

Quality and User Satisfaction Analysis of Zalora.Co.Id E-Commerce Website Using Seo and Webqual 4.0 Methods

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ABSTRACT

The rapid growth of e-commerce in Indonesia has intensified competition among online retail platforms, making website visibility and user satisfaction critical success factors. This study aimed to analyze the quality and user satisfaction of the Zalora.co.id e-commerce website using Search Engine Optimization (SEO) and WebQual 4.0 methods. The SEO analysis applied White Hat SEO techniques using Similarweb.com, Website Grader, and SEO Site Checkup to evaluate website ranking, performance, and meta tags. WebQual 4.0 was used to assess website quality across three dimensions—usability, information quality, and service interaction quality—in relation to user satisfaction. Data were collected through questionnaires distributed to 82 Information Systems students at Gunadarma University. The results showed that Zalora.co.id ranked first in the Fashion and Apparel category in Indonesia and 450th nationally, achieved a performance score of 66 out of 100, and showed no meta tag errors. However, the website still exhibited issues related to page-loading speed, recorded at 21.7 seconds, and font-size readability on mobile devices. The WebQual analysis indicated that the three dimensions simultaneously influenced user satisfaction, which was categorized as very good. This study concluded that although Zalora.co.id demonstrated strong SEO performance, improvements in page-loading speed and mobile readability were still required to further enhance user satisfaction.

INTRODUCTION

Internet use in Indonesia has increased substantially, and the internet has evolved from a medium for information retrieval, communication, and entertainment into an important platform for online business. It has become an integral part of contemporary lifestyles because of its ability to facilitate rapid information exchange and connect users across geographical boundaries.

The growth of internet use has also influenced consumer behavior and shopping patterns. Online shopping, or online retail, enables consumers to purchase goods and services directly from sellers through internet-based platforms. This model offers convenience because consumers can search for, compare, and purchase products without visiting physical stores. Consequently, the increasing adoption of online shopping has contributed to changes in conventional purchasing behavior and accelerated the development of digital commerce.

Advances in information technology have encouraged the emergence of online shopping platforms that enable buying and selling activities without geographical limitations. These platforms operate within the broader framework of e-commerce, which facilitates transactions involving goods and services through electronic systems. E-commerce has therefore become

an important infrastructure through which companies can expand their markets and reach wider consumer segments.

According to mtarget.co, Indonesia's e-commerce sector has experienced substantial growth. The number of online sellers reportedly doubled annually and reached approximately 4.5 million active sellers in 2017, with around 99% categorized as microenterprises and approximately half operating exclusively online without physical stores. The Indonesian e-commerce market was projected to expand considerably between 2017 and 2022, accompanied by substantial growth in online retail and social commerce expenditures (blog.mtarget.co, 2019). These developments indicate increasing public participation in online buying and selling activities.

E-commerce refers to the buying, selling, transferring, or exchanging of products, services, or information through computer networks, particularly the Internet (Kozinets et al., 2010). From an information technology perspective, e-commerce activities may involve electronic fund transfers, supply chain management (SCM), electronic marketing, online transaction processing, and electronic data interchange (EDI) (Chotimah, 2019). A marketplace represents one component of the broader e-commerce ecosystem by providing an online environment in which sellers and buyers interact. Digital marketplaces generally act as third-party platforms that provide sales infrastructure and payment facilities. Depending on the operating model, marketplaces may allow sellers to manage their own stores or may adopt a consignment-based system in which product management is handled by the marketplace provider.

The rapid growth of online commerce has intensified competition among digital retailers, requiring companies to strengthen their competitiveness and adopt appropriate strategies. As internet usage continues to increase, website visibility has become increasingly important. Websites that are difficult to find through search engines may receive limited visitor traffic, reducing the effectiveness of digital promotion. For e-commerce companies, websites function as important channels for presenting products, communicating with customers, and facilitating transactions. The continued growth of online stores in Indonesia also highlights the importance of developing websites that respond effectively to consumer needs.

A website serves not only as an information medium but also as a platform that supports business processes, including the online sale of products and services. However, operating an e-commerce website alone may not be sufficient without an effective digital promotion strategy. Search Engine Optimization (SEO) is a technique used to improve a website's visibility and ranking on search engine results pages. SEO practices are commonly categorized as White Hat, Black Hat, and Gray Hat SEO. White Hat SEO refers to optimization techniques that follow search engine guidelines and focus on improving website quality, relevance, and accessibility.

Several previous studies have examined SEO implementation and website quality. Sukri & Zulfikar, (2021) conducted research entitled "Getting the Best Website Ranking on Search Engines Using the Search Engine Optimization (SEO) Method," focusing on improving website rankings through SEO techniques. (Hariguna et al., 2020) investigated the implementation of on-page and off-page SEO on e-commerce websites and demonstrated that SEO optimization could improve website visibility and traffic. (Bahri, n.d.) examined SEO techniques for improving article rankings on Google Search. Regarding website quality, (Purwandani & Syamsiah, 2021) applied WebQual 4.0 to evaluate the quality of an e-learning system, while (Hamzah et al., 2022) integrated WebQual 4.0 with Importance-Performance Analysis to assess an e-campus platform. (Rindani & Puspitodjati, 2020) combined WebQual with the Kano Model to analyze the quality of an e-government system, whereas (Adellia &

Prasetio, 2016) mapped customer perceptions of Indonesian e-commerce marketplaces using multiple quality attributes.

However, several research gaps remain. First, most previous studies examined SEO and website quality separately rather than integrating both approaches into a comprehensive evaluation. Second, studies focusing on Indonesian e-commerce platforms have generally analyzed either technical SEO performance or user satisfaction independently. Third, although Zalora.co.id is a prominent fashion e-commerce platform in Indonesia, its website quality and user satisfaction have received limited systematic evaluation using an integrated SEO and WebQual 4.0 approach. Fourth, the application of WebQual 4.0 to fashion e-commerce platforms in Indonesia remains limited.

The novelty of this study lies in the integration of SEO analysis using White Hat SEO techniques with WebQual 4.0 to evaluate both website visibility and user experience on Zalora.co.id. Unlike previous studies that generally examined SEO performance or website quality independently, this research combined both approaches to provide a more comprehensive assessment of website performance. Furthermore, the study applied this integrated framework to a fashion e-commerce platform in Indonesia, an area that has received limited attention in previous research. The use of multiple analytical tools, including Similarweb, Website Grader, and SEO Site Checkup for SEO evaluation, together with WebQual 4.0 for measuring website quality and user satisfaction, provided a broader analytical framework that may serve as a reference for similar studies.

This study aimed to analyze the quality and user satisfaction of the Zalora.co.id e-commerce website using SEO and WebQual 4.0. Specifically, the study sought to evaluate the SEO performance of Zalora.co.id using White Hat SEO techniques, assess website quality based on the WebQual 4.0 dimensions, and examine the relationship between website quality and user satisfaction. The findings are expected to provide practical recommendations for e-commerce practitioners and digital marketers seeking to improve website optimization, visibility, and user satisfaction. For website developers, the integrated analytical framework may provide a useful reference for evaluating and improving e-commerce platforms. For researchers, this study contributes to the literature on the combined application of SEO and WebQual 4.0 in the Indonesian e-commerce context. Ultimately, the study supports broader efforts to improve e-commerce website quality and user experience in Indonesia's rapidly expanding digital economy.

METHOD

This study employed a quantitative descriptive and correlational research design to evaluate the popularity and quality of the Zalora.co.id website and to examine the relationship between website quality dimensions and user satisfaction. Data were collected through literature review, observation, questionnaires, and document analysis. Zalora.co.id was selected as the research object based on Indonesian e-commerce data from iPrice. For the SEO analysis, Similarweb was used to assess website ranking and traffic-related performance, while Website Grader and SEO Site Checkup were used to evaluate selected on-page SEO elements, including the meta title, meta description, meta robots tag, viewport meta tag, and heading structure.

Website quality was assessed using WebQual 4.0, which comprised three dimensions: usability (X1), information quality (X2), and service interaction quality (X3), with user satisfaction as the dependent variable (Y). The study population consisted of 459 Information Systems students at Gunadarma University from the 2017 cohort. Respondents were selected using purposive sampling, with a minimum sample size of 82 respondents calculated using the

Slovin formula with a 10% margin of error. Data were collected through a Google Forms questionnaire consisting of 21 items between April 5 and June 27, 2023. The questionnaire items were tested for validity using the criterion ($r_{\text{count}} > r_{\text{table}}$) at a 5% significance level, while reliability was assessed using Cronbach's alpha, with coefficients above 0.60 considered acceptable.

RESULT AND DISCUSSION

Analysis Results

After conducting an analysis using white hat SEO and webqual 4.0, you will get the results of how much the correctness of the data collection process has been carried out based on website ratings and filling out questionnaires by respondents. These results are analyzed and can be evaluated as recommendations for the Zalora.co.id website in order to develop a better Zalora.co.id e-commerce website and to increase end user satisfaction.

DISCUSSION

SEO White Hat Analysis Result

The following is the result of ranking, performance and meta tag analysis of the Zalora.co.id website using Similarweb.com, Website.Grader.com, seositecheckup.com.

Similarweb.com on the Zalora.co.id website

Similarweb.com is used to view Zalora.co.id website rankings and the steps are as follows.

1. Open Similarweb.com in the google chrome browser but this can also be done using another browser.



Figure 1. *Similarweb.com on Google Chrome*

Source: Author's documentation during SEO analysis (2023)

2. Enter the Zalora.co.id link or url into the search bar on Similarweb.com.



Figure 2. Entering Zalora.co.id on Similarweb.com

Source: Author's documentation during SEO analysis (2023)

3. Displays the ranking results of the Zalora.co.id website

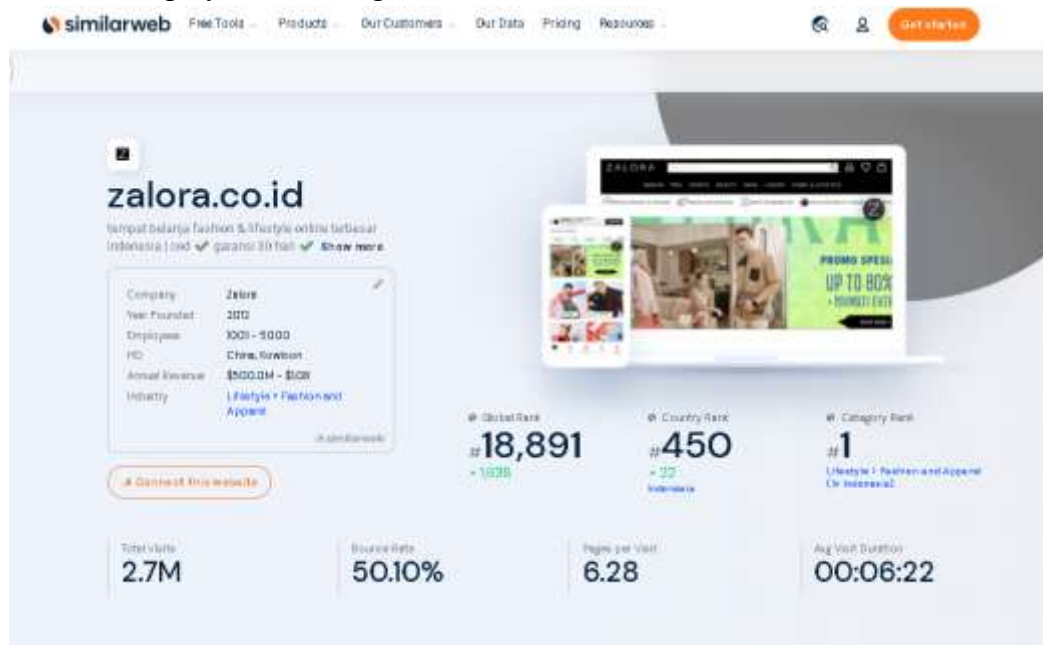


Figure 3. Display of Zalora.co.id Website Rating Data.

Source: Similarweb.com (2023) – accessed March 2023

Based on Figure 3, it can be seen that Zalora.co.id in Indonesia is ranked 450th out of all websites in Indonesia. As for the global ranking, it is ranked 18,891 of all websites in the world, in the global ranking, the Zalora.co.id website has increased from the previous ranking. For ranking in the category of Fashion and Apparel websites in Indonesia, Zalora.co.id is ranked 1st.



Figure 4. Display of Geographic Data and Zalora.co.id Website Visitor Traffic.

Source: Similarweb.com (2023) – accessed March 2023

Based on Figure 4, it can be seen that Zalora.co.id website visitors come from Indonesia with a percentage of visitors 96.41%, United Kingdom with a percentage of visitors 0.90%, United State with a percentage of visitors 0.33%, Turkey with a percentage of 0.32%, and Australia with a percentage of visitors 0.30%. Total Visits in March 2023 amounted to 2.7M, an increase of 26.71% from the previous month. Page per Visit is the average page visited by one visitor every day. The page per visit of the Zalora.co.id website is 6.28 pages in one day. There is Avr. Visit Duration, namely the average time most visitors view the contents of the website. On the Zalora.co.id website it is 00:06:22 or an average of 6 minutes 22 seconds to open the website once. The last one is the Bounce Rate, which is the percentage of visitors who leave the website after only opening one page. The bounce rate on the Zalora.co.id website is 60.10%.



Figure 5. Traffic Sources Website Zalora.co.id

Source: Similarweb.com (2023) – accessed March 2023

In Figure 5, there are several categories which are sources of traffic on the Zalora.co.id website. Starting from referrals with 1.94% of visitors, referrals are a system that will bring new visitors to certain sites, in this case, the Zalora.co.id website.



Figure 6. Social Media traffic Zalora.co.id

Source: Similarweb.com (2023) – accessed March 2023

The next category is Social (Social Media) with a total of 1.26% of Zalora.co.id website traffic sources. Figure 6 shows that visitors in the social category (social media) on the Zalora.co.id website via Whatsapp are 55.81%, Youtube are 27.73%, Facebook are 12.59%, Instagram are 3.80%, and Tiktok are 0.07%.

The mail category gets a visit of 2.59%. Mail is an electronic mail provider like Yahoo! And Gmail. Display is a category that gets a visit of 0.83%. The Display category is a leading paid referral site, top publishers refer ad traffic to the Zalora.co.id website with several Top Ad Networks or top ad management networks. See in picture 4.7

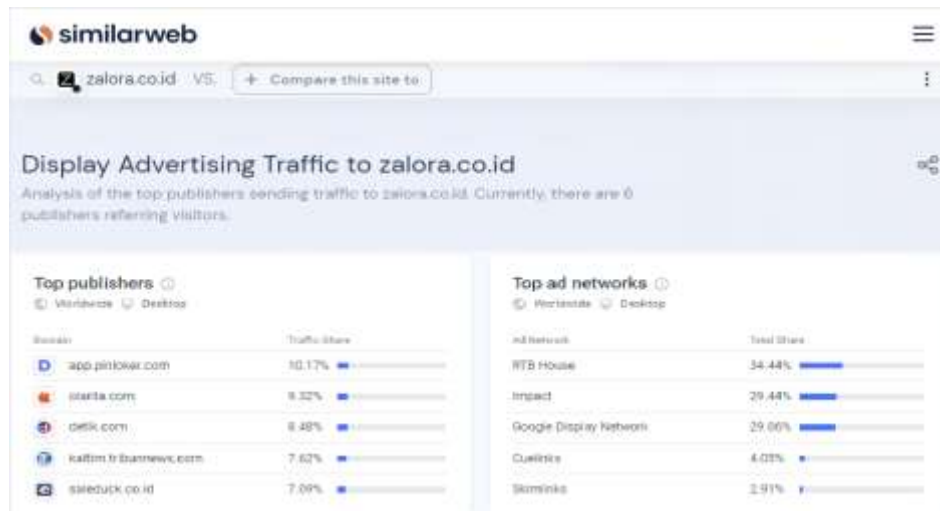


Figure 7. Display Advertising Website Zalora.co.id
Source: Similarweb.com (2023) – accessed March 2023



Figure 8. Search Keywords Website Zalora.co.id
Source: Similarweb.com (2023) – accessed March 2023

In the organic search and paid search categories Zalora.co.id gets 35.84% traffic with organic and paid keywords 25.56% and 10.28%, respectively. Organic keywords are the leading keywords that bring free traffic to Zalora.co.id, in this case the top keywords from search engines on the Zalora.co.id website are zalora with 12.45% percentage, puma indonesia with 0.77% percentage, dr martens with percentage of 0.64%, Zalora Indonesia with a percentage of 0.51% and finally Nike Indonesia with a percentage of 0.43%. While paid keywords are prominent keywords purchased by Zalora.co.id to attract traffic from search engines. The number of percentages of the keyword pain can be seen in Figure 4.8.

The last category for traffic sources is Direct, which is 57.53%. Direct means directly, in this case visitors go directly to the Zalora.co.id website without having to go through an intermediary.

Websitegrader.com on the Zalora.co.id website

Website.Grader.com is used to assess the performance of the Zalora .co.id website the steps are as follows,

Opening Website.Grader.com in the google chrome browser but this can be done using another browser.



Figure 9. Website.Grader.com on Google Chrome.

Source: Author's documentation during SEO analysis (2023)

1. Enter the Zalora.co.id link or url into the website bar on Website.Grader.com.



Figure 10. Entering Zalora.co.id on Website.Grader.com

Source: Author's documentation during SEO analysis (2023)

2. Displays the performance results of the Zalora.co.id website

Based on Figure 11 it can be seen that the overall status of the Zalora.co.id website is OK with a score of 66. This means the website can be accessed but there are some problems

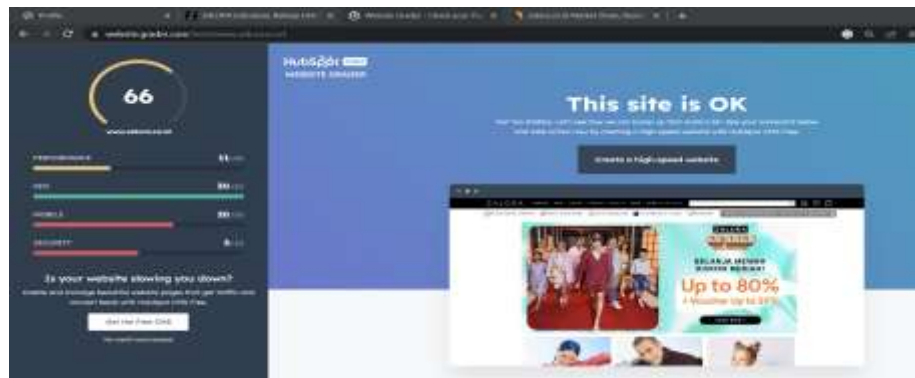


Figure 11. Display of Zalora.co.id Performance Status.

Source: Website.Grader.com (2023) – accessed March 2023

For the performance section as shown in Figure 4.11, the Zalora website is rated 11 out of 30. The performance section explains how the website's performance influences traffic and revenue. The Zalora.co.id website has a Page Size of 2.2 MB. Page Size is the size of the website page. To produce optimal website performance, a page size of under 3MB is required.

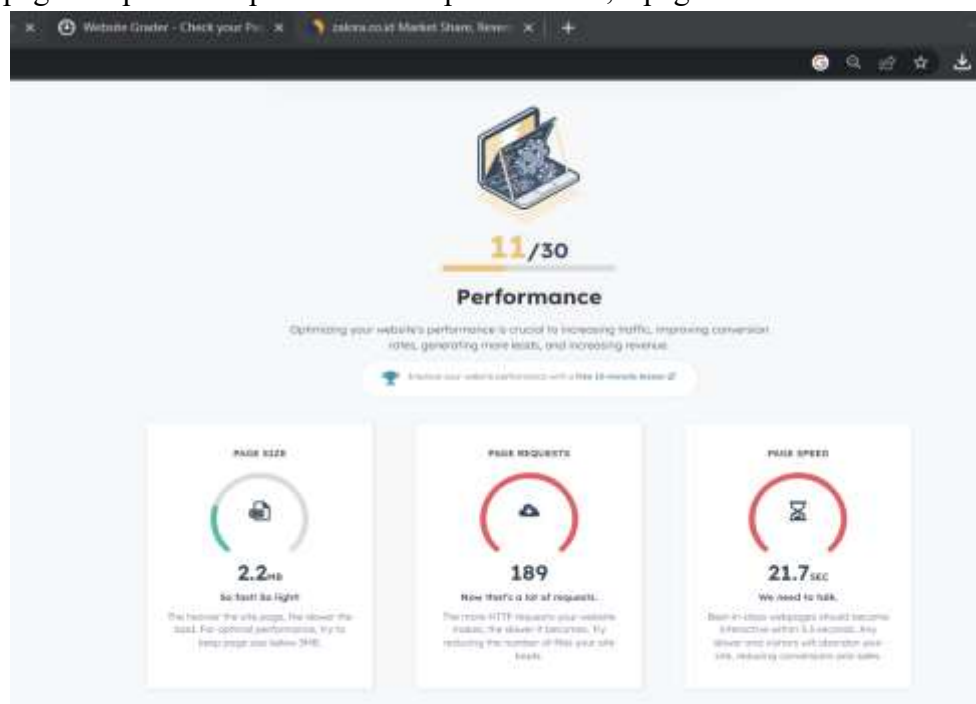


Figure 12. Display Performance from the Zalora.co.id Website.

Source: Website.Grader.com (2023) – accessed March 2023

Page Request on this website is 18. Page Request is a website request for HTTP. The more HTTP requests needed for the website, the longer the website page will appear so that the website's performance is not optimal. Combining files to reduce HTTP requests can result in small Page Requests so that website performance becomes optimal.

Page Speed on this website is 21.7 seconds. Page Speed is the speed of the website in displaying pages. An optimal website only takes less than 3 seconds to display a website page. The longer the website page appears, the fewer visitors who want to access the website.

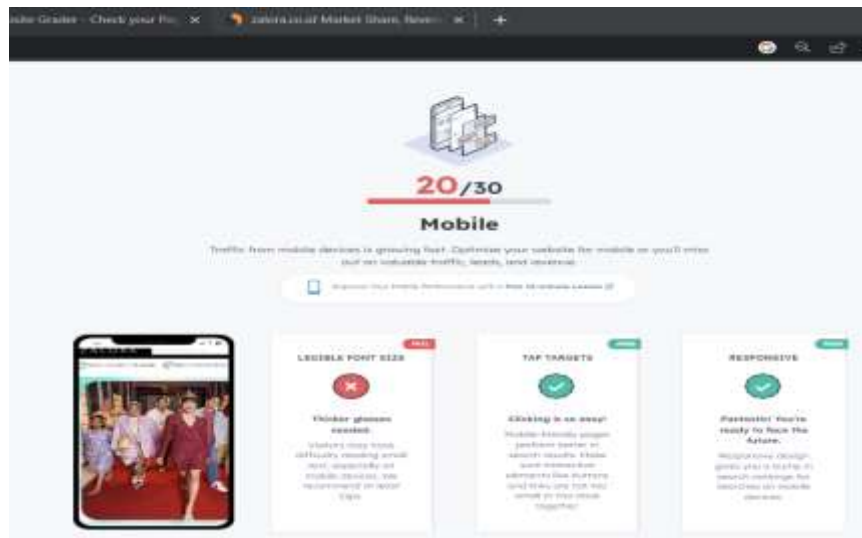


Figure 13. Mobile status display from the Zalora.co.id website

Source: WebsiteGrader.com (2023) – accessed March 2023

Based on Figure 13, the Mobile View on the Zalora.co.id website has a value of 20 out of 30, and it can be seen that this website is responsive. Legible Font Size on this website is small. Legible Font Size is the size of the font that is legible on the website page. Visitors will find it difficult to read small sentences on mobile devices. To make it easier for visitors to read the writing on the website, a minimum Legible Font Size of 12px is required.

Based on figure 14, the SEO view of the Zalora.co.id website has a score of 30 out of 30. This section explains how the website can be found easily by users by using the appropriate meta tags. There are no errors in the Meta Description, Meta Titles and Meta Headings on the Zalora.co.id website. This website has a Sitemap so that users can browse the website quickly and easily.

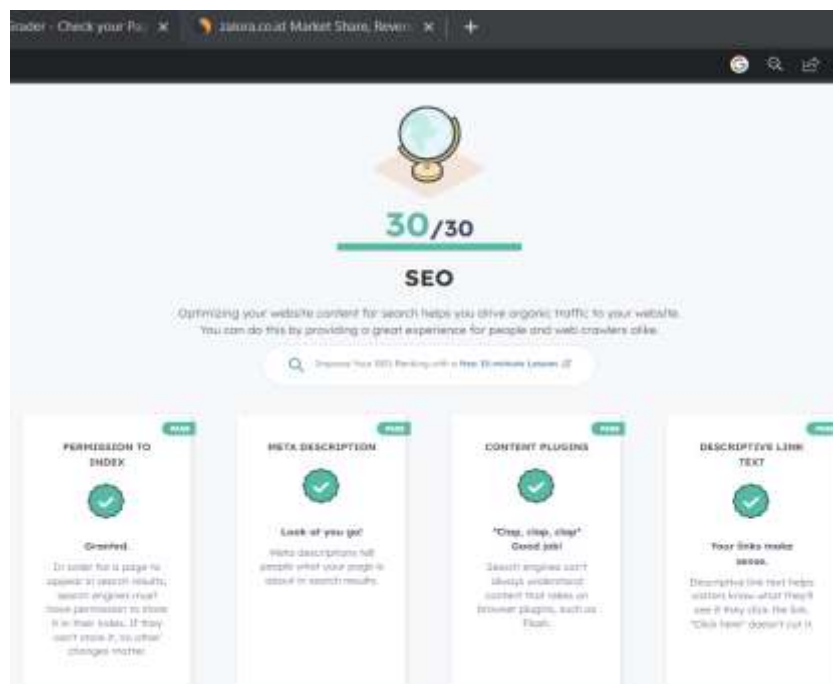


Figure 14 Display of SEO status from the Zalora.co.id website

Source: Website.Grader.com (2023) – accessed March 2023

Based on Figure 15, the Security of the Zalora.co.id website has a value of 5 out of 10 because the JavaScript on this website is not updated to the latest version so that there can be exploitation of this website's JavaScript. Using the latest version of javascript will make this website more secure. The Zalora website already has an SSL Certificate.

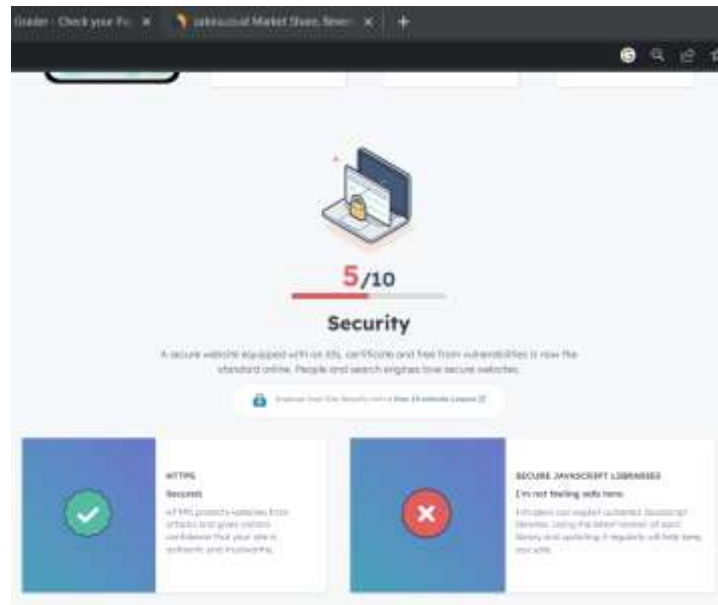


Figure 15. Security status display on the Zalora.co.id website

Source: Website.Grader.com (2023) – accessed March 2023

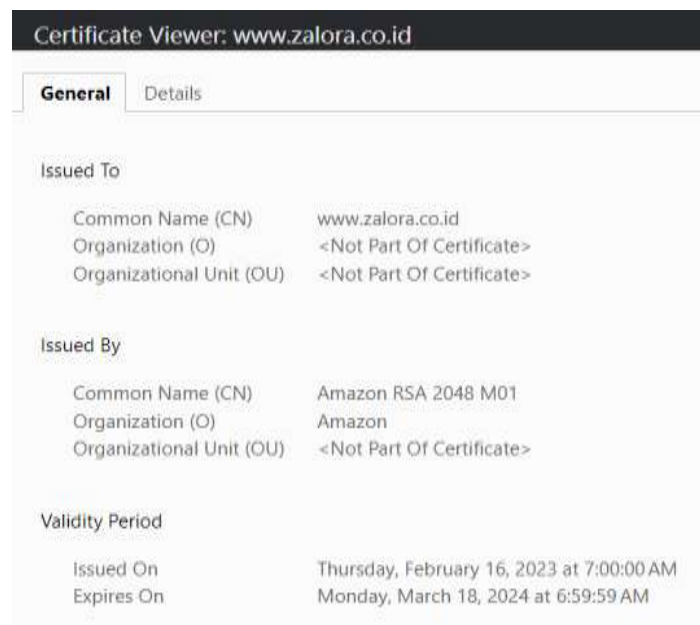


Figure 16. Display of the SSL Certificate from the Zalora.co.id website

Source: Website.Grader.com (2023) – accessed March 2023

Seositecheckup.com on the Zalora.co.id website

Seositecheckup.com is used to perform analysis on Meta Tag variables. The steps are:

1. Open Seositecheckup.com in google chrome browser but this can also be done using another browser.

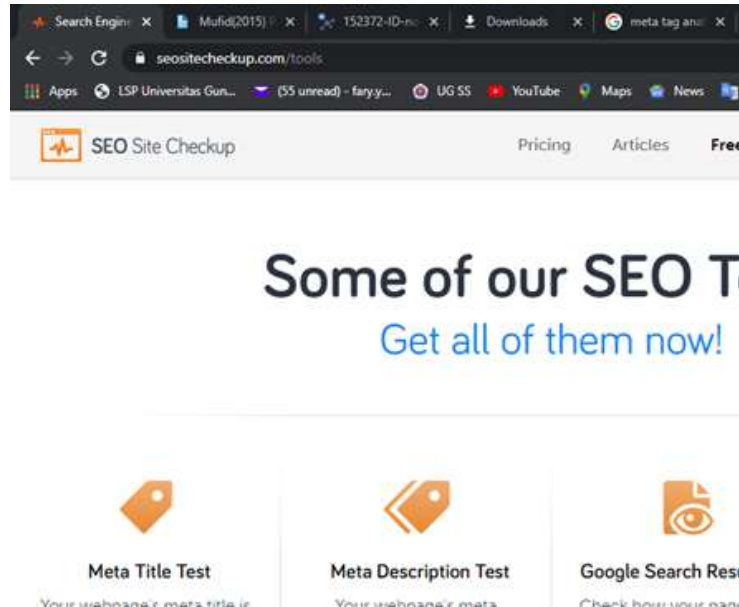


Figure 17. Displays Seositecheckup.com

Source: Author's documentation during SEO analysis (2023)

2. Enter the Zalora.co.id link or url to the website bar on Seositecheckup.com

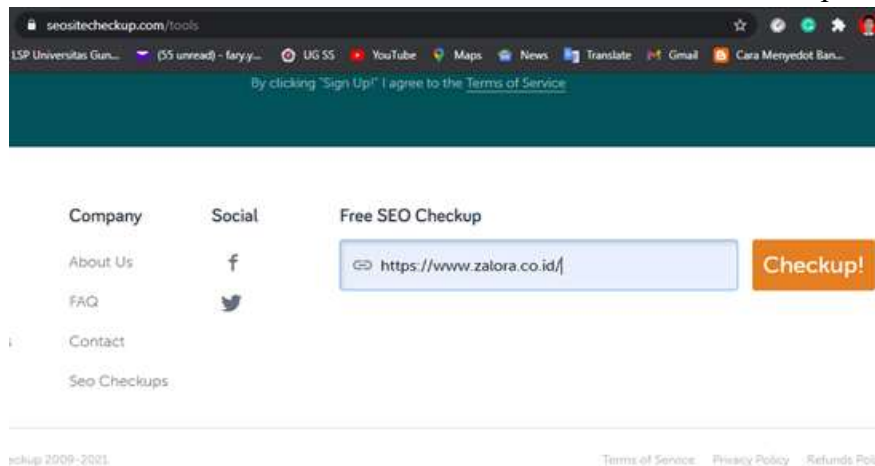


Figure 18. Display Seositecheckup.com

Source: Author's documentation during SEO analysis (2023)

Displays the results of the Zalora.co.id website meta tag analysis.

Meta titles

Figure 19 shows that the Zalora.co.id website has a title of 64 characters long. Almost all search engines will truncate the title of a website if it has more than 70 characters.



Figure 19 Meta Title on the Zalora.co.id Website.

Source: Seositecheckup.com (2023) – accessed March 2023

CONCLUSION

Based on the analysis of the Zalora.co.id website using White Hat Search Engine Optimization (SEO) techniques and WebQual 4.0, several findings were identified. Analysis using Similarweb indicated that Zalora.co.id performed strongly in terms of website ranking, geographic reach, and search-related traffic. However, analysis using Website Grader showed that the website still had several performance-related limitations, particularly in the number of page requests and page-loading speed. In addition, the mobile version of Zalora.co.id displayed text with font sizes below 12 px in some areas, which could reduce readability for users accessing the website through mobile devices.

The meta tag assessment conducted using SEO Site Checkup indicated that no major meta tag errors were detected on the Zalora.co.id website. In addition, the website quality assessment based on the WebQual 4.0 dimensions of usability, information quality, and service interaction quality was categorized as very good. The three WebQual 4.0 dimensions simultaneously had a significant effect on user satisfaction, represented by overall impression, on the Zalora.co.id website. Overall, the combined SEO and WebQual 4.0 analyses indicated that Zalora.co.id demonstrated satisfactory website quality and generally sound on-page SEO elements, although several technical performance issues remained, particularly those related to page-loading speed and mobile readability.

Based on these findings, several recommendations were proposed. Website developers and digital marketers should improve page-loading performance by minimizing unnecessary HTTP requests, optimizing image sizes and formats, and reducing other resource-intensive elements. Mobile readability should also be improved by applying appropriate responsive typography rather than relying on an absolute minimum font size alone. Zalora.co.id management should maintain the quality of the usability, information quality, and service interaction dimensions while continuing to address technical performance issues that may affect user experience and engagement. Future studies should involve broader and more diverse respondent groups beyond university students, incorporate additional SEO evaluation tools or performance indicators, and consider supplementary variables such as trust or brand image to extend the WebQual 4.0 framework. Comparative studies involving other e-commerce platforms may also provide further insight into Zalora.co.id's competitive position and areas requiring improvement.

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