

Implementation of Search Engine Optimization (SEO) with RankMath Plugin to Increase WordPress-Based Website Visits

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Abstract: Search Engine Optimization (SEO) is a series of processes carried out systematically on a website to increase visitor traffic through search engines. SEO needs to be applied to websites with the aim of being indexed by search engines. It is known that one of the CV. Alfiel Elektronik companies in Bandar Lampung has used a website in marketing its products. However, the website is not indexed in the Google Search Engine, so there are no visitors. In order for the website to be indexed and appear on the top page of Google search, the solution is to apply the SEO Method, namely On-Page SEO (inside the website) and Off-Page SEO (outside the website). SEO requires quite high knowledge and skills, and requires a lot of time and money. Therefore, tools are needed that can simplify and speed up the SEO process. One of the tools used is the RankMath plugin. RankMath is an SEO plugin that provides complete features and is easy to use to optimize WordPress websites. The purpose of this research is to apply the SEO Method with the RankMath plugin to increase website visits. The website is measured for SEO performance before and after using the RankMath plugin. The methods used in SEO optimization in this research are planning, analysis, design, implementation, testing and maintenance. The implementation of SEO is able to increase the ranking of the Alfiel Electronic website with the domain, <https://alfiel-electronic.com/>, increase the SEO audit value on Ahrefs and increase the number of visits and website page impressions. This shows that the RankMath plugin is effective for improving SEO and website visits.

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Introduction

The combination of aspects of information technology and communication or by another name ICT (Information and Communication Technology) has become a medium that is inherent and supports various human activities in daily life (Adiputra, 2020). In the current information era, people use the internet to find information, with easy access to information, people also use the internet in social activities, activities and work (Danuri, 2019). The combination of technology results in easy and cheap internet access, this increases people's interest in making internet technology a media and marketing tool (Sitorus, 2020). Technological developments also have a big impact on the website business (Sudaryo, 2020). The success of a website-based business can be determined by the level of visits. Increasing website visitors greatly affects the increase in the number of service users (Orbaningtyas, 2023). CV. Alfiel Elektronik is one of the companies in Bandar Lampung that has utilized a

website-based business as a means of marketing products. The problem that occurs at this time is that the website on the CV Alfiel Elektronik company is not indexed on the Google Search Engine, so there are no visitors and no transactions occur. In addition, the company has not mastered information technology to develop marketing media. One way to minimize the problem is the use of Search Engine Optimization (SEO) which is expected to increase traffic.

Search Engine Optimization (SEO) is a series of systematic processes to increase the volume and quality of website traffic to specific pages (Suteja, 2021). SEO utilizes the working mechanism or algorithm of search engines to promote websites to the top rankings of search results (Azim, 2019). SEO is a set of processes, ways, tactics, and techniques in optimizing website pages to rank high in search results (Saragih, 2020). Search engines are the main means of connecting internet users who are looking for information with websites that provide that information (Mukhlis, 2023). SEO can affect the visibility of a website to achieve relevant search results (Prawira, 2023). The more often a website appears in the list of search results, the more visitor traffic increases. On-Page SEO is an activity carried out on website pages so that search engines can easily index existing keywords, such as ensuring the right keywords in domain names, titles, descriptions, tags, headings, images, and content (Meylasari, 2018). On-Page SEO is done by ensuring the right keywords in the domain name, title, description, tags, headings, images and content in the description (Shofwatullah, 2019). Meanwhile, Off-Page SEO is an activity carried out outside the website to increase traffic by providing quality backlinks on the main website (2020). In optimizing the SEO process, researchers use the Rankmath plugin which focuses on improving SEO. Rankmath provides an evaluation score to measure how well a web page is optimized in terms of SEO (Widya, 2020). This score reflects the quality and effectiveness of SEO optimization on the page. By using the Rank Math score, it can help users to understand the quality and effectiveness of SEO optimization on the page and get recommendations to improve page rank and visibility in search engines. (Zulkarnain, 2023).

Relevant research is the use of Search Engine Optimization (SEO) methods on websites (Assiroj, 2022). The problem that occurs is that the ranking on the website is not optimal, another problem is the lack of understanding of the management of government sites that should follow the various guidelines and rules given by search engine algorithms and the ignorance of government site managers about website ranking. From these problems, the implementation of Search Engine Optimization (SEO) on the website is carried out with the aim of knowing the website's ranking on Google search and knowing the difference in website ranking before and after the implementation of Search Engine Optimization (SEO). In this study, the implementation of SEO has been able to improve website ranking, become the first rank and has succeeded in increasing sitelinks from 74% to 89% and visitor statistics from the previous 2,767 to 3,101. Another relevant research is the application of SEO techniques on websites as a marketing strategy through the internet (Arifin, 2014). Utilizing advances in internet technology as a means of marketing products and services at a relatively low cost and a wide range attracts companies as a marketing medium. However, the problem that occurs is the difficulty of companies to create websites that are visited and indexed on search engines. From these problems, optimization is carried out on search engines by applying Search Engine Optimization (SEO) techniques and designing websites by paying attention to good rules as marketing media. Website design in accordance with SEO rules has succeeded in increasing traffic visits in just a matter of months and target users or visitors

have reached marketing targets and increased sales of goods / services. Another relevant research is the use of on-page and off-page Search Engine Optimization (SEO) methods in optimizing websites to increase traffic visits (Marcos, 2021). The problem that occurs in this research is that it is not fully focused on the application of SEO which causes the website not to experience an increase in traffic visits and an increase in ranking for the website based on certain keywords. From these problems, the application of the SEO (Search Engine Optimization) method to this media website is expected to be more helpful in reaching a much wider market.

The next research is the application of Search Engine Optimization (SEO) to improve website ranking on Google page search results (Mulyanto, 2020). The problem that occurs is that the use of the website is still not optimal, especially in searching for several targeted keywords. This causes the website to be difficult to find by the google search engine organically, consideration to overcome the problem by using paid advertising from google but the use of these ads costs a lot of money so it is considered less efficient. This research has successfully shown significant results from the use of Search Engine Optimization (SEO) has become a solution to the problem. With various methods carried out in a relatively short period of time has succeeded in increasing the ranking of website keywords on google search results after the implementation of SEO. Similar research was conducted as a form of utilizing Search Engine Optimization (SEO) to increase website popularity and visits for MSMEs (Saefurrohman, 2022). The selection of the right sales strategy determines the sustainability and development of an MSME business. For this reason, MSMEs need to improve branding by ensuring that their business is indexed by search engines and always appears on the first page of search results. The use of Search Engine Optimization (SEO) is one solution to increase traffic and become an effective sales strategy. This research conducts website optimization to improve user experience, accessibility, performance, traffic, and website conversion rates. MSMEs have implemented effective strategies to increase search speed based on the level and interest of web visitors as measured by the number of visits made.

The application of the Search Engine Optimization (SEO) method with the Rankmath plugin at the CV. Alfiel Elektronik company is expected to optimize the product marketing system with increased website visits. Utilizing internet technology is one strategy to attract as many visitors as possible. The Search Engine Optimization (SEO) method is used to maximize the website so that it is better known and has great potential to attract many visitors. Website optimization is expected to be a solution to increase visitor traffic, achieve targeted keyword rankings, and expand reach. With the increasing quality of website visitors, it is expected to have a major influence on the development of the store.

Methods

This research uses an experimental method to evaluate the application of Search Engine Optimization (SEO) with the RankMath plugin in increasing WordPress-based website visits at Alfiel Elektronik Store. The experimental method was chosen because it allows researchers to give special treatment to research subjects and measure the effects of the treatment. The main objective of this method is to identify the cause-and-effect relationship between the implementation of SEO with the RankMath plugin and the increase in the number of website visits.

1. Data Collection

The initial stage of research is data collection. Researchers conducted observations and literature studies on the subject to be studied. Initial data collection was carried out through observations of the Alfiel Elektronik Store website. This observation includes analyzing the number of daily visits, the most visited pages, and the time of visit. This data will be used as a baseline to compare the results after SEO implementation. Literature study was conducted to collect additional information and references relevant to SEO and the use of RankMath plugin. The literature sources used include scientific journals, books, and articles from the internet related to the research topic.

2. Planning

The next stage is planning. At this stage, researchers determine relevant and potential keywords to increase website visibility. After the keywords are obtained, the researchers then plan the website structure and content that will be optimized using the RankMath plugin. The data that has been obtained is then analyzed to ensure relevance and search volume. The researcher also evaluates the website structure and content to identify areas that require optimization.

3. Analysis

At this stage, the selected keywords were analyzed to ensure relevance and high search volume. In addition, researchers evaluate the website structure and existing content to identify areas that need to be optimized to improve the website's visibility on search engines.

4. Design

The next stage is design. In this stage, researchers redesigned the existing website pages and designed new content that complies with the principles of on-page SEO. The RankMath plugin is used to provide guidance and optimization scores on each page and article on the website. The design that has been obtained is then implemented into the Alfiel Elektronik Store website using the RankMath plugin.

5. Implementation

In the implementation stage, on-page SEO optimization is performed on the website using the RankMath plugin. This includes optimizing titles, meta descriptions, tags, headings, images, and other content. In addition, researchers also implement off-page SEO strategies, such as getting quality backlinks to increase website domain authority.

6. Testing

The next stage in this experiment is testing. Testing is done by measuring the effectiveness of SEO implementation using Google Console. The data observed includes the increase in the number of visits, visit duration, and traffic sources. This stage is done by using RankMath scores to evaluate each page and article after optimization and make adjustments if needed.

7. Maintenance

The last stage is maintenance. Maintenance is done regularly on SEO optimization by monitoring changes in search engine algorithms and keyword trends. In addition, SEO strategies are also updated regularly to ensure the website remains competitive and relevant in search results. Content updates are done regularly and SEO strategy adjustments are implemented to ensure the website remains relevant and optimized in search results.

Table 1. SEO Optimization Flowchart

Stage	Desripsi
Data Collection	Observation and literature study to collect preliminary data and additional information
Planning Analysis	Determine keywords and plan website structure and content Analyzing keywords and evaluating website structure and content
Design	Redesign website pages and content according to SEO principles
Implementation	Perform on-page and off-page SEO optimization using RankMath plugin
Testing	Monitor and measure the effectiveness of SEO implementation
Maintenance	Perform regular maintenance and content updates to ensure continuous optimization

Research Results And Discussion

Research Results

The research results are divided into two parts. The first part discusses the SEO optimization stage carried out on the Alfiel Electronic Store website. This stage includes a series of activities, namely data collection, planning, analysis, design, implementation, testing, and maintenance. The second part of the research results contains a discussion of the results of the SEO optimization process. In this section, a comparison of the condition of the Alfiel Electronic Store website before and after SEO optimization is presented. This is done to evaluate the impact and effectiveness of SEO optimization efforts that have been implemented.

1. Planning

Alfiel Electronic store has several websites to support their online presence. The main website that serves as the parent is www.alfiel-electronic.com. To expand the market and support the main website, a new website was designed with the domain www.alfiel-electronic.com. This website will be focused on specific keywords related to the product packages offered. Here are the keywords that will be applied:

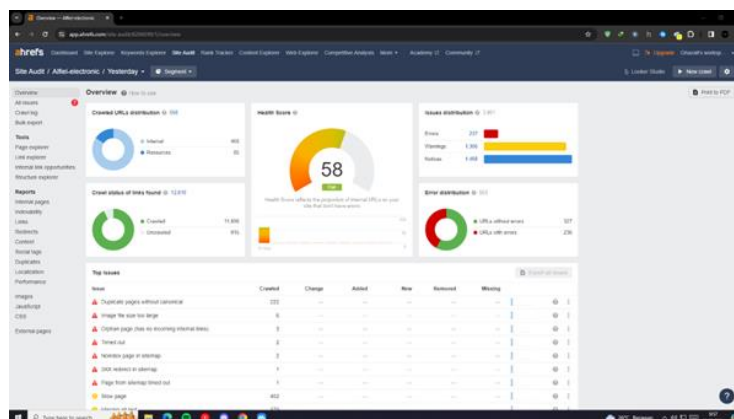
- Dahua CCTV Distributor Lampung
- Dahua 4 Channel CCTV Package Lampung
- Hikvision 4 Channel CCTV Package Lampung
- Ezviz CCTV Package Lampung
- Fingerprint Package Lampung

The goal of this planning is to improve visibility and ranking in search engines, both for the parent website and the new website, so as to attract more organic traffic and increase product sales. By focusing on specific keywords, Alfiel Electronic hopes to reach potential customers who are looking for these products in the Lampung region.

2. Analysis

At the analysis stage, an in-depth review of the Alfiel Electronic Store website is carried out, especially in terms of search engine optimization (SEO) through the site audit process. A site audit is a comprehensive evaluation of a website to identify problems that can affect its performance in various aspects. This audit covers elements such as SEO, site performance, security, user experience, and compliance with web standards.

The main purpose of the site audit is to ensure that the Alfiel Electronic Store website functions optimally and provides the best experience for users, as well as increasing visibility in search engines. This audit was conducted when the Alfiel Electronic Store website had not yet used SEO optimization and site structure improvements, so that the audit results could be used as a basis for making improvements and improving site performance.



Picture 1. Analysis Ahrefs

Analysis of the Alfiel Electronic Store website using the Ahrefs Site Audit tool shows that the site health value <http://www.alfiel-electronic.com> is at 58%, which is categorized as fair. In this analysis, Ahrefs performed 550 crawled URLs distribution, where 465 URLs are internal URLs and 85 are internal and external resources. Ahrefs also performed 12,610 crawl status of links found, which is divided into 11,695 crawled (destination links have been crawled) and 915 uncrawled (destination links are not crawled). This can be caused by the configuration done on the website, both from the server side and the CMS used. Furthermore, Ahrefs found 563 errors. In the Internal pages section, there are several problems that need to be fixed so that the health of the Alfiel Electronic Store site can improve and provide a better experience for visitors.

In this research, some of the main keywords used are:

- "cctv distributor dahua lampung"
- "cctv package dahua 4 channel lampung"
- "cctv package hikvision 4 channel lampung"
- "cctv package ezviz lampung"
- "Fingerprint package lampung"

In addition to these five main keywords, there were several other keywords that were also considered as part of this research. The use of relevant and specific keywords aims to obtain accurate results and focus on the Lampung region, specifically related to CCTV products and fingerprint devices available in the area.

3. Design

After conducting an in-depth analysis of the Alfiel Electronic Store website, both in terms of internal sites and the level of competition in the keywords to be optimized, the next step is to develop a search engine optimization (SEO) strategy that will be applied to the site. This SEO strategy will include two main components, namely on-page SEO design and off-page SEO design. By designing a comprehensive SEO strategy, it is hoped that the Alfiel Electronic Store website can increase visibility and ranking in search engines, so that it can attract more visitors who are interested in the products and services offered.

a. Situs Web structure

The first step in designing SEO optimization is to determine the website structure. This structure is designed to ensure easy navigation, clean URLs, and a logical hierarchy. By having a good site structure, visitors who are potential customers can find information more easily. Meanwhile, search engines can also index the Alfiel Electronic Store website

more easily. Website visibility and ranking can increase in search results. This can have a positive impact on the number of potential web visitors.

b. Content Design

Once the website structure is determined, the content is then designed with relevance to the targeted keywords in mind. This SEO strategic plan includes creating quality content, both for product/service pages and informative content that can attract visitors. Good content will not only help improve rankings in search results, but will also improve the user experience when visiting the Alfiel Electronic Store website. Thus, visitors will be more impressed and more likely to come back next time.

c. User Experience (UX)

Content design also pays attention to the User Experience (UX) of users. This SEO plan also includes efforts to ensure optimal mobile responsiveness, given that many visitors access the website via mobile devices. In addition, fast loading speed is also very important to keep visitors on the website. A slow website can cause visitors to leave the site before the page finishes loading, negatively impacting user experience as well as search engine rankings. By paying attention to aspects of responsiveness and speed, Alfiel Electronic Store can improve website quality and attract more potential visitors.

d. SEO On-Page

On-page SEO design for the Alfiel Electronic Store website focuses on optimizing the components of the website itself. This on page SEO design will focus on key elements of on-page SEO, such as the meta tag structure of the Alfiel Electronic Store website. The goal is to ensure that this website can be indexed and prioritized properly by search engines. A comprehensive on-page SEO design plan is expected to increase the visibility and ranking of the Alfiel Electronic Store site in search results. On-page SEO consists of: 1) title tags; 2) meta descriptions; 3) h1 tags; 4) keywords; 5) internal & external links; and 6) images.

e. SEO Off-Page

Off-page SEO design will focus on things outside the Alfiel Electronic Store website itself. The off-page SEO strategy will target increasing the visibility and reputation of the Alfiel Electronic Store website on search engines through increasing backlinks from other websites that point to the Alfiel Electronic Store site. These efforts can include outreach activities, collaboration, and content development that can attract links from related and relevant sites. With a good off-page SEO design, Alfiel Electronic Store is expected to improve its position in search results and attract more potential visitors. Off-page SEO consists of: 1) link building; 2) backlinks; and 3) social media engagement.

4. Implementation

The implementation of the search engine optimization (SEO) method will be carried out based on the previously created SEO design, with a focus on on-page SEO and off-page SEO on the homepage of the Alfiel Electronic Store website. The following are the implementation stages.

a. SEO On- Page

The on-page SEO optimization stage begins with the creation of the homepage and other pages. On-page SEO will focus on improving the homepage so that the website design matches the concept of Alfiel Electronic Store. Furthermore, implementation is carried out by filling in title tags and meta descriptions, creating headers that contain keywords, and distributing keywords on each page. These efforts are made so that the

visibility and ranking of the Alfiel Electronic Store website can increase in search results.

1) Homepage Creation

Creating the homepage of Alfiel Electronic Store is an important step in the on-page search engine optimization (SEO) strategy. The homepage serves as the main face of the website, designed to provide a brief introduction to the services offered and ensure an optimal user experience.



Picture 2. Homepage Creation

Apart from the homepage, there are 5 other pages created to optimize the Alfiel Electronic Store website. The following are the 5 pages created.

a) Main Page

This page consists of a header with the company logo, navigation menu, main banner, service introduction sections, such as CCTV and Access Door with short descriptions and links to their respective detail pages, as well as a call to action.

b) CCTV Page

This page provides detailed information about the CCTV packages provided. The CCTV page displays images, product titles, and respective prices, as well as links to those product pages.

c) Access Door Page

This page focuses on the Access Door services or access control systems offered. This page displays images, product titles, and their respective prices, as well as links to their product pages.

d) Control Page

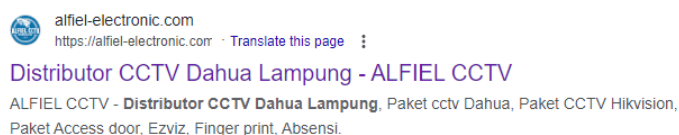
This page includes a map of the store location, company contacts, email, hours of operation, as well as social media links.

e) FAQ Page

This page lists frequently asked questions by customers and their answers.

2) Filling Title Tags and Meta Description

Filling title tags and meta descriptions on the homepage and other pages is done with the help of the rankmath plugin.



Picture 3. Filling Title Tags and Meta Description

3) Creation of Headers that Contain Keywords

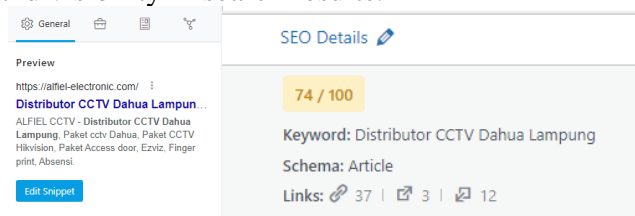
The creation of keyword-loaded headers is one of the essential elements in an on-page search engine optimization (SEO) strategy. Headers in this context refer to the use of HTML heading tags, such as H1, H2, H3, and so on, which are used to mark titles and subheadings in website content.



Picture 4. Creation of Headers that Contain Keywords

4) Keyword Distribution on Each Page

The distribution of keywords on each page of the website is important in the on-page SEO strategy. The main keywords, such as "CCTV Distributor Dahua Lampung", should be strategically inserted into the content, heading tags, meta tags, and other elements on the key pages of the website. This helps increase the site's relevance and visibility in search results.



Picture 5. Keyword

5) SEO Off- Page

The implementation of off-page SEO will focus on the external aspects of the Alfiel Electronic Store website. This strategy will include various tactics to improve the image and authority of the website on search engines through various methods.

a) Link Building

Link building is one of the most important aspects of off-page SEO. It involves getting quality backlinks from relevant authoritative websites. Ways to do link building include the following.

- 1) Writing guest articles on other relevant websites.
- 2) Listing the site in online business directories.
- 3) Participating in related industry forums, i.e. electronics.

b) Social Media Engagement

Alfiel Electronic store will utilize two main platforms, namely Instagram and Facebook. The strategy used for off-page SEO optimization through social media is to upload interesting visual content, interact with followers, attract reviews, do special promotions, and join social media communities.

5. Testing

The testing phase of the SEO method implementation will use the black box method. In this method, researchers will search using predetermined keywords on the Google search

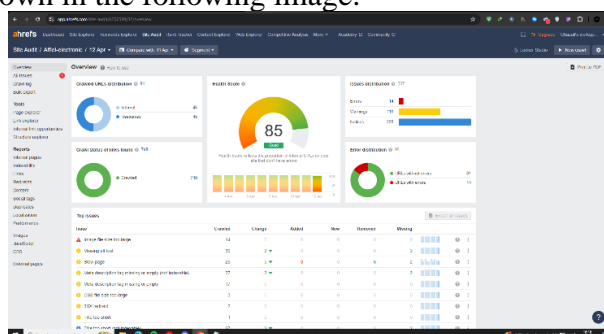
engine. The purpose of this research is to produce more accurate and objective search results, so a browser on a laptop device with secret browsing mode (incognito) will be used. The first step is to access the browser in incognito mode by pressing the key combination "Ctrl+Shift+N" or through the menu in the upper right corner by clicking the menu button and selecting "New Incognito Window". Next, in the search bar, search with the keywords "CCTV distributor Dahua Lampung". Open a new tab in incognito mode and search with the second keyword, "CCTV distributor Dahua Lampung". The next step is to make sure that the official website of Toko Alfiel Electronic, which is located at www.alfiel-electronic.com, has obtained the top position in the search results. However, top positions in search engines are not permanent and can change constantly according to updates to the algorithms used by search engines. Therefore, regular monitoring and adjustment of SEO strategies need to be done to maintain the top position in search results.

6. Maintenance

At this stage, researchers will strive to maintain the ranking of the Alfiel Electronic Store website by performing care and maintenance. This includes monitoring the health of the website based on the results of the SEO audit. This audit provides complete and accurate information using various variables designed in accordance with search engine guidelines, so as to provide an overview of the problems along with the location of existing errors. Researchers will prioritize improvements to problems with error categories that have the highest severity. By performing maintenance, it is hoped that the Alfiel Electronic Store website can maintain and even improve its ranking in search engines and can provide a better experience for visitors, and improve the overall health of the website.

7. Experiment Results

After SEO optimization, analysis using Ahrefs shows a significant improvement in the Alfiel Electronic Store website. The website is now in the good category with a health score of 85%. Ahrefs recorded 91 crawled URLs, divided into 46 internal URLs and 45 resources. Crawl link status of found shows 748, with 14 errors, 118 warnings, and 25 notices. The improvements made have successfully improved the overall health of the website, reduced the number of errors and significantly improved the user experience. The optimization results are shown in the following image.

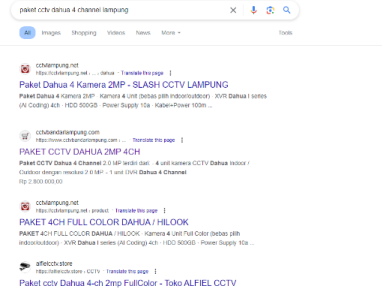
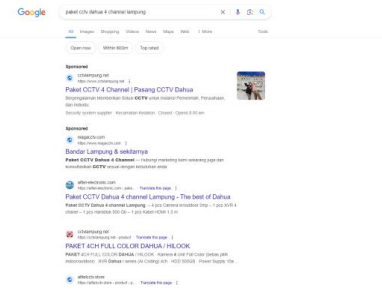
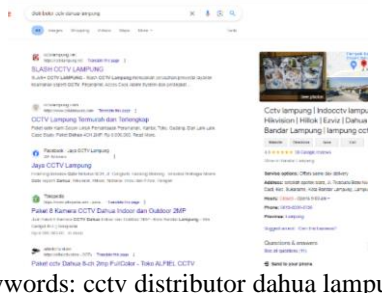
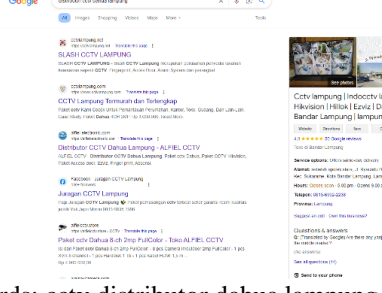


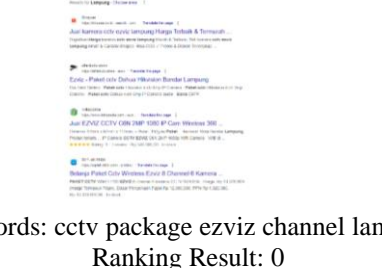
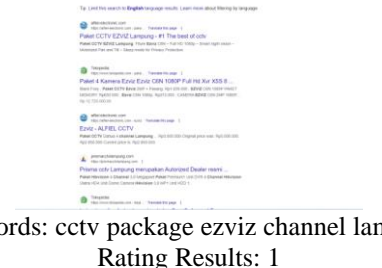


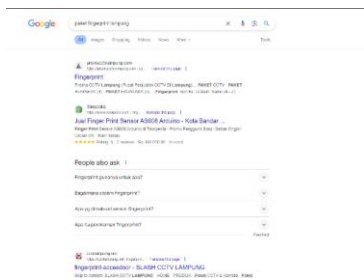
Picture 6. Ahrefs Analysis After SEO Optimization

Furthermore, the results showed that the implementation of Rankmath SEO on the Alfiel Electronic Store website has significantly improved keyword rankings. Before using Rankmath SEO, keywords such as "CCTV package Dahua 4 channel Lampung," "CCTV distributor Dahua Lampung," "CCTV package Hikvision 4 channel Lampung," "CCTV package Ezviz channel Lampung," and "fingerprint package Lampung" had no visible ranking (rank 0). However, after optimization, these keywords managed to rank higher, with

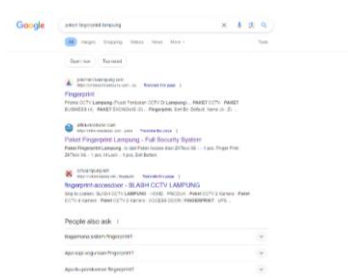
each keyword reaching rank 3, 3, 3, 1, and 2. This ranking improvement shows that Rankmath SEO is effective in improving website visibility and performance in search engines, so as to attract more visitors and increase sales conversion opportunities.

Table 2. Comparison of Search Results

Before Using Rankmath SEO	After Using Rankmath SEO
 <p>Keywords: cctv package dahua 4 channel lampung Ranking Result: 0</p>	 <p>Keywords: cctv package dahua 4 channel lampung Results Rating: 3</p>
 <p>Keywords: cctv distributor dahua lampung Ranking Result: 0</p>	 <p>Keywords: cctv distributor dahua lampung Rating Results: 3</p>
 <p>Keywords: hikvision 4 channel cctv package lampung Ranking Result: 0</p>	 <p>Keywords: hikvision 4 channel cctv package lampung Rating Results: 3</p>
 <p>Keywords: cctv package ezviz channel lampung Ranking Result: 0</p>	 <p>Keywords: cctv package ezviz channel lampung Rating Results: 1</p>

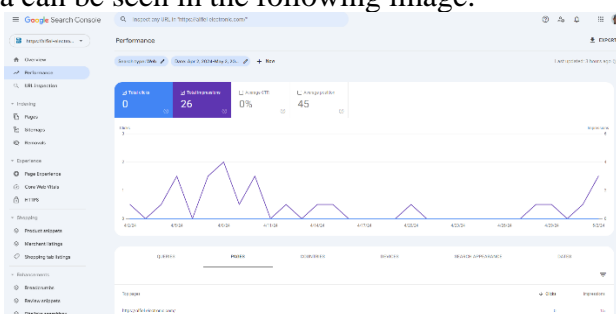


Keywords: fingerprint package lampung Ranking
 Result: 0



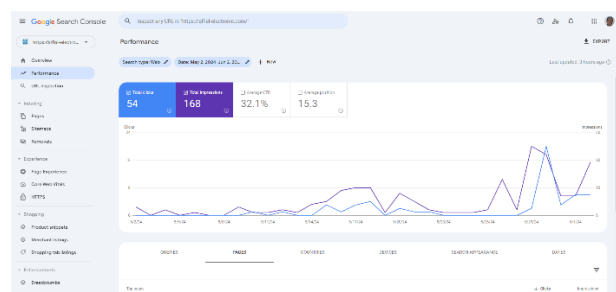
Keywords: fingerprint package Lampung Result
 Rating: 2

Before SEO optimization, Alfiel Electronic's web performance had 0 total clicks/visits. Total impressions are only 26 times with 0% CTR on average. The average web position is 45. The data can be seen in the following image.



Picture 7. Total Impressions Before SEO Optimization

After SEO optimization, the web performance of Alfiel Electronic Store has increased. The total number of web clicks is 54 with 168 total impressions. The average web CTR is 32.1%. The average web position is 15.3. This data is measured in a span of 1 month. The data can be seen in the following image.



Picture 8. Total Impressions After SEO Optimization

Conclusion

The conclusion of this study shows that the implementation of search engine optimization (SEO) strategies on the Alfiel Electronic Store website provides significant results. Before optimization, the health value of the www.alfiel-electronic.com site was at 58%, which was categorized as fair. However, after optimization, the health value increased to 85%, which is categorized as good. This shows that the improvements made, including addressing broken internal JS and CSS files, broken internal links, and issues with mixed content, successfully improved the health of the website. In addition, the implementation of Rankmath SEO also has a positive impact on the ranking of targeted keywords. Before

optimization, SEO rankings with keywords had no visible rankings. After optimization, the web ranked 1-3 in search.

This improvement is also reflected in traffic performance and website ad performance. Before optimization, Alfiel Electronic Store's web performance had 0 total clicks / visits, with a total impression of only 26 times and an average CTR of 0%. After optimization, the total number of web clicks increased to 54 with 168 total impressions and an average CTR of 32.1%. The average web position also increased from 45 to 15.3 in a span of one month. In addition to improving rankings and visibility on search engines, the optimization also improved user experience through improvements in loading speed, mobile responsiveness, and content structure. In conclusion, the SEO strategy implemented successfully improved the health, visibility, and performance of the Alfiel Electronic Store website, which in turn increased the potential for conversions and sales.

The main limitation is the relatively short research time, so the optimization results may not fully reflect the long-term impact of the implemented SEO strategy. In addition, this study only used a few specific keywords, so the results may not cover the entire potential of relevant keywords for Alfiel Electronic Stores. Therefore, future research is recommended to extend the observation period, expand the scope of targeted keywords, and include analysis of the impact of changes in search engine algorithms and other external factors to get a more comprehensive and accurate picture.

References

- A. Antonius and B. R. Suteja, (2021) The Implementation of On-Page Search Engine Optimization Methods to Improve Website Ranking as Google Search Results, *J. Tek. Inform. and Sist. Inf.*, vol. 7, no. 1, 2021.
- A. Rumondang, A. Sudirman, and S. Sitorus (2020), *Digital Marketing and Consumer Behavior*. Yayasan Kita Tulis.
- D. H. U. Ningsih, D. B. Santoso, N. Mariana, and S. Saefurrohman, (2022) "Model Search Engine Optimization (SEO) bagi UMKM Untuk Meningkatkan Popularitas dan Pengunjung Website," *J. Sisfokom (Sistem Inf. dan Komputer)*, vol. 11, no. 3, pp. 415–422.
- F. Azim, (2019) Application of SEO (Search Engine Optimization) Techniques with Onpage and Offpage Methods on the Cargoriau Website. *Com, Riau J. Comput. Sci.*, vol. 5, no. 1, pp. 32–37.
- F. B. Dewanto, M. H. P. Febrian, M. R. Amir, and I. F. A. Prawira, (2023) The Application of SEO in Company Marketing Strategy, *J. Maneksi (Management Econ. And Accounting)*, vol. 12, no. 4, pp. 709–715.
- F. D. Sidqi and H. Marcos, (2021) Website Optimization Using Search Engine Optimization (Seo) Methods on Page and Off Page in Increasing Visitor Traffic: Case Study: Hustle Media Group," *J. Inf. Syst. Manag.*, vol. 3, no. 1, pp. 27–31.
- F. Santoso and Z. Zulkarnain, (2023) Internship: Digital Marketing Gemstar Technology Asia PTE. LTD," in *National Conference for Community Service Project (NaCosPro)*, pp. 222–232.
- F. F. D. Imaniawan, R. Wijianto, and J. D. Mulyanto, (2020) Penerapan Search Engine Optimization Untuk Meningkatkan Peringkat Website Pada Search Engine Results Page Google (Case Study: [www. superbengkel. co. id](http://www.superbengkel.co.id)), *EVOLUSI J. Sains dan Manaj.*, vol. 8, no. 2.

- I. Handayani, E. Febriyanto, and M. Shofwatullah, (2019) Optimalisasi visibilitas situs iLearning Journal Center (iJC) On a Search Engine Based Search Engine Optimization (SEO) On Page,” Sains dan Teknol. Inf., vol. 5, no. 1, pp. 27–35.
- I. R. Mukhlis et al. (2023), Digital Marketing Strategy: Practical Guide & Latest Digital Marketing Strategy. Sonpedia Publishing Indonesia.
- J. Maknunah, L. S. Rahmawati, A. Prasetyo, and E. Y. Orbaningtyas. (2023), Utilization of Search Engine Optimization on the Website as Promotion Support, J. Janitra Inform. and Sist. Inf., vol. 3, no. 2, pp. 81–88.
- M. Danuri (2019), Digital technology development and transformation, J. Ilm. Infokam, vol. 15, no. 2.
- M. G. Saragih, S. O. Manullang, and J. Hutahaeen, (2020) Marketing in the Digital Age. CV. Andalan Bintang Ghonim.
- M. Hayaty and D. Meylasari, (2018) Implementation of Search Engine Optimization (SEO) Based Website as a Promotional Media, J. Inform., vol. 5, no. 2, pp. 295–300.
- M. Mastam and C. Widya, (2020) Rs Website Performance Optimization Using Off-Page and On-Page SEO Methods. Bina Darma University, 2020.
- N. P. Adiputra (2020), Fundamentals of Informatics Engineering. Deepublish.
- P. Assiroj, (2022) Implementation of Search Engine Optimization (SEO) Method on Wonosobo Immigration Website, INFOTECH J., vol. 8, no. 1, pp. 41–52.
- R. B. Lukito, C. Lukito, and D. Arifin, (2014) Application of SEO (Search Engine Optimization) Techniques on Website in Marketing Strategy through the Internet, ComTech Comput. Math. Eng. Appl., vol. 5, no. 2, pp. 1050–1058.
- S. E. Yoyo Sudaryo et al (2020). Digital Marketing and Fintech in Indonesia. Andi Publisher.
- W. Abdillah and H. Marcos, (2020) Implementation of SEO (Search Engine Optimatization) Techniques Using on Page and Off Page SEO Methods (Case Study of KUB Source of fortune),” Infoman's J. Manaj. and inform, vol. 14, no. 2, pp. 117–126.