

Why everyone should be digitally accessible

Jorgen Verweij, 2020

Perplex, Arnhem

DIGITAL ACCESSIBILITY Starters Content

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A grayscale photograph of a train station platform. A train is stopped at the platform, and a person is standing on the right side. The image is overlaid with a dark gray semi-transparent area on the left side, which contains white text.

When you are working at a new location, you have to learn where to find the coffee machine. You will know by the second time you have seen it. That is how it works for me on a website. I must first get to know the way and then I can easily navigate through it.

Elwin, only 2% vision in his left eye.

What is digital accessibility?

You can compare digital accessibility with the physical accessibility of public buildings, such as a station. A station has a wide glass entrance, with a sliding door next to a revolving door. This gives you an alternative way to enter the building (for example if you are in a wheelchair). There are no thresholds and at least one of the smart card gates is wider so that you can access it with a wheelchair. The signage is striking and consistent. If you still cannot find the right platform, there is (almost) always someone who can show you the way.

Physical accessibility is often well organised, and we find it very obvious. This is less often the case with digital accessibility. What if you have to make a hospital appointment online, but this is impossible because you have a visual impairment? Or you have to pay the bill for your health insurance online, but you still have to use the phone because this environment cannot be accessed through your keyboard? Nowadays you can arrange everything online and sometimes you do not even have a choice.

Dutch legislation in this area is based on the Convention on the Rights of Persons with Disabilities, to which digital accessibility has been added last year. If people with a disability are faced with an online problem, they can go to the Human Rights Commission, which will decide on this.

Digital discrimination

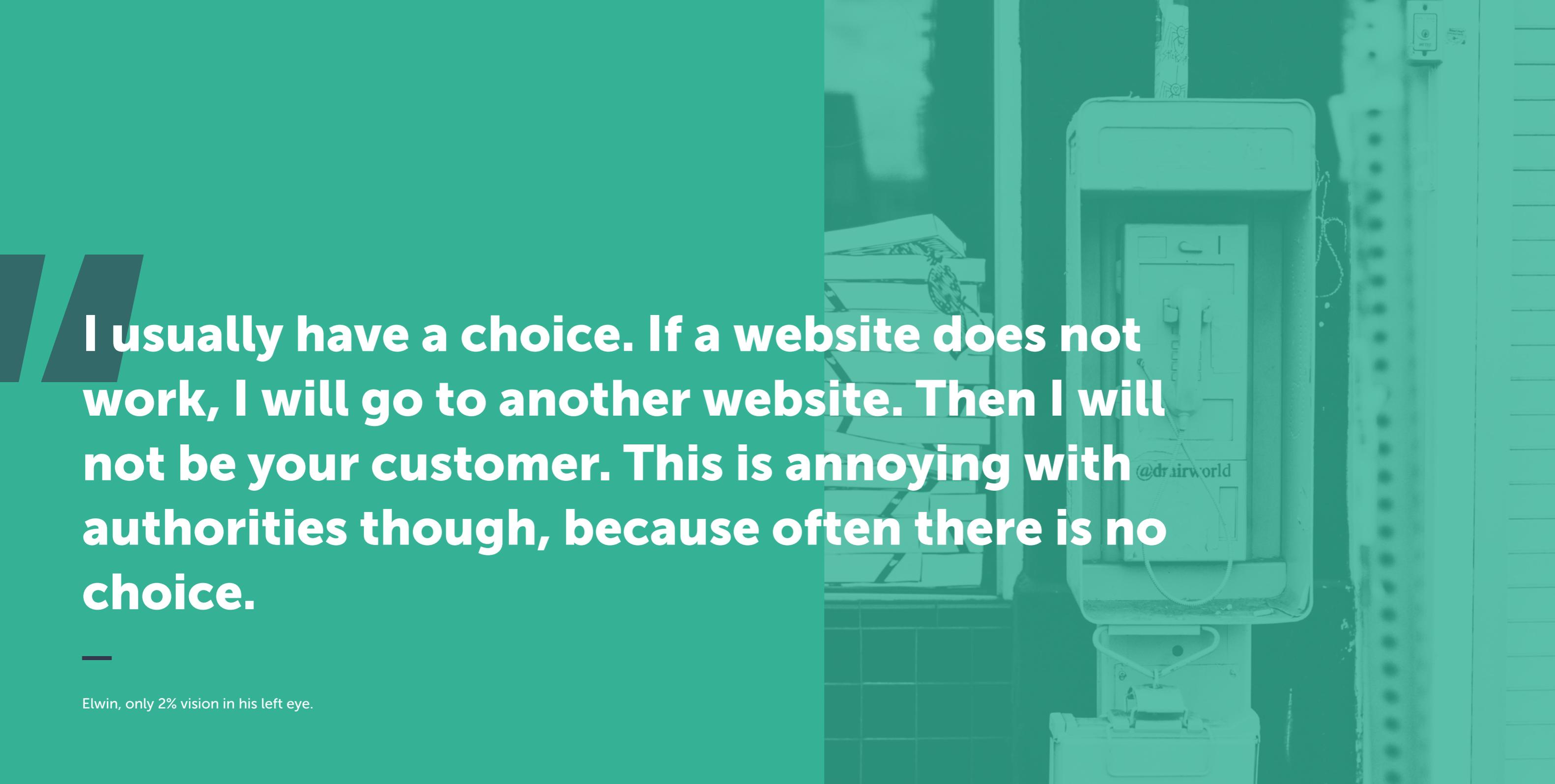
The first verdict on digital discrimination in the Netherlands is now a fact. Rabobank was given the 'honour'. On 4 October, the Netherlands Institute for Human Rights ruled that Rabobank discriminated against a blind account holder by not granting him equal access to mobile banking via the bank's app. The new version of the app was not accessible to this person. The bank ignored his request to gain access to the older version of the app, which was accessible. This is the first time that the Netherlands Institute for Human Rights made such a statement about digital accessibility since the UN Convention on Digital Accessibility came into force.

<https://www.mensenrechten.nl/berichten/rabobank-had-oplossing-moeten-bieden-voor-ontoegankelijke-app>

Accessibility in healthcare

Early 2018, the NOS carried out a major investigation into digital accessibility in healthcare. This study showed that almost all care sites are inadequate for the blind and the deaf. Many websites of hospitals, GPs and other healthcare providers are still difficult to use for people with disabilities. Although legislation came into effect exactly one year ago, which requires organisations to make websites usable for people with a disability, little has changed.

<https://nos.nl/artikel/2213251-vrijwel-alle-zorgsites-schieten-tekort-voor-blinden-en-doven.html>



I usually have a choice. If a website does not work, I will go to another website. Then I will not be your customer. This is annoying with authorities though, because often there is no choice.

Elwin, only 2% vision in his left eye.

Why does my website need to be digitally accessible?

A big misconception about accessibility for websites is that it is at the expense of the design and the appearance of the website. But digital accessibility is always an interaction between guidelines and user-friendliness. The beauty of these guidelines is that they are fixed and serve as a starting point for a user-friendly website. It often happens that customers or colleagues have a question about digital accessibility, but it is actually about usability. The solution is then in almost all cases also the most user-friendly option.

“We have no blind visitors or customers in a wheelchair”

‘We do not have blind visitors or customers who are in wheelchairs’ is often used as an argument not to be accessible online. But the target group of digital accessibility is very broad, much broader than is often thought. In total there are 4 million people in the Netherlands who have a limitation that possibly makes it difficult for

them to use or understand digital media. People with a visual impairment, where blind people are the clearest example, but also visitors with impaired vision (especially the elderly) or colour-blindness benefit from an accessible website.



**I do not need any advantage over others,
but it would be nice for me to have equal
convenience.**

Elwin, only 2% vision in his left eye.

Did you know

1 in 12

men are
colorblind?

In addition, there are people with an auditory impairment. Using audio to convey information in a website makes it impossible for them to understand all the information. And for visitors with dyslexia, ADHD or autism an unclear website with inconsistencies in navigation or flickering elements can be a barrier. And there are also visitors for whom Dutch is not their native language, to whom difficult language can be another barrier to understanding the information. Especially for this guidelines have been developed by W3C, the Web Content Accessibility Guidelines. The guidelines are too

long to deal with all of them. It is a set of 78 guidelines. That is why we will explain the 4 principles on the following pages. The 4 principles on which these guidelines are developed and subdivided give a very good picture of the types of impairments that need to be met. The four principles laying the groundwork for web accessibility are: perceptible, operable, comprehensible and robust. These guidelines ensure that digital information is accessible to everyone. Digitally accessible information is more usable, findable and searchable for different people and different search

engines on different devices. Because in addition to those 4 million Dutch people who have a disability, it can also happen that you get into a limiting situation, so that an accessible solution for a website, app or video also has benefits for you.

01 Perceptible

The Perceptible-principle states that information is not only perceptible with one sense. The information that you provide with a message must also be available to people who cannot see or cannot see well. Information with sound must also be available to people who cannot hear or cannot hear well. When information can only be approached with one sense, it is not 'perceptible' to everyone and therefore not accessible.

An example of this is subtitling of videos. Although it is used much because not everyone leaves the sound on for social media, it is necessary for people who are deaf. In addition to subtitling, audio description can also be added if there are sounds that influence the understanding of the story. The best example of this is the voice-over in a video. Without this voice-over, the purpose or essence of a video is difficult to understand. But adding subtitles to a video is not just an addition for these visitors. What if you are on a train and you see this video on your Facebook or Twitter timeline. If you do not have headphones, you will probably not watch the video. You are in a limiting situation (you are actually temporarily deaf) so at that moment the subtitling is a very good addition so that you can watch this video... and understand it.

Another guideline within this principle is that there must be sufficient contrast between the foreground and background to ensure that texts are easy to read. This guideline is mainly aimed at visitors with reduced vision, such as people who are colour-blind, but also elderly people. Because this target group is getting bigger and older people are also making more and more use of the internet, some of the guidelines also apply to them.

02 Usable

The second principle is Operable. Not everyone can use a mouse or touchpad. This principle therefore prescribes that all content on your website must be accessible and navigable via the keyboard. Problems often arise with information that is 'hidden' behind mouse-overs, carousels and animations that automatically move and keep moving and that you as a website visitor cannot stop, and iframes where you cannot get in and/or out. Have you ever navigated a website without a mouse because you were on the phone or having lunch? You are also in a limiting situation and you benefit from accessibility. But also, regular visitors or visitors who always perform the same action, benefit from a well-operated website.

03 Understandable

The third principle, Understandable, is about comprehensible content and a consistent representation of the environment in which this text is shown. Make sure that the texts on your website are not unnecessarily difficult. In the case of VieCuri, the texts are simple, without unnecessary use of hospital terms and other medical language. Yet another part of the principle Understandable is the explanation of forms and a clear explanation when something goes wrong when filling in or sending. You notice that this principle no longer applies to people with 'disabilities'. You make a website more user-friendly for everyone and not just for visitors with a disability.

04 Robust

The last principle, Robust, is the most 'technical' principle. In short: the code of your website must be correct, so browsers and for example screen readers can 'read' it and show it correctly or read it aloud. Errors in the code ensure that content is not displayed properly and may interfere with functionality. Here too, a website with good code does better in the search engine, but it also ensures that a smart speaker or assistant such as Siri or Google Home can handle it.

Barrier-free

Perhaps you have heard the term Barrier-free sometimes when it comes to accessibility. Stichting Drempelvrij.nl (Barrier-free Foundation) provides accessible websites, which meet the requirements, with a certification mark. This certification mark guarantees that a website can be used by all visitors. To obtain this certification mark, an audit is carried out by an external authority, for example the Accessibility Foundation. They approve the website based on the guidelines and come up with points for improvement. Once the website is fully compliant, you will receive a certificate that is valid for one year. Every year that you wish to renew the certificate, the site will be re-audited. This is how the website, including new pages, always meets the guidelines.

www.drempelvrij.nl

Case

VieCuri.nl

VieCuri knocked on our door 5 years ago with a question:

‘We want to develop a website that is there for everyone. Focusing only on the user is no longer sufficient, the website must be inclusive and not exclude anyone.’

More and more hospital services are digital, such as making an appointment, viewing results or preparing for admission or treatment. VieCuri wants as many people as possible to use this. Especially because the target group of a hospital is wide and there is a large possibility of having visitors with a disability. They wanted to realise

a website which can also be used by this target group.

From VieCuri, a wide patient panel was attached that consisted of an average of the patient file. With this group, the wishes/requirements of the website were determined in advance by means of interviews and questionnaires. They were allowed to give their opinion on the first designs and were involved in testing the website once it was realised.

From the user centrally to a website for everyone. A website that is inclusive and does not exclude anyone. Not the consumer is central, but the patient. Interplay of usability, design and digital accessibility. For example, VieCuri became the first hospital in the Netherlands with an accessible website and the first to obtain the Drempelvrij certification mark.



Getting started with accessibility

“When I see ‘read more’ in my link list, I have no idea what I will read about. Just like Google.”

—
Elwin, only 2% vision in his left eye.

Digital accessibility is important, that much is clear now. Being totally accessible is a big challenge, but with the tips below you will come a long way.

Tip01

Ensure there is sufficient contrast

Ensure sufficient contrast for all texts on the website. Try the tool below to determine if there is enough contrast between the text and the background. This makes the texts readable for everyone.

<https://contrastchecker.com/>

Tip02

Use good code

Use headers (h1, h2) to clarify the structure of the content and make sure that elements that you can click are always a `<a>` or `<button>`. If you have solved this, check whether all fields in a form have a clear label and are linked to each other. This way a screen reader (and Google) can always determine with which element it is confronted.

Tip03

Keyboard accessible

Try to navigate your website with the keyboard. Are you able to reach all elements and topics? You do this by using the Tab key to click through the elements of a page, by pressing the space bar or enter you can select the element that is currently active. To make a website keyboard accessible, it is important to avoid iFrames and to use buttons and hrefs. In addition, it is important that the other content on a website does not disappear during a pop-up.



Jorgen

About the author

My name is Jorgen and I have been working as a web/UX-designer at Perplex for more than 6 years. For VieCuri, among other things, we have worked hard to make the website Drempeelvrij/Barrier-free. This resulted in a certificate that we are very proud of!

In all my projects I take into account digital accessibility. Digital accessibility means working for a forgotten target group so you must learn to look at the design of a website in a different way.

Any questions? You can reach me at...

jorgen.verweij@perplex.nl | +31 26 383 07 34



Perplex

Creatief denken, digitaal doen

Willemsplein 46
6811 KD Arnhem
The Netherlands



Perplex

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