

CHAPTER I

INTRODUCTION

1.1 Background

The rapid development of information technology in the era of globalization has brought many changes to human life. Access to the internet as one of the information technologies provides many conveniences in human life both in communication and obtain new information. The rapid development of the internet network allows humans to access information without having to go to a certain place, wait for a certain time, or buy information media such as newspapers. Currently, online media such as websites have shifted conventional media such as newspapers and television as sources of information (Gushevinalti et al., 2020).

The shifting from conventional to modern media has been used in the field of journalism and news dissemination. The press and news media no longer only use conventional media such as newspapers and television broadcasts but also made extensive use of the internet to share information more efficiently. These days, there are many news portals in Indonesia that use websites as a medium for disseminating information online. According to data from the Indonesian Press Council, 902 of the total 1,711 verified media companies in Indonesia are online media companies (Indonesia, 2023). Based on the results of a survey conducted by the Reuters Institute, the majority of Indonesian people access more information and news through online media (Pusparisa, 2021).

Even though there are many varieties of online media where people can get information, such as social media, online news media remains essential and relevant on today's digital world. Deacon et al. (2024) stated that despite many claims suggest mainstream online news are displaced by social media, in reality, much of the information circulating on social media originates from conventional news sources. Social media still serve as news distribution channel rather than being the news production itself. The contents consumed through these platforms often still relies on journalistic output and credibility that are given by established news media. Reputation and trust that are built by these news company are the ones that often makes people cross-check some information that they got on social media to

the online news media. The articles published by news company in their official website is considered more credible and reliable compared to information circulating in social media, since it must undergo editorial reviews and addressing journalistic standards. Many of these company even utilize social media as a platform to expand their reach. So, although news consumption pattern might have changed, online news media remains a vital element in providing trustworthy, reliable, and verified information to the public, thus explains the big number of online media companies in Indonesia.

Of the hundreds of online news portals in Indonesia, there are several news websites that are most frequently visited by Indonesian people as of February 2025, as shown in Figure 1.1 below.



Figure 1.1
Rank of Most Visited News Website in Indonesia
(Source: (Similarweb, 2025))

Figure 1.1 shows data from Similarweb, accessed on March 20, 2025, showing several online news portal websites in Indonesia that were most frequently visited as of February 2025. The three most frequently visited news portal websites include detik.com, tribunnews.com, and Kompas.com. Although the ranking order may slightly vary across different web traffic analysis sources, but detik.com, tribunnews.com, and Kompas.com consistently appear among the top three most visited news website in Indonesia. The other sources that includes three of it on the list including Semrush (2025), Alfathi (2025), Azhari (2025), and Ahrefs (2025). This shows that many people access the online news portal as a news source. The surveys conducted by Reuters Institute also shows that 89% of the respondents uses online media (including their social media) as a news source. This strengthen the

fact that most Indonesian people are using and accessing online media as the news source.

Being the most visited news website in Indonesia means that the webpage is constantly being seen by many people. As widely accessed platforms, these websites must ensure that the information they provide is accessible to all users, including those with disabilities. According to data from Biro Pusat Statistik (BPS), there are 5% of the total population, equal to 22,5 million people with disabilities in Indonesia (Kemensos, 2020). Indonesia Economic National Surveys (Survei Ekonomi Nasional, Susenas) in 2020 also shows that there are 28,05 million or 10.38% of the total population is disabled with variety of disability, including visual impairments (Rifaldo & Kompas, 2023). The data from Rif'Ati et al. (2021) state that the total number of people in Indonesia with Visual Impairment is 8,019,427, consisting of 1,654,595 of blindness and 6,364,832 of moderate and severe VI. These highlight the importance of making news content accessible to all citizens.

Research from AlSaeed et al. (2024) also shows that visually impaired users are particularly vulnerable to web inaccessibility because the web is inherently visual. This makes news websites especially important to evaluate in terms of accessibility for users with visual impairments. Since most of the content presented on news websites, such as headlines, article text, navigation menus, and images, is visual, individuals with low vision, color blindness, or total blindness are directly impacted when accessibility features are missing or inadequate. Moreover, news websites play a vital role in the timely distribution of information, especially regarding public events, emergencies, or government decisions. If these platforms are not accessible, people with visual impairments may miss out on critical information, contributing to a digital divide. As emphasized by AlSaeed et al. ensuring the accessibility of news websites is essential not only for user inclusivity but also for maintaining equal access to real-time, reliable, and trustworthy information.

Legal and ethical obligations also support this take on everyone has the same right to be able to access information and news easily. According to Undang-Undang Nomor 8 Tahun 2016 tentang Penyandang Disabilitas, every person with disability has the right to express, communicate, and obtain information just like

everyone else. Therefore, online news providers must ensure that not only normal people, but disabled people are also able to access their news easily. Unfortunately, preliminary observations conducted on the three selected news websites including, detik.com, kompas.com, and tribunnews.com, reveal several accessibility shortcomings. These include missing alternative text, low color contrast, unclear focus indicators for keyboard navigations, and confusing page structure. In some page, important navigation elements and article headlines lacked label and markup, making it difficult for screen reader users to perceive the content structure. None of the websites provided accessibility options such as font size adjustment, high contrast mode, or screen reader friendly layout toggles. These findings highlight the need to systematically assess and improve the accessibility of these widely used platforms.

In addition to the preliminary observations, short interviews were conducted with individuals with visual impairments to gain better understanding of the challenges they face when accessing online news websites. This interview is done to get direct insights from people with visual impairments about the challenges they faced when accessing internet. Short semi-structured interviews were conducted with individuals with visual impairments, with the first two having partial color blindness and the third experience low vision due to glaucoma. The interviews transcript and documentation can be seen on Attachment 1 and 2. All participants reported slight difficulties in reading text due to low contrast. The participant with low vision highlighted challenges in navigating articles with small fonts and limited zoom support. These findings align with previous research conducted by Hajduk & Ali (2023), which identified similar challenges faced by users with visual impairments in using websites, including difficulty of reading text due to small size, the lack of color contrast, difficulty identifying images, and inaccessible form or inputs.

A website is a form of information technology that consists of text, images, videos and animations to present information that can be accessed anytime and anywhere (Sa'ad, 2020). Websites have been used in various parts of the world as a medium for disseminating information, including by the press and journalistic media. It would be great if all users could access the information provided on the

website with minimal effort. As a medium for disseminating information and news, websites must be able to convey information to all users from various groups, including people with disabilities. The ease with which users can access information on a website is known as “accessibility.” Website accessibility can also mean the ability of individuals with disabilities to browse, understand, and interact with website content (Raharjo et al., 2023).

The World Wide Web Consortium (W3C) defines web accessibility as how websites are designed and developed so that people with disabilities can use, perceive, understand, navigate, and interact with the website and even contribute to the web. These accessibility aspects are somethings that affect access to the web such as auditory, cognitive, speech, visual, etc. Not only benefitting the ones with disabilities, but accessibilities will also give great benefits for people without disabilities such as smart watches, smart TV users or others with different input mode, older people with changing abilities due to ageing, people with temporary disabilities, etc. (W3C, 2024a).

To ensure that the accessibility of news website is according to the standard, evaluation of the website accessibility needs to be conducted. There are guidelines that can be used to evaluate a website’s accessibility level, namely Web Content Accessibility Guidelines (WCAG) that has been used internationally. This guideline is developed through the W3C process in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally (W3C, 2024b). The guideline is made in order to guide web developers to ensure that a website can be used by all users including those with disabilities. Up to this time, the guideline has been revised many times, and the newest version of the guideline is WCAG 2.2 released on October 2022. WCAG has four principles namely Perceivable, Operable, Understandable, and Robust. Under these principles, there are many success criteria with several success level including level A (minimum), level AA (medium), and level AAA (maximum) (W3C, 2024c). Although there are three success level, many global legal frameworks recommended WCAG AA as the baseline of accessibility compliance (Öksüz, 2025).

Web accessibility has received growing attention from developers and organization to ensure that websites are usable by all including ones with disabilities. Numeral studies have analyzed the accessibility of a website in various section such as government, academic, e-commerce, and many more including news website. However, despite of the increasing awareness in digital inclusivity, the number of studies that focuses specifically on online news portals, especially in the Indonesian context, remain limited. While there have been some studies analyzing news websites, most are either done outside of Indonesia or only focusing on a single platform. One research by Fadli & Suranto (2024) focuses on Detik.com as the website being analyzed and the other one by AlSaeed et al. (2024) that focuses on Arabic news portals, and both are still using WCAG 2.1 as the guideline. Up to this time, there has not been a study focusing on most visited news website in Indonesia that uses WCAG 2.2 as the guideline.

Given the big number of people with disabilities, especially visual impairment in Indonesia and the importance of accessibility to ensure that everyone can access information equally, an accessibility analysis needs to be conducted. This research aims to evaluate how well the online news website in Indonesia comply with accessibility standard, with a particular focus on accessibility for users with visual impairments. The study adopts the WCAG 2.2 as the evaluation guideline and apply the WCAG Evaluation Methodology (WCAG-EM) as the method for systematic analysis. To identify and assess accessibility barriers, a combination of automated tools is used including WAVE, aXe DevTools, and Siteimprove, in which the analysis will be used as complementor to each other by addressing different aspect of accessibility and not intended to create comparable result. These tools are chosen based on the ability in detecting errors for the selected success criterias. Each tool has distinct detection capabilities and focuses on slightly different aspects of accessibility. For example, WAVE excels at providing a visual overlay of issues on the page, aXe have features for automated keyboard tabbing, and Siteimprove offers structured reports with issue severity rankings. Since Level AAA is often considered too strict and impractical for broad implementation, and level AA is recommended as the baseline of accessibility compliance, this study focuses only on success criteria at Levels A and AA, excluding Level AAA.

Through this approach, the research seeks to contribute valuable insight into the current state of Indonesia News Website accessibility and highlight area for improvement to promote more digital inclusivity.

1.2 Problem Statement

According to the background that has been stated, there are some problems that are found regarding this topic.

1. The rapid growth of news media resulting in many news website and company in Indonesia. The three most visited news website among hundreds of websites are detik.com, Kompas.com, and tribunnews.com.
2. Being the most visited website means high website traffic and wide coverage where many people can access the website, including ones with disabilities.
3. All people have the rights in gaining access in information, including people with disabilities such as visual impairments.
4. With high traffic and the probability of being accessed by people with visual impairments, there are still a few analysis of the news website's accessibility.
5. Studies that focus on analyzing accessibility for visually impaired user on Indonesian news website is still so minimal, therefore this research needs to be conducted.

According to these problems, the research questions of this research are stated below:

1. How do the three most visited online news websites in Indonesia perform in terms of accessibility compliance with WCAG 2.2, particularly for users with visual impairments based on an analysis using WAVE, aXe DevTools, and Siteimprove, and what types of accessibility issues affecting these users are most frequently identified?
2. What are the recommendation that can be given to improve the accessibility in these 3 most visited online news websites in Indonesia?

1.3 Research Purpose

The purpose that are aimed of this research are:

1. To know the performance of the 3 most visited online news website in Indonesia in terms of accessibility compliance with WCAG 2.2, particularly for users with visual impairments based on the analysis using WAVE, aXe DevTools, and Siteimprove and know the types of accessibility issues affecting these users that are most frequently identified.
2. To give recommendation that can improve the accessibility in these 3 most visited online news websites in Indonesia.

1.4 Research Scope and Limitation

For this research, there are some limitation and scope that are applied as stated below:

1. The research focuses on analyzing the accessibility, particularly for ones with visual impairments, on the 3 most visited online news website in Indonesia.
2. The Visual Impairment included for this research are Low Vision and Color Blindness.
3. This research will only focus on success criteria with conformance level on level A and AA, excluding the level AAA.
4. This research will focus on the home page and one of the news page samples of the 3 most visited online news website in Indonesia.

1.5 Research Benefit

After the research is conducted and the research purpose is completed, the benefit that will be given by this research are stated below:

1. This research contributes to academic fields by enriching the body of literature on web accessibility, particularly in the context of online news media in Indonesia. The findings provide valuable insights into the current state of accessibility compliance based on WCAG 2.2 standards and serve as useful reference for future studies related to digital inclusions and accessible web designs.
2. The result of this research offers a practical evaluation of accessibility issues found in popular Indonesian news websites, specifically from the perspective of users with visual impairments. These insights can be used by

web developers, media organizations, and related stakeholders as a basis for improving the accessibility of their platform and promoting more digital inclusivity.

