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Implementation of White Hat SEO-Based Digital Incubator Platform

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Abstract

Advances in information technology are developing rapidly in various areas of life. The Internet is one of the most influential information and communication technologies. A website, one of the Internet technologies, is not only a medium of information, but also a process that supports a company's business. No effect. SEO (Search Engine Optimization) is one of the advertising methods using search engine optimization so that the website created by our company will be displayed on the top of the search engine page or on the first page (first page). This research was initially conducted on the Business Incubator website, which did not follow his SEO techniques. Then some steps were also taken by implementing on-page SEO techniques such as title tag, content, meta keywords, keyword optimization for meta description and sharing on social media. This point. A test as a benchmark for successful implementation of SEO techniques. As a result of implementing SEO techniques, his website's SERP (Search Engine Results Pages) on search engines increased and in the second month he successfully landed on Google's second page and was indexed by Google Search. The first page was not successful in March.

Keywords: Website, SEO, Seo on Page, SERP, White Hat SEO

1. Introduction

Advances in information technology are developing rapidly in various areas of life. The Internet is a highly influential and influential part of information and communication technology [1]. A website, one of the Internet technologies, is not only a medium of information, but also a process that supports a company's business. not [2]. SEO (Search Engine Optimization) is one of the advertising methods using search engine optimization, and the website created by our company is displayed at the top of the search engine or on the first page (first page) of the search engine page. [3]. This survey was conducted on his PT website. Alphabet Incubator Indonesia (AII), which initially did not implement SEO techniques, implemented on-page SEO techniques such as optimization of title tags, content, meta keywords, meta descriptions, and keywords for social sharing at this stage. . Some steps were also taken. A test [4] as a benchmark for successful implementation of SEO techniques. Advances in information technology are developing rapidly in various areas of life. The Internet is a highly influential and influential part of information and communication technology [1]. A website, one of the Internet technologies, is not only a medium of information, but also a process that supports a company's business. not [2]. SEO (Search Engine Optimization) is one of the advertising methods using search engine optimization, and the website created by our company is displayed at the top of the search engine or on the first



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Previous research has carried out the application of SEO techniques, namely the white hat SEO method on a website and succeeded in being in the top-ranking position and safe from the deindex process (A. Riyanto, 2018), it has been studied that the index process is faster on expired domains than fresh domains on machines[5]. Google search, especially the image-index process, but fresh domains are more stable in increasing the index (Sujatmiko & Ariyus, 2018)[6].

PT. Alphabet Incubator Indonesia (All) has partnered with several universities and associations in creating Indonesian digital talent. The transition to a new era after the Covid-19 pandemic has become an urgency to accelerate the digital economy recovery in Indonesia[7]. Since 2018, as a step to capture the best talents throughout Indonesia, strategic startup-reneur efforts require cross-sectoral and inter-regional collaboration in the Pentahelix mix. For this reason, all has the potential to expand its wings in developing a startup-reneur ecosystem to create digital multitalent with a blend of local wisdom[8]. The promotion that has been carried out so far is still conventional, the marketing target is narrow, the advertising costs are large enough so that it cannot produce the desired profit target, besides that website traffic is so low that it is not visible or is still on a page far from the Search Engine Results Page (SERPs)[9].

To overcome this, with the support of information technology, this study aims to implement website creation and implement SEO techniques at PT. Alphabet Incubator Indonesia so that the marketing target becomes wider, the business on the website is growing so that sales are increasing. Search Engine Results Pages (SERPs).

2. Research Method.

2.1 Research flow

This research begins with identifying problems that arise on existing websites, after that a literature study stage is carried out in order to enrich insights to fix these problems, then in the next stage is the design of SEO techniques based on problem identification analysis and literature studies that have been carried out[10]. The stages of testing and design changes are carried out for better results, the last stage is the implementation of the website with the SEO techniques that have been applied. The research flow is as shown below:

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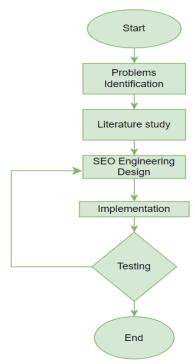


Figure 1. Research Flow

A design that optimizes the ranking of the website on the first page using SEO techniques. On-page SEO techniques do (A. Riyanto, 2018)[11]:

1. Title tags

Enter your keyword in the title of your website page

2. Meta keywords and meta descriptions

To make your site easily findable by search engines and to describe the content created, include your desired keywords in your 150-160 character meta description.

3. Heading tags

Assigns ALT tags and TITLE tags to each image to define the image.

- 4. URL Structure
- 5. Image
- 6. Content

Provide bold on the words of the contents of an article as a keyword marker.

2.2 Implementation

Implementation is carried out referring to the design of SEO techniques that have been designed[12].

2.3 Testing

Testing is done using the *gtmetrix* tool to measure page speed, loading time and others. Tests are also carried out to assess responsive design on website pages on various devices[13].

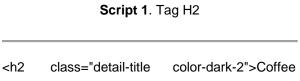
3. Findings

PT. Alphabet Incubator Indonesia has been optimized using the On Page SEO method with several techniques and tests have been carried out, namely website loading speed, responsive design and observation of website position in search engines.

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3.1 Implementation of the Seo on Page Method

Implementation and Implementation of On Page SEO includes several things, namely: Title optimization, titles are keyword optimized and put keywords in the first letter of the title so that they are not truncated by search engines [14]. For example, the title "Coffee Alphabet Incubator (CAI) - Alphabet Incubator" is inserted with the keyword "Coffee Alphabet Incubator" [15]. The title is taken from the table column in the database table. Script Program can be seen in the script below.



Alphabet Incubator Indonesia (CAI) - Alphabet Incubator</h2>



Figure 2. H2 Tag Results

URL optimization, by inserting the main keyword as the example above using the keyword "coffee alphabet incubator". The URL is taken from the title column in the database, the following is the program listing[16].

Script 2. URL Optimization

<h4 class="s_newstitle"> <ahref="<?=site_url('artikel/'.\$art->slug)?>"<?= \$art->judul ?></h4>

So the URL is like the image below https://alphabetincubator.id/coffee-alphabet-incubator-cai/

Figure 3. URL Optimization Results

The use of Meta Description functions to run briefly and clearly about what the contents of the content/articles are looking for by visitors[17]. These meta tags help web spiders and search engine robots describe items on the web. The meta description is taken from the description column of the item table database.

Meta keywords help determine keywords for some of your content so that you can compete in search engines. Keywords should match the content of articles on the web. Meta keywords are also used by search engines to speed up the indexing of content and articles based on specified

keywords[18]. Meta keywords are taken from the keyword column of the article table database [19].

3.2 Testing

Site speed was tested using the gtmetrix tool with a PageSpeed of 94%, Grade A for the alphabetincubator.id site. The website load time is 2.9 seconds. The website size is only 1.83 MB. As shown in the figure below:

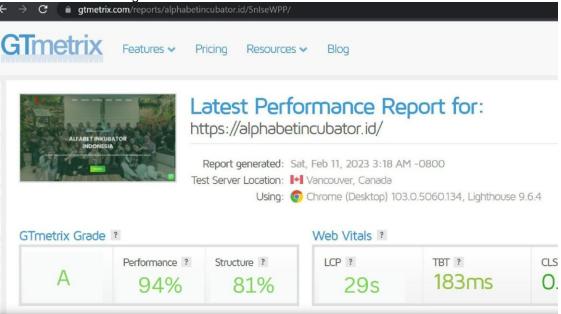


Figure 4. Speed Testing

The layout of the website has a responsive design look. H. Websites can adjust the appearance of layouts when invoked on all end devices.

The SEO technique was tested on the alphabetincubator.id website optimized with on-page SEO methods [20]. Test results using Alphabet Incubator Keywords ranked him in the second page position in search engines in December 2022 (month 2) and in January 2023 (month 3) It was completely unmonitored on the engine. First page position to rank up. Below are the results of the search test on the Google search engine for the second and third months.

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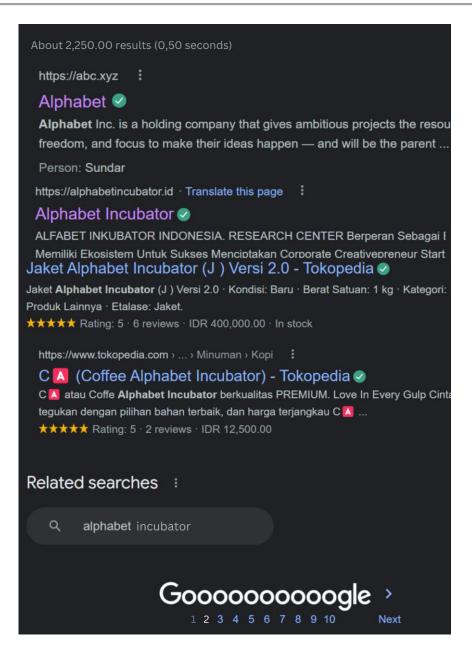


Figure 5. Position in google search engine(second page)

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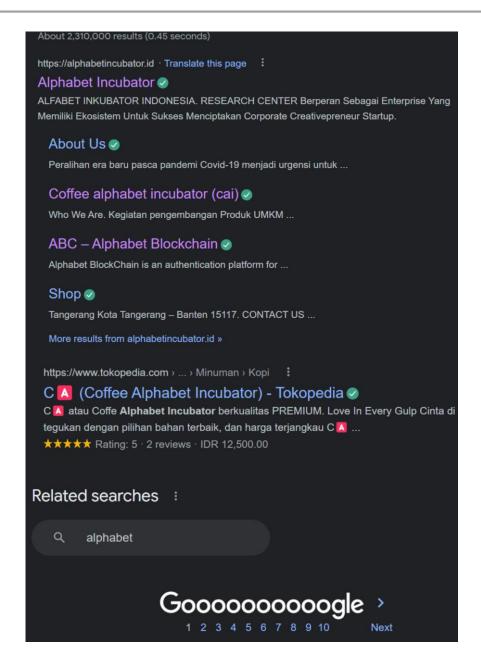


Figure 6. Position in google search engine (first page)

4. Conclusion

Applying on-page SEO techniques can improve your website's SERP on search engines and get traffic from Google search engines. The previously unindexed website alphabetincubator.id was successfully indexed by Google and appeared on the first page of Google Search in less than three months.

By using good SEO techniques, such as choosing the right keywords, content optimization, using quality backlinks, good website structure and paying attention to the quality of the content. Not only does it focus on SEO optimization, but make sure the content produced is useful for website visitors. Don't try SEO techniques that are considered unethical, such as buying backlinks or doing keyword stuffing. These techniques can harm a website's reputation and can even have an impact on lowering rankings on search engines. Always monitor and evaluate the

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results of SEO optimization that has been carried out, and correct it if necessary to achieve better results.

Further research is optimization using other techniques, such as off-page SEO, to ensure that a website's search ranking stays on one page for a long time.

References

- [1] B. Ngarawula and D. Suharnoko, "Interaction Village Supervisory Non-Commissioned Officers (Babinsa) in Implementing the Universal Defense System to Face Digital Information and Communication Technology Challenges: Babinsa Social Interaction Study in the Use of Technology and Information Media within the IV Diponegoro Military Regional Command," Int. J. Res. Soc. Sci. Humanit. ISSN 2582-6220, DOI 10.47505/IJRSS, vol. 4, no. 1, pp. 1–16, 2023.
- [2] S. Yulianti, S. B. Ismaya, T. Indrajaya, M. Sova, and E. Rosmiati, "Empowerment Digital Marketing Strategy One Time Entrepreneur Micro Application Social Media in the Village Mekar Jaya, District Sukmajaya, Depok City," East Asian J. Multidiscip. Res., vol. 2, no. 1, pp. 393-416, 2023.
- [3] R. Challis, S. Kumar, C. Sotero-Caio, M. Brown, and M. Blaxter, "Genomes on a Tree (GoaT): A versatile, scalable search engine for genomic and sequencing project metadata across the eukaryotic tree of life," Wellcome Open Res., vol. 8, no. 24, p. 24, 2023.
- [4] N. Lutfiani, U. Rahardja, and I. S. P. Manik, "Peran Inkubator Bisnis dalam Membangun Startup pada Perguruan Tinggi," J. Penelit. Ekon. dan Bisnis, vol. 5, no. 1, pp. 77–89, 2020.
- [5] C.-T. Yang, E. Kristiani, Y. K. Leong, and J.-S. Chang, "Big Data and Machine Learning Driven Bioprocessing-Recent trends and critical analysis," Bioresour. Technol., p. 128625, 2023.
- D. Dong and C. H. A. Tay, "Discoverability and Search Engine Visibility of Repository Platforms," in Discoverability in Digital Repositories, Routledge, 2023, pp. 157-175.
- H. Haryani, S. M. Wahid, and A. Fitriani, "Analisa Peluang Penerapan Teknologi [7] Blockchain dan Gamifikasi pada Pendidikan," J. MENTARI Manajemen, Pendidik. dan Teknol. Inf., vol. 1, no. 2, pp. 163-174, 2023.
- [8] M. Rakhmansyah, U. Rahardja, N. P. L. Santoso, A. Khoirunisa, and A. Faturahman, "Smart Digital Signature berbasis Blockchain pada Pendidikan Tinggi menggunakan Metode SWOT," ADI Bisnis Digit. Interdisiplin J., vol. 2, no. 1 Juni, pp. 39-47, 2021.
- B. Oliveira and C. T. Lopes, "The Evolution of Web Search User Interfaces--An [9] Archaeological Analysis of Google Search Engine Result Pages," arXiv Prepr. arXiv2301.08613, 2023.
- [10] S. Orekhov, "A New Approach to Search Engine Optimization Based on the Synthesis of a Virtual Promotion Map," in Advances in Intelligent Systems, Computer Science and Digital Economics IV, Springer, 2023, pp. 136-151.
- [11] K. Ernawati, B. S. Nugroho, C. Suryana, A. Riyanto, and E. Fatmawati, "Advantages of Digital Applications in Public Health Services on Automation Era," Int. J. Health Sci. (Qassim)., vol. 6, no. 1, pp. 174-186, 2022.
- [12] M. Iqbal, M. N. Khalid, A. Manzoor, M. M. Abid, and N. A. Shaikh, "Search Engine Optimization (SEO): A Study of important key factors in achieving a better Search Engine Result Page (SERP) Position," Sukkur IBA J. Comput. Math. Sci., vol. 6, no. 1, pp. 1-15, 2022.
- [13] H. A. Tengriano and A. Yunus, "Analisis Performa Website AyoMulai Menggunakan GTMetrix dan Page Speed Insights," KHARISMA Tech, vol. 17, no. 2, pp. 199-213, 2022.
- [14] T. T. T. Nguyen and T. T. Nguyen, "BOOSTING WEBSITE WITH SEARCH ENGINE OPTIMISATION Case study of websites Meditation and Personal Finance

- Source," 2022.
- [15] C. Lukita and A. Faturahman, "Perkembangan FinTech Terhadap Crowdfunding dan Blockchain di era Disrupsi 4.0," *J. MENTARI Manajemen, Pendidik. dan Teknol. Inf.*, vol. 1, no. 1, pp. 9–19, 2022.

p-ISSN: 2963-6078

- [16] M. Edgar, "URL and Domain Structure," in Tech SEO Guide: A Reference Guide for Developers and Marketers Involved in Technical SEO, Springer, 2023, pp. 23– 42
- [17] V. Duong, SEO management: methods and techniques to achieve success. John Wiley & Sons, 2019.
- [18] A. Erdmann, R. Arilla, and J. M. Ponzoa, "Search engine optimization: The long-term strategy of keyword choice," *J. Bus. Res.*, vol. 144, pp. 650–662, 2022.
- [19] A. Gad, R. E. S. Tallal, A. M. R. Mabrouk, and A. M. Gad, "Thumb Tip Injuries Meta-Analysis of Different Reconstruction Options.," *Egypt. J. Plast. Reconstr. Surg.*, 2023.
- [20] M. Edgar, "Page Experience: Core Web Vitals and More," in *Tech SEO Guide: A Reference Guide for Developers and Marketers Involved in Technical SEO*, Springer, 2023, pp. 95–106.