How charities can develop accessible digital products



Designing and building digital products that are set up for accessibility success.

adaptable.

Contents

Introduction	0
Where to start?	03
Building Accessibility into your products	0
WordPress and Accessibility	09
Publishing your Accessibility Statement	12
Accessibility Scores	14
Creating an Accessible Design System	18
Our digital offering	20
Our sevices	2.

Introduction 01

Introduction

Back in 2018, new accessibility regulations came into force for public sector bodies in the UK - which includes some not for profit organisations.

These regulations state that you must make your digital products - including websites and mobile apps - accessible for all users by making them 'perceivable, operable, understandable and robust'. Along with making sure your digital products follow these rules, organisations are also required to include an up-to-date accessibility policy or statement on their website.

While this regulation is primarily targeted at the public sector, and therefore doesn't apply to every charity, bringing your digital products up to date and inline with accessibility standards should be more than just a tick-box compliance exercise. It should be treated as the right thing to do for users with disabilities, even if your charity is not subject to the regulations. Making your site accessible should also be looked at as a win-win. For the user, they're able to engage with your digital products more easily and for your charity, this means lot's more potential donors, advocates, and sponsors.

Introduction 02

It's important to recognise the power of the 'purple pound', which refers to the spending from disabled households in the UK – estimated to be around £2bn per month. Many organisations fail to meet the needs of this group, typically by providing poor accessibility (both physical and digital), and almost 75% of disabled households will have not chosen a product or service for this reason.

Any organisation that wants to be truly inclusive with their online presence therefore needs to take accessibility seriously and not exclude users with disabilities from their digital real-estate.

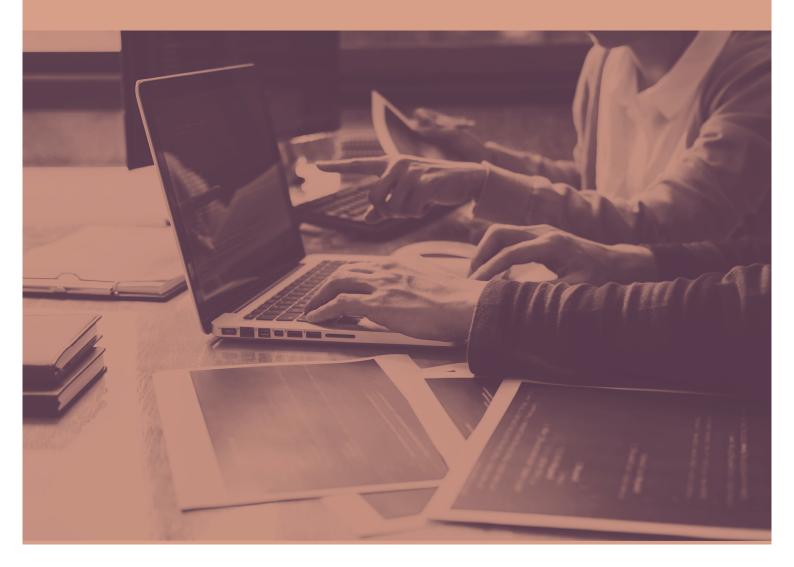
In this guide, we look at how you can design and build digital products that are set up for accessibility success. We've also shared our audit results from leading third-sector organisations, so you can explore real-world examples of the most accessible and performance driven websites within the sector.



Where to start?

Where to start?

It can be hard to know how to bring digital products up to a good standard of accessibility compliance if it's not something you've attempted before. A good first step is to create a list of all the digital touch points that your users interact with.



Where to start? 04

Areas to consider when auditing

- Your website, particularly text-based content pages
- Any images, audio or video content your company shares
- In-person touch screens and digital displays
- Applications, both web-based and mobile
- Forms, transaction pages or any other type of interactive tools
- Any pages where users are required to log-in
- Hosted documents such as PDFs
- Dynamic content, e.g. pop-up windows
- Navigation pages, including sitemaps and pages with a search function

Once you have your list, you'll need to check how far your digital products currently comply with Web Content Accessibility Guidelines 2.1, identifying any gaps as you go. (WCAG) 2.1 defines how to make web content more accessible to people with a wide (although not conclusive) range of disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological impairments. These guidelines also make web content more usable by older individuals with changing abilities due to ageing, and often serve to improve experience for users in general.

The full set of guidelines can be viewed here.

After these checks have been completed, the next step is to develop a roadmap - mapping all of the areas for remediation to a timeline, and the individual or team required to fix them. This roadmap should be referred to regularly to ensure the project is completed on time, and to an appropriate level.

Building accessibility into your products

When it comes to defining the areas of focus within your digital product, there are around 15 areas you need to pay close attention to. Collectively, these ensure that your product is set up or managed in a way that best performs for accessibility.

However, whilst this is an extensive list, and will have a positive impact on your digital product if they are all managed and iterated, it doesn't necessarily mean you will achieve a perfect level of accessibility. If additional opportunities to make your product even more usable are identified, they should be implemented.

Media

- Autoplay: ensure media won't play automatically and can be paused
- Markup: use appropriate markup for all media controls

Content

- Plain language: avoid complex text like metaphors, idioms and figures of speech
- Button content: ensure buttons and labels are all different and describe content well
- Alignment: keep text aligned to the left (or to the right for right-to-left languages like Arabic)

Imagery

- Elements: apply alt attributes to all img elements (in-line graphics - typically icons or small graphics), and null alt attributes for decorative elements
- **Text:** ensure text is included in alt descriptions, and provide text alternatives for charts, maps and other complex imagery

Headings

- **Elements:** use heading elements to introduce contents, and write them in a logical sequence
- H1: restrict H1 elements to one per page/view
- Levels: don't cut out any heading levels

Keyboard

- Elements: remove any focusable elements that are invisible
- **Focus**: ensure keyboard focus order matches the layout, and that interactive elements navigated to by keyboard have a visible style of focus

Tables

• **Elements:** use table for tabular data, for table headers, and caption for table titles

Lists

• **Elements:** use order list (ol), un order list (ul) ul and definition list (dl) to define list content

Controls

- **Elements:** use "a" elements for links and button "elements" for buttons
- Links: ensure they can be easily recognised, provide a skip link that can be seen when focused on, and identify links that open new tabs or windows
- Focus: give focus states to controls

Forms

- Elements: use label for all form inputs, and consider using autocomplete, fieldset and legend where necessary
- Error messaging: ensure these are displayed above the form after submission, are associated with the corresponding input, and are communicated by more than just colour alone

Global Code

- HTML: validate code and use lang attributes
- Attributes: don't use autofocus and remove title tooltips
- Flow: give each page a unique title and a linear flow of content
- Technical: make sure viewport zoom-ins aren't disabled, use landmark elements on key content, and extend session timeouts

Appearance

- Content: check that it displays in specialised bruising modes, that different pieces of content are in good proximity to each other
- Layout: keep the layout simple and consistent, and don't rely solely on colour to convey information
- **Text:** use text to prevent instructions being audio or visual only, and increase its size to 200% where possible

WordPress and accessibility

WordPress has its own accessibility team, which operates with the target of ensuring its CMS interface is compliant with WCAG 2.0AA as possible. This means that the most recent bundles of WordPress have been checked to ensure that they are accessibility-friendly.

However, WordPress does not currently conform with W3C's Authoring Tool Accessibility Guidelines 2.0 ATAG, although it does aim to reach that standard. ATAG requires applications to be accessible for people with disabilities, for content to be accessible and for accessibility flaws to be repaired, without using add-ons or tools.

This means WordPress, while valuing the importance of accessibility, still has some flaws in this area. In particular, people with disabilities can find it difficult to author WordPress content, while content authors can still easily create web pages that aren't accessible.

To mitigate any accessibility issues, we take the following steps when building a WordPress powered website. If you're building your own site, we recommend you follow them too:



Adequate colour contrast

this is important to ensure that people with vision issues can distinguish between text and interface elements. Under WCAG 2.0 AA, you should aim for a minimum of 4.5:1 ratio for normal text and 3:1 for large text.



Fonts

layouts and text should support font resizing so that users can improve legibility. Elements containing text should be able to expand vertically, and font sizes should be in ems and rems, and not px.



Markup

HTML code must properly describe content. UI and oI tags should be used for lists, but shouldn't be used for other elements. Table tags should not be used for layout, while heading tags should progress in a linear fashion, so that H3 tags are always preceded by H1s and H2s.



Text alternatives

it's important to bear in mind that assistive technology often can't access non-text-based content, so text alternatives should be provided for any image, video or audio file (except those that are solely decorative). In the case of large files such as podcasts, transcripts should be provided.



Differentiation

use more than colour to define text apart from links, active states and other items. Text should be bold and/or underlined at the very least.



Screen-reader navigation

to support navigation by screen readers, your theme should have clear skip links at the top of the page, using ARIA roles and/ or HTML5 landmarks. As an example, a link can say 'Read more about our products' instead of just 'Read more'.



Keyboard navigation

users should be able to tab through all menus and links, with clear focus states that have sufficient contrast.



Motion control

users should have the option to control or stop any animations or automatic motions.

The above list is just a starting point and is by no means exhaustive, if you'd like more information then we'd be more than happy to advise on coding standards.

Publishing your accessibility statement

When you've established a good level of accessibility, an accessibility statement is a good way of explaining and promoting it.

This should be in plain English and jargon free so that every reader, including those who may have learning disabilities, can understand how best to use your site.

This should be published as a HTML page on your website, and should be linked to in a clear and easy-to-find place on every page (such as a footer). Statements should be updated whenever major changes are made to the website and/or app, and in any case at least once a year.

At the very least, the statement should cover:

- The level of compliance with accessibility standards, whether fully, partially, or not compliant - in this context, 'not compliant' means not meeting most of the requirements
- The areas of your website or app that are not compliant with accessibility standards (if any), and an explanation why (e.g. exempt, or not viable to reach compliance)
- Alternative routes to inaccessible content
- Information on how accessibility was evaluated, and any plans to fix any remaining issues
- Contact details to report accessibility issues, and a means of complaint if users remain dissatisfied

A <u>sample accessibility statement</u> is available from the Government Digital Service, which includes some wording that is required to be included by law. You can use this as the base from which you can create a statement specific to your organisation.



Accessibility scores 14

Accessibility scores

In the second quarter of 2021, YouGov compiled data from people who have a positive opinion of a charitable organisation. The popularity data from this is what we have used to undertake our audit for the top 20 charities that were ranked.



Accessibilty scores 15

Please note: Figures obtained from an audit carried out during July 2021 - scores can always increase and decrease depending on any updates the Charities featured have made to their website.

Charity - Homepage Audit		Errors	Contact Errors	Alerts	Features	Structual Elements	ARIA
Cancer Research UK	CANCER RESEARCH UK	2	3	35	37	82	51
British Heart Foundation	British Heart Foundation	65	19	43	35	132	1096
Macmillan	MACMILLAN CANCER SUPPORT	2	2	96	40	49	76
Marie Curie	Marie Curie	9	4	10	98	43	239
St. John Ambulance	St John Ambulance	20	6	24	21	79	97
Battersea	BATTERSEA	2	12	18	31	60	58
RSPCA	RSPCA	12	13	15	37	75	850
Alzheimers Research UK	Alzheimer's Society	43	32	375	93	178	86
Samaritans	SAMARITANS	4	6	10	4	62	189
Alzheimers	Alzheimer's Research UK	19	2	61	31	103	201
Guide Dogs	Guide Dogs	15	20	31	77	66	626
Red Cross	BritishRedCross	3	3	19	14	39	85
RNLI	Lifeboats	2	0	21	36	78	81
WWF	WWF	1	4	32	42	97	55

Accessibility scores 16

Charity - Homepage Audit		Errors	Contact Errors	Alerts	Features	Structual Elements	ARIA
D of E	Ž DE	21	51	13	14	28	5
Great Ormond Street Hospital	OO Great Ormond Street Hospital for Children Inst Mondadon Trot	0	1	22	23	47	55
Save the Children	Save the Children	7	2	20	32	78	113
National Trust	National Trust	3	10	9	32	39	40
Royal British Legion	ROYAL BRITISH LEGION	10	1	364	59	81	51
Dementia UK	Dementia UK	8	43	17	15	69	63



Errors: General errors such as a form control not having a corresponding label or a link containing no text.



Contracts Errors: Very low contrast between text and background colours.



Alerts: Advisory areas to draw your attention to. Alert could be, Text appearing to be a heading but is not a heading element or Link text containing extraneous text or may not make sense out of context.



Features: features of the website that have the correct configuration.



Structural Elements: The number of elements that make up the core page.



ARIA: present set of attributes that have HTML elements that define the content to make it more accessible.

Accessibilty scores 17

	0-49	50-89	90-100
Charity - Google Lighthouse Accessibility Score		Desktop	Mobile
Cancer Research UK	CANCER RESEARCH UK	100	100
British Heart Foundation	British Heart Foundation	89	95
Macmillan	MACMILLAN CANCER SUPPORT	95	95
Marie Curie	Marie Curie	95	97
St. John Ambulance	St John Ambulance	71	71
Battersea	BATTERSEA	98	98
RSPCA	RSPCA	80	80
Alzheimers Research UK	Alzheimer's Society	84	84
Samaritans	SAMARITANS	90	85
Alzheimers	Alzheimer's Research UK	76	85
Guide Dogs	Guide Dogs	100	100
Red Cross	BritishRedCross	100	100
RNLI	Lifeboats	100	100
WWF	WWF	95	95
	WWF		

Accessibility scores 18

	0-49	50-89	90-100
Charity - Google Lighthouse Accessibility Score		Desktop	Mobile
D of E	Ž DE	77	83
Great Ormond Street Hospital	Great Ormond Street Hospital for Children 1895 Foundation Trust	93	200
Save the Children	Save the Children	92	90
National Trust	National Trust	79	77
Royal British Legion	ROYAL BRITISH LECION	100	97
Dementia UK	Dementia UK	89	95

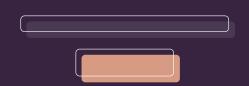
Google Lighthouse is an automated tool for improving the quality of web pages. You can run it against any web page. It has audits for performance, accessibility, progressive web apps, SEO and more.

Creating an Accessible Design System

Deploying an accessible design system may make sense if you're planning a website redesign, or a wider overhaul of your digital real-estate. This would usually consist of:



Style guide(s): standard fonts, colours, logos, and rules for written content



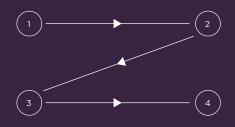
Pattern library: where and how user interface items such as buttons and forms should be used; these items should be tested and approved for accessibility prior to use



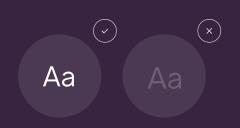
Component library: all user interface patterns, along with their working code, housed ready to go so that code doesn't need to be rewritten repeatedly

You have the choice of adopting an existing design system, adapting one for your use, or producing your own from scratch. If you have specific needs that can't clearly be met by existing open-source design systems, then creating one from scratch will likely be the better option. However, it's important to bear in mind that designing your own from the ground up will be the most expensive and time-consuming implementation compared to deploying one 'off-the-shelf'. As an example of adaptation, take a look at this blog from HM Government's digital service on how their design system was adapted to meet the needs of the NHS.

When considering a design system, there are three important things to bear in mind:



Visual hierarchy: this should be kept as simple as possible, with the number of decisions required from a user minimised. The size of elements like buttons, and where they're placed, are vitally important considerations: they should be easy to click or tap, even if a user has magnified their browser.



Contrast: according to the Royal National Institute of Blind People, more than two million people in the UK suffer from some sort of sight loss. Reaching acceptable levels of contract between different colours is vital for these people so that they can read content and undertake calls to action. Typography and size also help in this area, including bolding, underlining and adding distinctive features to links.

BUTTON

Colour: simply adding a certain colour for all calls to action of a certain type can make a huge difference to visually impaired users to give them some familiarity. For example, users can start to associate green with purchasing if all 'add to basket' and 'go to checkout' buttons are green.

Our digital offering 21

Our digital offering

adaptable: a digital studio creating experiences that work, for the people who matter.

The ability to adjust to new conditions - that's the definition of adaptable.

Founded in 2013, adaptable started life as a humble duo. Their vision? A digital studio that creates experiences that work, for the people who matter.

Fast forward to today, and our talented team are delivering effective digital products for an ever-growing list of clients around the world.

We partner with forward-thinking businesses that know their digital can work harder for them, but need help to get there. From house hunters to dog owners, gamers to sports fans, we take a user-first approach to every project.

Adaptable is not just our name, we embody this core principle in everything we do for our clients - and ourselves. Always evolving, always learning, always moving. Let's talk.

Our services 22

Our services

Discovery

Complex digital projects can sometimes feel overwhelming. When projects aren't straightforward a well-investigated brief of business and user requirements is the best starting point.

Product / Software Development

Our team has the experience of tackling complex business problems with innovative product development that moves at speed with your ambitions and customer expectations.

Web Development

Great digital experiences are powered by great technology. Our experienced engineering team builds solutions using the latest technology to keep your digital real estate effective, secure and seamlessly integrated.

Web Design

From UI mood boards to design style styles to fully prototyped UI concepts - our design process is an opportunity to create and refine a visual solution that helps your users complete what they came to your product to do.

Fastrack MVP's

Whether you're building a business case inside your organisation or have an important pitch with a pending deadline - our rapid MVP process will give you something tangible to start a conversation and make your investors take notice.

Support

We support our clients with maintenance and support along with proactive monthly programmes of feature development, enhancements and user testing.

We'd love to build something amazing together!

This paper has been created by our Co-Founder,
Dan Cooper. If developing a new or existing charity
website is on your radar, you can book a free
30 minute project discovery call with us.

