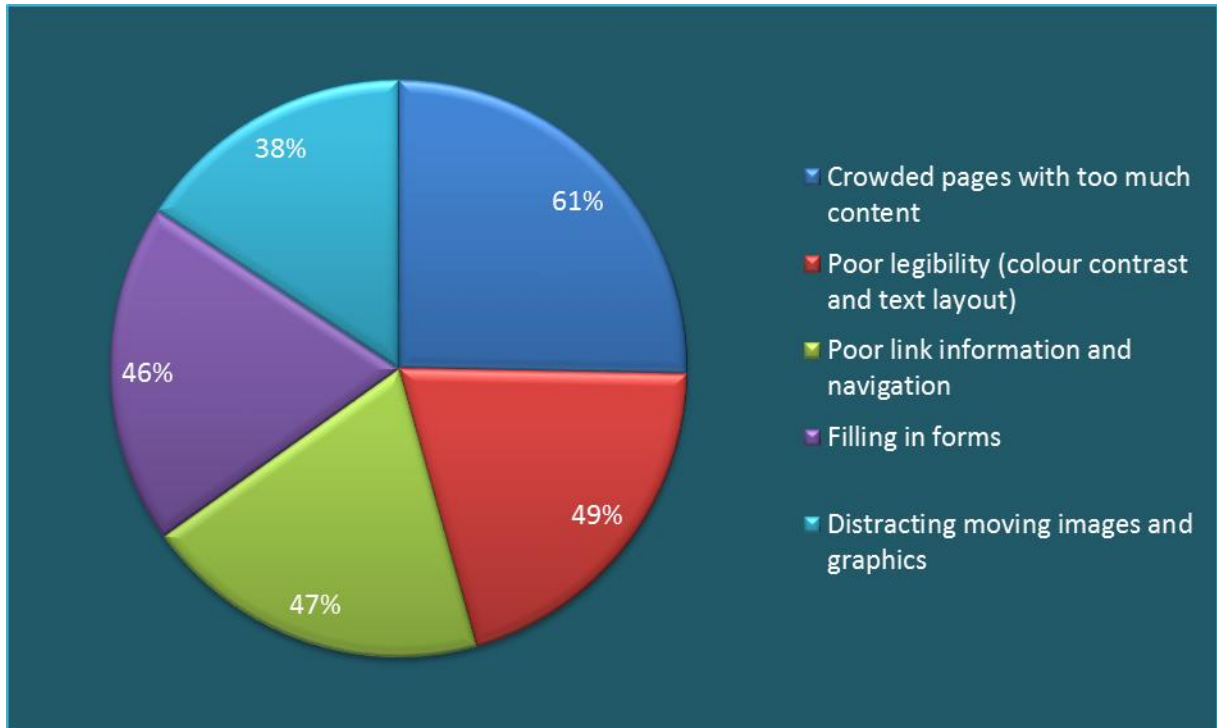| Website Issue	%
Crowded pages with too much content	61%
Poor legibility (colour contrast and text layout)	49%
Poor link information and navigation	47%
Filling in forms	46%
Distracting moving images and graphics	38%

Figure 7: Most-common website issues - users with access needs but not using AT

Key components in meeting this type of access need are the attitude and competence of the user to find and use their own solutions to the barriers they encounter. Often such users will develop 'work arounds' or use some of the accessibility features built into web browsers such as changing fonts, text size, and colour.

Access Barriers for Disabled Users with No Specific Online Access Needs

> Even amongst users who say they have no specific access needs, 60% still prefer to limit their shopping to sites that they know are accessible.

The Survey was open to all disabled people and our main aim was to analyse the issues faced by people whose disability affects the way they can use the internet. However, while 29% of participants said their disability did not have a direct impact on their internet use, the answers and comments recorded by this group indicate their preference for an accessible site. Perhaps this finding

reinforces the assertion, often repeated by accessibility proponents, that an accessible website is better for everyone whether they have a disability or not.

Respondents noted frustrations such as a lack of information about products and how they can be used in a specific situation, about facilities and access to, for example, venues, hotels, train and bus stations, about how to access specific information or book assistance.

Even amongst users who say they have no specific access needs, 60% of people still prefer to limit their shopping to sites that they know are accessible, and the same percentage said that they prefer to buy from the website that is the easiest to use rather than the one that is cheapest.

Outside the Survey questions, we invited participants to comment on the issues that caused them accessibility problems most often. As might be expected there were a broad range of replies, but several core issues were repeatedly highlighted as problem areas:

- Graphical captcha
- Inconsistent page layout and site design
- Limited or no support for browser accessibility features
- Pop-ups and adverts

> "I'm dyslexic - I struggle with busy pages and obscure links".
>
> "Issues for me are with font style/size and also sites that use coloured backgrounds or coloured fonts that can make it difficult to read the information."

User Responses to Websites with Access Barriers

How people with access needs respond when they come across a website which presents access barriers is of primary significance for businesses, and the indications from the Survey are unequivocal.

> 71% of participants with access needs will simply leave a problematic website.

Consumers are aware of the breadth of retail options available to them online. This expanding choice relates not just to the buying decision but also, crucially, to the pattern of 'search and research' which applies particularly to larger purchases. According to recent research, 80% of major purchases begin with online research.[15] If research is stymied by access barriers, even at this early stage of the consumer pathway, the retailer loses potential customers. In a world of expanding choice, the Survey shows that people who have difficulty using a site are unlikely to give that site a second chance where there is an alternative. There are, of course, some transactions where the user has no alternative (booking tickets for a museum exhibition was one example given).

Some disabled people shop online out of necessity, but beyond that it is clear that disabled users value the independence of being able to shop online, and it is equally apparent that, for many users, an inaccessible website represents exclusion from that independence of action.

Figure 8: User action on encountering an inaccessible website

---

[15] Synchrony Financial: *Fourth Annual Major Purchase Consumer Study*. November 2015

Only 7% of participants with access needs who came across barriers said they would phone a site helpline either to seek help or to provide feedback on any barriers they experienced. Rather than phone a helpline, users are more likely to seek help from friends or family; 11% said they would seek assistance from someone else.

> "I call and complain… with strong feelings of frustration that I could not do my shopping without help from customer service or from a friend."

There were also several comments about the apparent lack of understanding of helpline staff when businesses were contacted about an access issue. Participants lack of willingness to engage with a website where they have experienced access issues indicates several customer care issues. Experience from our work in this field over the years suggests that most site helplines don't fully understand the issues faced by customers with access needs, which leads to a poor and frustrating experience for the consumer.

> "I find staff at large Companies have no idea about using a screen reader. They have asked me to turn the speakers off in the past."

Each poor experience will reinforce disabled users' attitudes towards all such helplines. At the same time, the low level of helpline feedback may well lead the business to conclude that accessibility is not a problem. Businesses cannot take lack of feedback as a sign of customer satisfaction

These behaviours are significant for business in several ways well beyond the loss of a sale and the associated PR and brand damage. Survey responses point to a lack of engagement between businesses and disabled potential customers. Unless businesses proactively engage with disabled online shoppers then they will lack information about the issues or develop an understanding of the business implications.

While businesses may well research the needs of their 'non-disabled' online shoppers with techniques such as user testing, focus groups and mystery shopping, such approaches are rarely used to assess the needs and responses of disabled shoppers despite them forming a potential customer base of 6.1 million people in the UK alone.

> 85% of participants with access needs preferred to limit their shopping to sites which they know are accessible.

As well as the short-term issue for the business of the customer going elsewhere, losing a potential sale and the wider brand damage and customer care issues, there are also longer term implications which stem from the user's decision to 'click away'. For the business, the loss of a sale is nowhere near as significant as the loss of a customer. It is widely reported that it costs at least five times as much to attract new customers than to retain existing customers, and while 65% of companies successfully upsell or cross-sell to existing customers, only 12% of companies are able to do so to new customers. [16]

Once a user has found an accessible website there is a significant degree of site loyalty and a reluctance to look elsewhere. Equally, customers who have found that a website presents them with accessibility problems are unlikely to make a quick return. This may not be particularly unexpected given that many users, irrespective of whether they have a disability or access need, develop site and brand loyalty. However, what is notable is how high a priority is given to website accessibility in consumer behaviour.

> 81% of participants with access needs have chosen to pay more for a product from an accessible website rather than buy the same product from a website that was less accessible.

This finding emphasises the high level of priority that disabled users give to website accessibility with more than four out of five willing to prioritise the accessibility of the website over the cost of the product. This has major financial

---

[16] Esteban Kolsky: *thinkJar consumer research*, 2015

implications for both the shopper and the businesses who fail to have accessible sites. The shopper is paying what amounts to an accessibility premium, paying more for items and therefore having less to spend elsewhere. Given that "those living in a family with a disabled member are more likely to be in low income than non-disabled families" [17], the accessibility premium is paid by those who can least afford it.

> "Every day people like me don't want to have to think about using a site; we just want it to work."

82% of participants with access needs said they would spend more if websites were more accessible.

Figure 9: Percentage of users who would spend more online if websites were accessible

For those businesses that appreciate the issues and make sure that their websites are accessible to disabled shoppers, there is the significant business

---

[17] Department of Work and Pensions: *Households Below Average Income*. June 2016

benefit of access to an additional customer base of 4.3 million people in the UK alone.

> "If shopping websites were generally more accessible I'd gladly do most of my business online."

Online Retail Spending

The Size of the 'Purple Pound'

The figures are worth re-visiting. ONS figures in May 2016 showed that 76.8% of disabled adults were active internet users [18], equating to 8.6 million people. The CAP survey suggests that 71% of disabled users have access needs (i.e. they have an impairment that affects the way they use the Internet). Applying this percentage to the ONS figures produces an estimated 6.1 million disabled internet users who have access needs.

> The spending power of the UK online disabled population with access needs at the beginning of 2016 totals £16.55 billion

In January 2016, the IMRG Capgemini e-Retail Sales Index reported an online spend in the UK for 2015 of £114 billion, and estimated the spend would rise to £126 billion by the beginning of 2016 [19]. This projected figure equates to an average online spend per adult in the UK of £2710. Using these figures, the spending power of the online disabled population with access needs at the beginning of 2016 totals £16.55 billion.

---

[18] ONS: *Statistical Bulletin: Internet Users in the UK 2016*. May 2016
[19] IMRG Capgemini: *e-Retail Sales Index*. January 14, 2016

Online retail spending levels

The Survey asked participants with access needs to quantify their expenditure on a monthly and yearly basis. The figures suggest that there is no appreciable difference in spending levels between those who used AT and those who did not.

Table 6: Online spend in the average month (users with access needs)

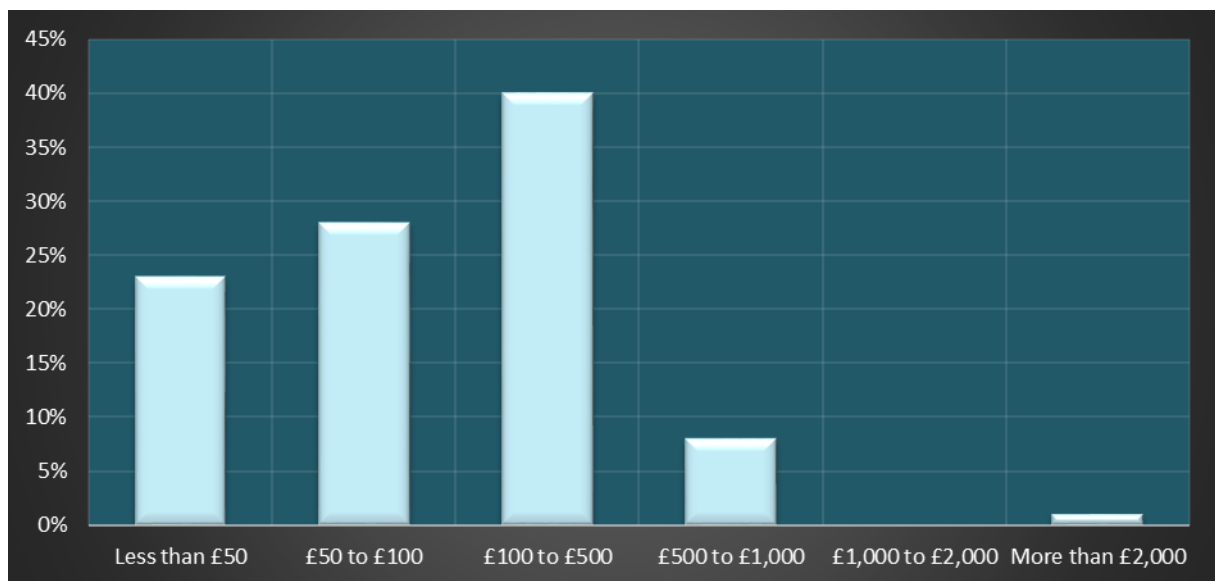| Spend	%
Less than £50	23%
£50 to £100	28%
£100 to £500	40%
£500 to £1,000	8%
£1,000 to £2,000	0%
More than £2,000	1%
Totals	100%

Figure 10: Online spend in the average month (users with access needs)

91% of participants with access needs spend up to £500 per month

This table does not reveal any surprises in relation to spending levels or whether participants' access needs play a part in that spending. Nevertheless, 91% of
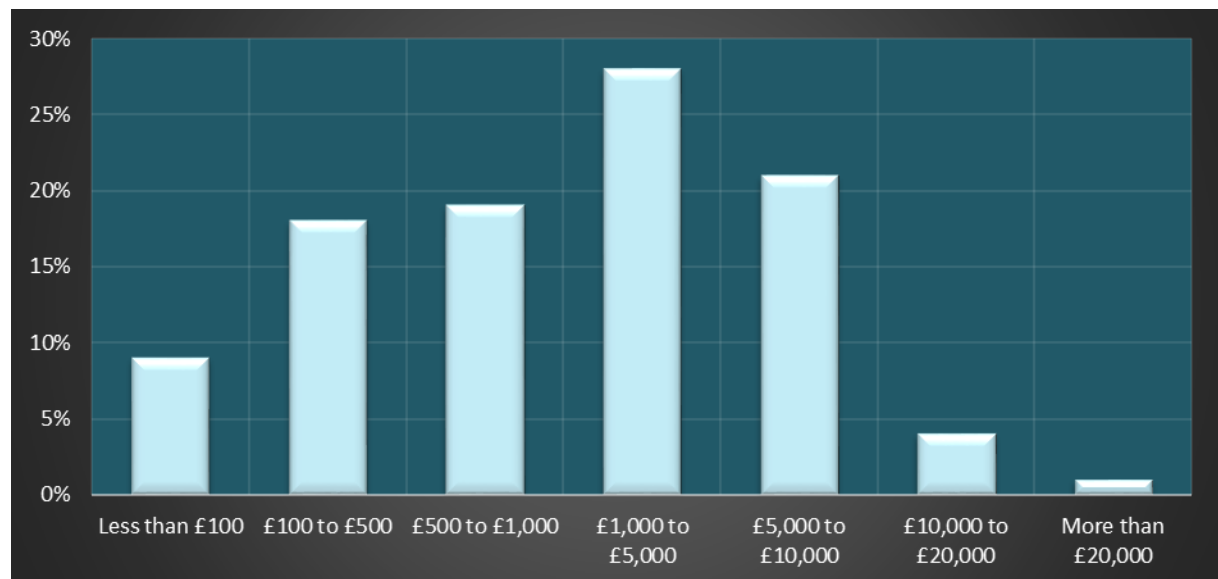
participants with access needs spend up to £500 per month. 40% of respondents are spending between £100 and £500 per month. Only 9% are spending more than £500 per month.

Participants were also asked to estimate how much they had spent online during the previous 12 months. 46% of respondents spent less than £1,000 in the previous 12 months. 74% spent less than £5,000. Only 5% spent more than £10,000. Once again there was no appreciable difference between participants with access needs who used AT and those who did not use AT.

Table 7: Online spend in the previous 12 months (users with access needs)

Spend	%
Less than £100	9%
£100 to £500	18%
£500 to £1,000	19%
£1,000 to £5,000	28%
£5,000 to £10,000	21%
£10,000 to £20,000	4%
More than £20,000	1%
Totals	100%

(This table uses participants with access needs as the baseline)

Figure 11: Online spend in the previous 12 months (users with access needs)

> 74% of participants with access needs spent up to £5000 in the last year.

As we showed at the beginning of this section, the spending power of the online disabled population with access needs at the beginning of 2016 is estimated to be £16.55 billion.

This survey suggests that website accessibility and usability barriers would cause 71% of users (4.3 million people) to 'click away' to an accessible alternative site, representing £11.75 billion in potential sales lost to competitors.

Online spending frequency

The Survey asked respondents how often they used retail websites.

Table 8: Frequency of online purchase by users with access needs in last year

Frequency	%
Every day	5%
Several times each week	31%
Once a week	22%
Once or twice a month	29%
Once or twice in the last year	8%
Not at all in the last year	5%
Total	100%

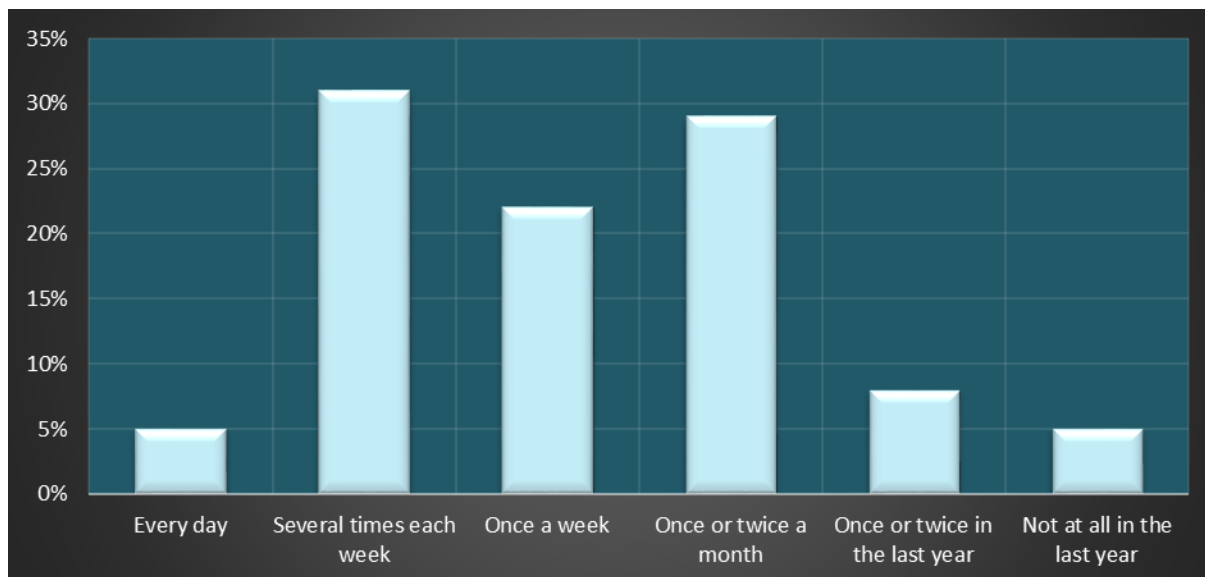(This table uses participants with access needs as its baseline)

Figure 12: Frequency of online purchase by users with access needs in last year

The survey showed that 58% of users with access needs said they shopped online every day or several times each week, or at least once a week. 36% of users with access needs shop online several times a week. This spending frequency is mirrored in the group using Assistive Technology, although 6% of AT users have not shopped online in the last year.

Online spend by sector

Participants' were asked to identify retail sectors in which they regularly shopped online (they could choose as many sectors as applied).

There were few significant variations in the shopping habits of participants with access needs when compared with those who said their disability did not affect the way they use the internet. Taking the responses of participants without specific access needs as the benchmark, users with access needs were more likely to spend regularly on supermarket goods and financial services, and less likely to spend on clothing. It is difficult to make judgements about this sector spend but a frequent comment from respondents was the poor levels of product description on many sites. This might be a key determining factor in the decision to buy where a user's access needs presented barriers in relation to assessing the suitability of goods.

Table 9: Regular spend by users with access needs, by sector

Type of product	%
Supermarket goods and produce	10%
Travel services (flight, train and bus tickets, etc.)	9%
Insurance	5%
Home and garden products	9%
Entertainment tickets (theatre, cinema, concerts, etc.)	8%
Fashion and clothing	9%
Books, music and software	13%
IT hardware (computer, laptop, tablet, etc.)	7%
Banking, savings and investments	13%
Utilities (gas, electricity and water)	9%
Phone services	8%
Total	100%

(This table used participants with access needs as its baseline)

There was little variation in the regularity of spend per sector whether participants used AT or not, except for the fashion and clothing sector where AT users were noticeably less likely to shop online.

It is important to recognise that the Survey offered participants choices based on general retail sectors, and that the Survey does not tell us how much participants spend in particular sectors. There is no indication that participants' access needs had any impact on their choice of sectors in which they shopped. Not surprisingly, sector spend seems to be driven by the same factors as for other shoppers such as lifestyle, personal preferences, financial limitations etc.

However, where people choose to spend within any given sector is a key issue for business not least because of the growing range of choices on offer to the customer. The Internet has gone a long way towards levelling the playing field between large and small retailers. Long-established high street names are increasingly challenged by new, agile retailers armed with accessible websites and inclusive customer care. As the Survey has shown, in the online market it is not enough simply to offer the cheapest product.

Section 3: Conclusions

Conclusions and next steps

Accessibility is the gateway to an online market currently worth £16.55 billion in the UK alone. This report clearly establishes that there is a measurable commercial imperative in an accessible digital presence. Yet in many businesses, the negative online experience of disabled customers suggests that disability issues remain niche at best and the disabled customer remains peripheral.

> 73% of participants with access needs experienced barriers on more than a quarter of websites they visit for the first time; a third experience such barriers on more than half of websites.

Considering what needs to happen next is clear in a general sense – retailers need to make their online presence accessible. Not to do so in an increasingly competitive online retail market means simply directing customers to a more accessible competitor. Making change happen, however, requires more than a recognition of the need for change.

Who owns the accessibility issue?

A recent report by Forrester Consulting on behalf of Microsoft[20] reported that 60% of organisations rely on "developers following guidelines" to ensure the accessibility of their content. This figure may seem low, particularly when combined with the suggestion from the same report that "only 42% reported using a content accessibility checker", and only 25% said they have "strong governance in place"[21]. The practical experience of disabled people as reflected in the Click-Away Pound findings reinforces the Forrester report. In other words, to ensure good website accessibility there is a need for good governance.

---

[20] Forrester Research for Microsoft: *Assessing the Value of Accessible Technologies*. 2016
[21] Ibid. 17

The Knowledge Gap

Our experience suggests that an understanding of the issues and their implications is simply lacking in many organisations. This is illustrated by a recent project where we were asked to review how an organisation with a stated commitment to inclusion and equality had purchased a payroll system which meant those who used screenreaders could not use them to read their payslips online. We talked to the three main groups of people involved in the acquisition and installation of the system. HR said "we didn't know about this issue"; Procurement said "nobody told us to include the issue in the specification"; IT said "no one asked us".

As we delved deeper, we found that no-one in the organisation at the right level was responsible for co-ordinating this type of issue and in effect it remained unknown as organisational knowledge; the classic issue of "how do you know what you don't know?"

In broad terms, there are a range of people who have an interest in ensuring accessibility to an organisations' goods and services. This, of course, will vary widely depending on the size and structure of the organisation but would typically include a range of functions such as:

- Customer engagement
- Marketing
- PR
- Communications
- IT development
- Procurement
- Equality and diversity
- CSR

These functions may have differing and perhaps competing priorities; for example, the branding of a company might look good to a designer or PR specialist but fail the WCAG2 contrast guideline. Who in the organisation gets a say in deciding on the branding and who gets the final vote? Without an understanding of the issues and implications across the breadth of business

functions, achieving a decision which satisfies everyone's priority becomes problematic.

This lack of knowledge is often exacerbated by the management structure of an organisation and a lack of clarity over who 'owns' the issue. It would be unusual for the functions mentioned above to fall under one point of management control until the top or near the top of the management structure. Only 25% of businesses in the Forrester report consider they have a robust governance structure to underpin the process of ensuring accessibility. This is interesting as it correlates with the Survey's findings and our wider experience of site testing over the years. Effective governance delivers accessible websites.

Relying on the Developer

It would be tempting to say that all businesses need to do to deliver an accessible online experience is ensure that developers work to a pre-determined accessibility and usability standard and for this to be an integral part of any customer care strategy.

Most developers we have worked with over the years have told us that they understand the WCAG2 guidelines, the implications of access barriers for disabled users, and the practical requirements for development practices and techniques. However, this is not born out either in our website testing experience or that of the participants in the Survey. One obvious example is how many developers continue to misuse the ALT attribute; for us, the litmus test of accessibility understanding, but more importantly a key building block of accessibility for many AT users, especially those using screenreaders. Ironically, this misuse continues despite many developers appearing to believe that accessibility primarily concerns barriers for visually impaired people; a misplaced perception also mentioned in the Forrester report and one we come across repeatedly. This Survey reminds us forcibly that this is not the case.

Relying on Validation

Equally misplaced is the all too frequent tendency to regard WCAG2 as the single measure of accessibility, and further to rely on accessibility validation tools for

assessing a website's compliance with WCAG2. As we mentioned earlier in the report, it is entirely possible for a site to be 'accessible' in terms of the WCAG standard but very difficult to use in practice for a disabled user. The Forrester report indicates that 42% of businesses "leverage a content accessibility checker so that content is naturally accessible across all devices"[22]. This approach fails to recognise that such tools are limited and cannot be regarded as a solution in themselves. We would estimate that only around 70% of WCAG2 check points can be assessed in this way and that such assessments need to be supplemented with an expert interpretation and testing by users with impairments.

Finally, it is worth considering how, or even if, businesses address this issue in digital product specification and design protocols. Where such internal procedures do not clearly set out the requirements both in accessibility standards and testing regimes which involve people with impairments, it is problematic to assume that digital products will be accessible or usable. This is particularly true where development work is sub-contracted.

Lack of Customer Engagement

All too often, businesses exhibit a lack of engagement with this significant and growing proportion of their potential customer base. Significantly, the Survey found that only 7% of disabled users who came up against accessibility barriers said they would contact a helpline. Comments from Survey respondents about their poor experience of helplines suggest that not only do helplines often fail to solve the immediate customer issue, but they exacerbate the problem by providing the customer with a frustrating and alienating experience. Customer-facing staff too often give the impression that they do not understand disability issues or know how to deal with the disabled customer.

This lack of engagement with the disabled customer is reflected in the comparative lack of emphasis that developers or customer engagement staff give to accessibility when compared to their attention to brand guidelines and general user experience. It would be usual for a process of user testing, focus

---

[22] Ibid. 17

groups and so on to be used at several stages through the product development cycle. However, it was noticeable that there was no mention by business in the Forrester report that disabled people were involved in the user testing of websites. This is also highlighted by our work elsewhere where none of the major mystery shopping or user testing agencies with whom we have worked consider, as a matter of course, accessibility for disabled people.

What next?

The challenge of accessibility does not respect role descriptions or departmental boundaries; everyone in all aspects of a business has an interest and a responsibility. Likewise, while the Click-Away Pound Survey 2016 concentrates on retail websites, that is only one aspect of an organisation's digital presence, which is likely to include increasing numbers of internal systems as well as customer facing apps and other digital products. As this digital culture grows ever more extensive, access by disabled people is becoming a more far-reaching issue, touching all organisational levels, functions, systems and products.

Accessibility therefore requires organisations to undertake the broadest possible analysis of the issues, to consider their entire digital presence and to treat the issues of accessibility under one access strategy and as part of an integrated customer journey.

Within this wider context, it is worth revisiting the major messages from the Click Away Pound:

- 71% of disabled customers will click away from a website that they find difficult to use.

- Those customers who click away have a spending power of £11.75 billion in the UK alone, around 10% of the total UK online spend in 2016.

- 82% of customers with access needs would spend more if websites were more accessible

- The silent customer cannot be assumed to be a satisfied customer.

Lessons for Business

- Responsibility for the quality of the customer experience starts at the top

- Corporate commitment to excellence in customer experience relates to every customer and every potential customer

- Be proactive. Reach out to disabled customers, employees, and organisations that represent disabled people

- The digital experience needs to be part of an integrated and coordinated customer care strategy

- A strategy needs an action plan to ensure that an accessible digital presence becomes 'business as usual': this will involve developing management protocols, accessibility standards, customer engagement, mystery shopping, testing regimes involving customers with impairments, style guides, training, etc.

- The action plan needs to be owned, managed and monitored by the business, not delegated to 'others'

Actions for Internal Stakeholders

Accessibility reaches into all organisational levels, functions, systems and products. Even so, there are action areas for key areas of businesses.

Executive leaders should...

- Make a published commitment to a strategy of inclusion with an action plan to make it happen and communicate it across the business.

- Ensure that business strategy includes a best practice approach to digital accessibility.

- Ensure all managers and staff understand the business rationale behind the strategy for inclusion.

- Empower in-house expertise.

- Make people accountable for the adoption of best practice and implementation of the strategy.

IT Leaders should ...

- Establish a 'House Guide', setting out your minimum standard for accessibility and usability best practice in product development.

- Ensure staff understand WCAG2 and can implement the guidelines effectively.

- Ensure accessibility requirements are detailed in product specifications.

- Ensure developers and sub-contractors follow the House Guide.

- Make accessibility and usability testing mandatory.

- Include disabled people in concept development, as well as product testing.

- Build accessibility monitoring and testing into update plans.

Customer care leaders should ...

- Ensure digital accessibility is treated as an integral part of the customer experience and has equal importance.

- Reach out to disabled people to understand them as consumers.

- Include disabled people in mystery shopping and research programmes.

- Engage with disabled people to understand and address any barriers which might arise in the digital presence.

- Ensure customer facing staff understand disability issues and can address them confidently and effectively.

- Ensure alternative contact methods are in place and replied to with equal speed.

The Future for the Click-Away Pound Survey

The results from the Click-Away Pound 2016 Survey represent a snapshot from a fast-changing picture in which sellers of goods and services are becoming ever more dependent on the internet customer. Amongst online customers, the Purple Pound is shown to be a significant proportion and one that is growing. As retailers respond to this growing market, it is ever more important that access to those goods and services is barrier free.

The 2016 Survey has established a point of departure, but the significance of the Survey lies as much in future development as in present findings. Moving forward, the Click-Away Pound 2017 presents opportunities:

- To develop the relevance of the survey to specific business sectors

- To track performance and indicate trends over time.

- To expand the survey beyond the UK.

To take the next step, the Click-Away Pound team would welcome the interest of potential partners.

To discuss these opportunities, any other aspect of the Survey, or to discuss how we can help to improve your digital products for disabled people, please contact Rick Williams: info@clickawaypound.com or phone on 07788 448428.

Appendix 1: CAP 2016 user profiles

The Survey collected responses to specific questions, but also provided free-text opportunities for people to express how they felt about their experience of online shopping. Often laced with frustration and sometimes with anger, these comments are a reminder that all the technical and corporate issues have a personal impact on real people.

Personal observations were wide-ranging, but there are three common themes:

Technical guidelines

The nature of the survey led many users to comment on the practical difficulties that they face interacting with the technology. Experienced screenreader users, for example, are often aware that many of their difficulties are due to failings and omissions in website coding. Recurrent issues such as properly labelled form fields, thoughtful and concise text descriptions and full keyboard accessibility, are all covered by the WCAG2 guidelines and users feel that there can be little excuse for ignoring them. As one respondent put it, "It's beyond me why site developers can't get this right. After all it isn't rocket science…"

Usability

Many comments voiced a frustration with simple legibility. Pale text colours, small font sizes, cluttered sites, distracting moving images, were issues mentioned repeatedly. As one user said, "When designing websites, please consult the people who actually have to use them on a daily basis."

Customer care

Users who come across the same barriers repeatedly simply do not believe that the companies responsible care about them as customers or as people. The lack of care represented by an inaccessible website is often reflected in a company's response when help is sought or complaints are raised. Survey users often said how much they wanted to help companies improve, but felt only added frustration with no channel to engage positively with the business.

The user profiles and comments that follow speak for themselves.

This person is deaf and uses an amplified telephone along with their desktop PC. They rate themselves as an advanced user.

As an online shopper with a hearing impairment, we asked them what issues make the experience most difficult for them. They said:

> "…videos often have no subtitles and no transcript available. Often I cannot skip to more communicative content, so I am forced to watch online content I cannot follow."

When the user has tried to contact a retailer by email, their experience of customer care and communication has been…

> "…very, very poor… sometimes ignored, incomplete or inconsistent, …often very late replies (e.g. more than 24 hours, which is appalling bearing in mind telephone calls for hearing people are answered in 24 seconds)."

We asked them what improves their online shopping experience; they said:

> "The better websites are the ones who have a live-help box, and/or email accounts that are quickly attended to…"

Lessons

- Video with editorial content must have subtitles or a text transcript.
- Alternative customer contact methods must be answered promptly.

This respondent shops online using dictation software installed on a laptop computer. They rate themselves as an intermediate user and experience access problems with between half and three-quarters of websites.

Their shopping is occasional, and limited largely to utilities, phone services, insurance and online banking. When we asked them what issues make online shopping most difficult for them. They said:

> "…Poor link information and navigation, difficulties working with the dictation software generally, and filling in forms."

We asked them to give us examples of issues that regularly cause problems for them. They said…

> "…Being timed out and having to start again from scratch. Pop-up calendars/drop lists which disappear when you try to click on them by voice. Links and images which don't work by voice. Sometimes I have to get other people to click on these for me."

Lessons

- Be aware of the need to cater for speech input. This is a good example where a more accessible site is better for everyone as sites are increasingly accessed through mobile devices.

Profile No. 11100334

Age: between 24 and 35

Location: Outside the UK

This person is visually impaired and uses screenreader software installed on a laptop PC. They rate themselves as an advanced user.

As an online shopper using a screenreader, we asked them what issues make the experience most difficult for them. They said:

> "…CAPTCHA, no image descriptions for sale items, buttons that work with a mouse click only, and dynamically refreshing pages. …if there is an error in a form, like I've missed a field or something is incorrect, I can seldom tell where the error is because my screen reader can't locate the related error description."

The user has tried to report issues to site owners in the past, but no longer does so. They said…

> "I used to contact companies whose sites didn't work with my AT, but I never once found that this yielded results. I'd be interested to know if others' advocacy has ever lead to improvements."

We asked them if they could recall a good online shopping experience; they said:

> "I wish I could. The ones with better accessibility still fall short for me because of the lack of image descriptions. I often get something I didn't expect because the text product description is very vague and I don't have enough info to really understand what the product I'm buying will be like…"

Lessons

- Concise and accurate image descriptions remain fundamental to good accessibility.
- Form design and error correction are key to online transactions.

This person uses screenreader software installed on a desktop PC. They rate themselves as an advanced user.

When we asked them what issues make the experience most difficult for them. They said:

> "The screen reader does not report when something happens on screen for example when ordering something like a curry there may be a pop-up box offering hot, medium or mild. Sometimes it may be a choice of a free gift. Sometimes it is as crucial as knowing whether something has been put into the shopping basket."

When asked for any further thoughts on their experience of the online shopping process, they said:

> "The main problem is that using a screen reader there is no way of finding out quickly what is important and what is not. Landing on a page and hearing 350 links for example means that you are going to have problems finding the one you need. 349 of the links are probably dots and the continue button probably takes up a quarter of the screen but the screen reader doesn't tell you that!
>
> The way that some sites increase the amount of information on screen as you go through the process can also become frustrating. You have to read through the contents of the shopping basket before getting to check the address; then you have to read through the contents of the basket plus the delivery information before getting to the newly added credit card details.
>
> It all takes time and requires excessive patience..."

Lessons

- Asking a screenreader user to test your site may reveal a range of unsuspected issues.
- Screenreaders start again at the top of a page when the page is refreshed.

This person uses a smartphone with screen magnification for online shopping. They rate themselves as an advanced user.

When asked for any further thoughts on their experience of the online shopping process, they said:

"I have difficulty with anything that's flashing/moving. If print is too close together. Ads that appear suddenly upset my eyes. I can't see how to get rid of them often, so I will leave the site. Many sites do that trying to get your email to subscribe to their site. I just leave it.

CAPTCHA' are mostly impossible for my eyes. It takes several attempts to get it correct or I just leave, not ordering what I needed to. I know they have a vocal alternative, but I find most of those impossible to understand correctly.

It all adds up to an upsetting experience and an unsatisfied non-customer. It may seem odd to be upset so much, but if it's a site I REALLY wanted to order from and support, the fact that I am impeded from it is exasperating and frustrating."

Lessons

- Be aware that flashing and moving images can be a major distraction to a range of users.

Appendix 2: Websites, Disability and the Equality Act 2010

The primary focus of this report is on the commercial and associated issues relating to online shopping and disabled shoppers. However, the business case (see Section?) also considers the legal risks associated with websites that fail to take website accessibility and usability into account. This Appendix discusses those issues and the UK's legal framework.

The introduction of the Disability Discrimination Act in 1995 made it unlawful for the first time to discriminate against disabled people; this coincided with the beginnings of the online shopping revolution. At that time most people thought of discrimination in relation to the provision of services in terms of shops which were inaccessible to wheelchair users because of steps, or restaurants refusing entry to people with guide dogs.

However, the Act, subsequently incorporated into the Equality Act 2010, was sufficiently widely drafted to cover services provided by this new form of retail – online shopping and subsequently the apps which now proliferate.

For businesses which use their websites and apps for selling goods or services there are several potential legal issues which could apply in relation to their accessibility and usability. The Equality Act 2010 makes it unlawful for a service provider to:

- Directly discriminate against a disabled person by refusing to provide the service or providing a worse service because of their disability
- Indirectly discriminate against a disabled person by having a seemingly neutral provision criteria or practice (PCP) that it applies to everyone but which substantially adversely affects a particular group of people who share a protected characteristic such as a disability or a type of disability e.g. people with a visual impairment, without justification
- Treat disabled people unfavourably for a reason arising out of their disability e.g. requiring a disabled person to pay more for a service without justification
- Fail to make reasonable adjustments for a disabled person.

It is particularly important for service providers to be aware that providing reasonable adjustments is a proactive obligation. This means businesses should take steps to ensure the accessibility and usability of their websites before a complaint is received.

The legal duty on service providers to make reasonable adjustments is twofold. First they should anticipate that they will have disabled customers and so should design websites and apps to be accessible and usable by disabled people. However, it will not be possible to anticipate the needs of every disabled person but service providers can and should consider when designing websites and apps the needs of people with:

- visual impairments
- hearing impairments
- manual dexterity problems
- mobility impairments
- cognitive impairments such as epilepsy
- learning difficulties such as dyslexia, dyspraxia
- Asperger's and Autism
- Learning disabilities
- Mental health problems

Even if a website or app has been designed to be accessible and meets the relevant standards and has been tested for usability by disabled people, it might still be substantially too difficult for a disabled person to use because of the nature of that person's disability. In that case the service provider has a secondary duty on top of the anticipatory duty to make an individual reasonable adjustment for that individual. So even if the website is as accessible as it could possibly be, if a customer still cannot use it because of their disability then the business may need to provide the same level of service to that customer in some other way if it can e.g. the same price for an item by telephone or face to face in a shop.

Case study

Erica is blind and wants to buy an airline ticket to go to a friend's wedding in Dublin. She has heard about an airline which sells discounted tickets online. The airline also sells tickets by phone and at their retail outlets but to get the

discount Erica discovers she has to book online. Erica uses a screenreader to access websites and when she tries to use the website to book her ticket she finds her screenreader won't work properly because of the way the website has been designed. She telephones the airline and explains she is blind and her screenreader won't work on their website. The customer service adviser is sympathetic but says they can only sell her a ticket without the online discount.

This could be indirect discrimination as the airline has applied the provision, criteria or practice (PCP) of offering discounts only to online sales but this substantially disadvantages disabled people who cannot use the website because of their disability. The airline would have to justify this discrimination as a proportionate means of achieving a legitimate aim. The airline might also have discriminated against this customer for a reason arising out of her disability because, but for her disability, she would have been able to buy the ticket online and so would not have been charged the higher price. Again, the airline could only defend this unfavourable treatment of this customer if they could show that it was a proportionate means of achieving a legitimate aim. Finally, the airline has also failed to make a reasonable adjustment for the customer. A reasonable adjustment would be to make their website accessible so that customers using screenreaders can use it and so buy tickets online in the same way as non-disabled customers. Alternatively, if that was not reasonable in this case given the nature of the website, the airline should have given this customer the same discount over the 'phone.

This case study shows that businesses not only need to ensure that their website is accessible and usable but that the wider underpinning procedures, staff training and approach to customer care are also considered. Nevertheless, although the law is available to protect disabled customers in this way relatively few cases have been brought before the County or High Court. Where there have been challenges – the Royal National Institute of Blind People have initiated several over the years – the businesses concerned have agreed to resolve the issue and the cases never reached the Court.

Whilst UK law has made little impact in this area it has had more effect in the USA. There is increasing pressures on US companies regarding their websites and cases are being taken more frequently. For example, the retail outlet Target

paid $6 million to settle a class action brought by the National Federation of the Blind because its website was inaccessible.

To minimise the legal risk of being challenged under the Equality Act businesses should ensure their websites and apps are accessible and usable to disabled people with a range of access needs and who might also use assistive technology. They might, for example, be able to demonstrate this by:

- Complying with the WCAG2 international standards
- Using the British Standard – Website accessibility BS8878 and demonstrating how it was used
- Demonstrating how accessibility specialists and disabled people were involved in user testing, and showing how the results were taken into account
- Showing their internal procedures regarding site and app development, including any procurement or sub-contracting arrangements with developers, to show they include the issue of accessibility and usability testing and standards
- being accredited by one of the various schemes such as the RNIB's 'See It Right'

Bela Gor,

Legal Director, Business Disability Forum

Acknowledgements and Disclosures