

The Optimization of Website Visibility and Traffic by Implementing Search Engine Optimization (SEO) in Palembang Polytechnic of Tourism

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Abstract—This research is a case study of Search Engine Optimization (SEO) in Palembang Polytechnic of Tourism website. The main objective of this research is to establish a plan for SEO in Palembang Polytechnic of Tourism (<http://poltekpar-palembang.ac.id/>) and to improve online visibility and ranking position in search engines (Google). It aims to bring in more international traffic and students to visit the website. SEO is a digital marketing technique to increase web accessibility. In the globalization world, people use search engines, such as Google, to know or find out more about various topics quickly and visually. Through a bibliographic review and qualitative analysis, the research focuses on the understanding of what SEO is and its implementation for the Palembang Polytechnic of Tourism website. The results show that the most important thing in making SEO plans is to increase visibility and branding on search engines (Google). SEO is done by developing website content and setting keywords as backlinks.

Index Terms—Website Visibility, Search Traffic, Search Engine Optimization (SEO)

I. INTRODUCTION

IN the digital era, various devices with Internet network support are more in demand by consumers compared to other common devices. This online-based tool is used to access various information that they need, including information about services or products. Not only that, but consumers can also access various

opinions about a product or service that they are looking for. As a result, all consumers want the best and most trusted and quality brand. One way to get information about products or services with the criteria they want is to look for it in a search engine. This is where digital marketing actors play a role in fulfilling the desires of their consumers. Through a website or blog, they can provide detailed information about products, brands, or services that they will promote. For their website to be easily seen and accessed by visitors, their website must be on the first page of a search engine. By being on the first page of the search engine's web, visitors can immediately see your website with a note of the keywords you use following the keywords written in the search field by visitors.

Personal branding and Search Engine Optimization (SEO) have a close relationship in the digital world today. When people build brand recognition, the audience will search for the name or brand on search engines. Therefore, what appears in the search results has a significant impact on the brand image. Therefore, SEO is an important part of creating personal branding power on a website.

SEO is one way to improve a product to get the best position or strategic ranking in a search engine. The strategic position is where internet users can find product brands, keywords, or website in a search engine that they access. This kind of position is none other than the first page of a search engine website. By being on



Fig. 1. Internet users in Indonesia. The labels read: The result of Survey in 2017 'Hasil Survey 2017', Penetration of Internet Users 'Penetrasi Pengguna Internet', 143.26 Million People from the Total Population of 262 Million People in Indonesia '143,26 Juta Jiwa dari Total Populasi Penduduk Indonesia 262 Juta Orang', Penetration of Internet Users in Indonesia in 2016 'Penetrasi Pengguna Internet Indonesia 2016, 132.7 Million People '132,7 Juta Jiwa'.

the first page of a search engine, blogs, products, or keywords can be accessed easily. The use of SEO in the world of digital marketing aims to optimize the use of a search engine. SEO allows a website, brand, product, or service to be easily accessed by visitors because it is on the first page of a search engine's web.

Moreover, the number of Internet users in 2017 reached 143.26 million people or equivalent to 54.68% of the total population of Indonesia. Figure 1 shows an increase of 10.56 million people from the results of the survey in 2016. It announced by Asosiasi Penyelenggara Jasa Internet Indonesia 'Indonesian Internet Service Provider Association' (APJII) after conducting a study of penetration and the usage of Internet users in Indonesia [1]. Thus, SEO can be important to improve branding.

Figure 1 presents an online profile for universities in one effective way. It is done to promote the character of the tertiary institution. By displaying a good website, it can attract many potential customers and increase the size of the target audience. However, it is not enough. A website on the Internet must be clear for the people who are looking for products, services, or resources provided. It aims to make the website relevant and real. The goal is also to make the website survive and thrive in an increasingly competitive online marketplace when people want to get information [2].

The popular search engines like Google, Yahoo, and Bing find the relevant information and present it to users. Search engines are the main place that people can explore information and make decisions based on information. The general goal of the Google search

engine is the most important and reliable source of academic information [3].

Most prospective students are looking for information about colleges on Google and other well-known search engines. Some students aim at specific colleges or universities. However, most colleges or universities only have a list of criteria such as available location, quality, and majors.

SEO is essential for colleges and universities to develop their marketing plans. Nowadays, many universities and colleges apply their names in all matters such as title, meta description, page content, and others. However, SEO provides its unique challenges for universities. Its websites are often segmented by program, department, or school. It can produce many contributors to the SEO process. In addition, it is not uncommon for Information Technology (IT) departments at universities to develop websites by using SEO to increase its visibility of a website [4].

If a university wants to promote a website, it needs to consider the best technique in determining the steps in the process. Improving top positions and average positions on Search Engine Results Pages (SERP) supports visibility, branding, and many other related steps of progress [5]. It is especially true with the increasing number of people who have access to the university. Getting high rankings on search engines is very important for every university because the competition is getting tougher.

SEO at the university must be done ethically. It is to utilize the latent power on the website of the university. Then, they still have to compete with each other with a myriad of other available online programs for prospective students. Today, promoting a website is one of the ways that all universities do. The competition to promote branding in the online marketing business is unavoidable. The competition is to be the top position in the search engine, which makes the promotional website look for potential visitors. To ensure the website is in the main position of search engines, the university needs to apply techniques and strategies for SEO.

Palembang Polytechnic of Tourism is a university that provides vocational education in the field of tourism. It is under the Ministry of Tourism of the Republic of Indonesia and Deputy Institutional Development and Tourism Industry. Polytechnic of tourism is responsible for the development of the institutional tourism industry. It contributes to increasing human resources such as experts in the tourism field. The website of Palembang Polytechnic of Tourism has a very significant influence in developing and introducing the tourism industry in Palembang, Indonesia. This research aims to describe the use of SEO and how

URL	Change	High	Low	Keywords	Movement
poltekpar-palembang.ac.id/	0	4	50	10	

Keyword	Rank	Change	Volume	Search Engine	Location	Platform	Updated
kampus terbaik di palembang	29	-	30	www.google.co.id (id)	Indonesia	Mobile	May 26 11:00:25 AM
kampus terbaik di palembang	32	-	30	www.google.co.id (id)	Indonesia	Desktop	May 26 11:00:25 AM
pariwisata palembang	16	-	210	www.google.co.id (id)	Indonesia	Mobile	May 26 11:00:26 AM
pariwisata palembang	15	-	210	www.google.co.id (id)	Indonesia	Desktop	May 26 11:00:27 AM
politeknik pariwisata	5	-	140	www.google.co.id (id)	Indonesia	Mobile	May 26 11:00:27 AM
politeknik pariwisata	4	-	140	www.google.co.id (id)	Indonesia	Desktop	May 26 11:00:25 AM
universitas terbaik	-	-	1300	www.google.co.id (id)	Indonesia	Mobile	May 26 11:00:46 AM
universitas terbaik	-	-	1300	www.google.co.id (id)	Indonesia	Desktop	May 26 11:00:45 AM
universitas terbaik di palembang	42	-	210	www.google.co.id (id)	Indonesia	Mobile	May 26 11:00:25 AM
universitas terbaik di palembang	50	-	210	www.google.co.id (id)	Indonesia	Desktop	May 26 11:00:24 AM

Fig. 2. The website ranking of Palembang Polytechnic of Tourism on Serpfox. The labels read: the best campus in Palembang ‘kampus terbaik di Palembang’, tourism in Palembang ‘pariwisata Palembang’, polytechnic of tourism ‘politeknik pariwisata’, the best university of tourism ‘universitas terbaik’, the best university in Palembang ‘universitas terbaik di Palembang’.

to apply it to maximize that website content and to ensure that search engines find the website. Website visibility is required to ensure that search engines find the website, index it well, and rank it highly on SERP [6]. Thus, the website can be accessed optimally and found easily by prospective students in Indonesia, especially in South Sumatra.

II. LITERATURE REVIEW

A. Search Engine Optimization (SEO)

SEO is used to understand search engines and knowledge. It makes a website has a higher rank in the search engines. It is the process of optimizing a website that may involve editing code and content related to HTML. It makes it more relevant to specific keywords to increase visibility in search engines [7].

B. Google PageRank

Google PageRank (Google PR) is one of the methods used by Google to determine the relevance or importance of a page. It is the technique used by Google to rank web pages according to their importance [8]. Google PR is a measure from 0–10. Google PR is based on backlinks. The more the quality of backlinks is, the higher the Google PR will be. Increasing Google PR is very important if people want to improve their search engine ranking. Google uses a web link structure to determine which pages are important [9]. The website ranking of poltekpar-palembang.ac.id on the Google search engine uses

the link of <https://app.serpfox.com/>. It is displayed in Fig. 2.

The data are preliminary data for the research. The researchers use three types of keywords for the sample, namely ‘the best campus in Palembang’, ‘Palembang tourism’, and ‘tourism polytechnic’. The website ranking based on keywords shows that the best campus in Palembang is 32nd, Palembang tourism is 16th, and tourism polytechnic is 4th. The ranking of the website of palembang.ac.id in the early June 2019 Google search engine uses the link of <https://alexa.com/>, which is displayed in Fig. 3.

The data in Fig. 3 show the rank website. It is taken from the site. The ranking of all websites based on Alexa website in Indonesia is 4,245,896. The ranking of a website can change at any time, depending on competitors. Furthermore, the visiting data on the website can be seen in the cPanel domain. The data are taken as a benchmark for comparison in 2018 with the same month. Figure 4 shows the result.

C. Keywords

The process of typing something into the searching box and retrieving the awaited result takes a few seconds if the right keywords are used appropriately. Keywords are essential for every search to provide relevant results. Keywords are words typed in search engines. It is the match words in documents/webpages. In general, these keywords are preferred by search engines that are used as headlines.

Keywords are also very important in specific searches on the Internet. Keywords are a type of

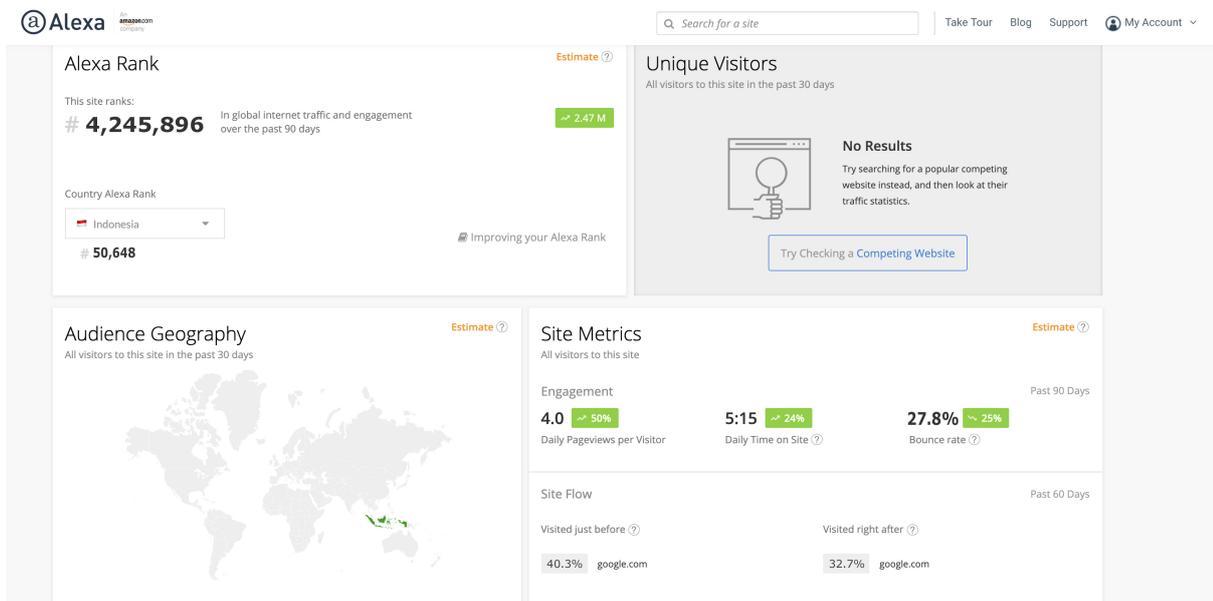


Fig. 3. The website rank of Palembang Polytechnic of Tourism on Alexa.com.

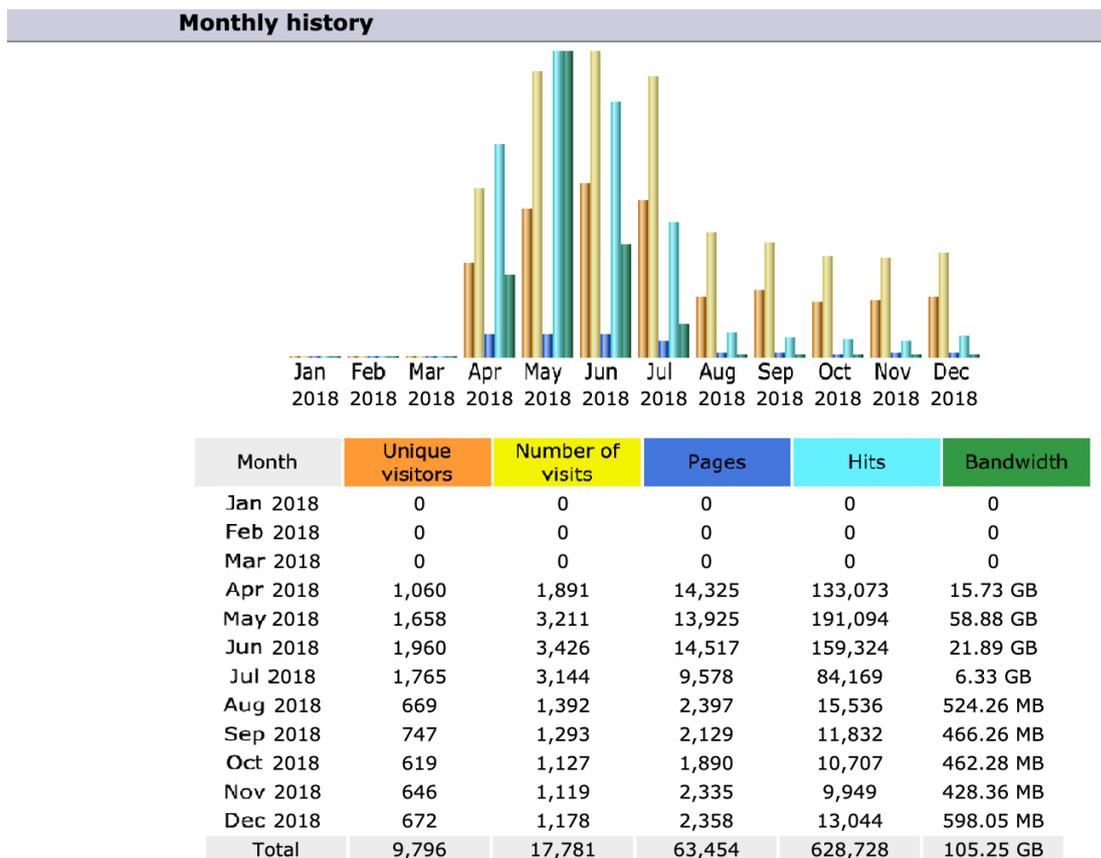


Fig. 4. The number of visitors in Palembang Polytechnic of Tourism website in 2018.

Keyword Overview: politeknik pariwisata

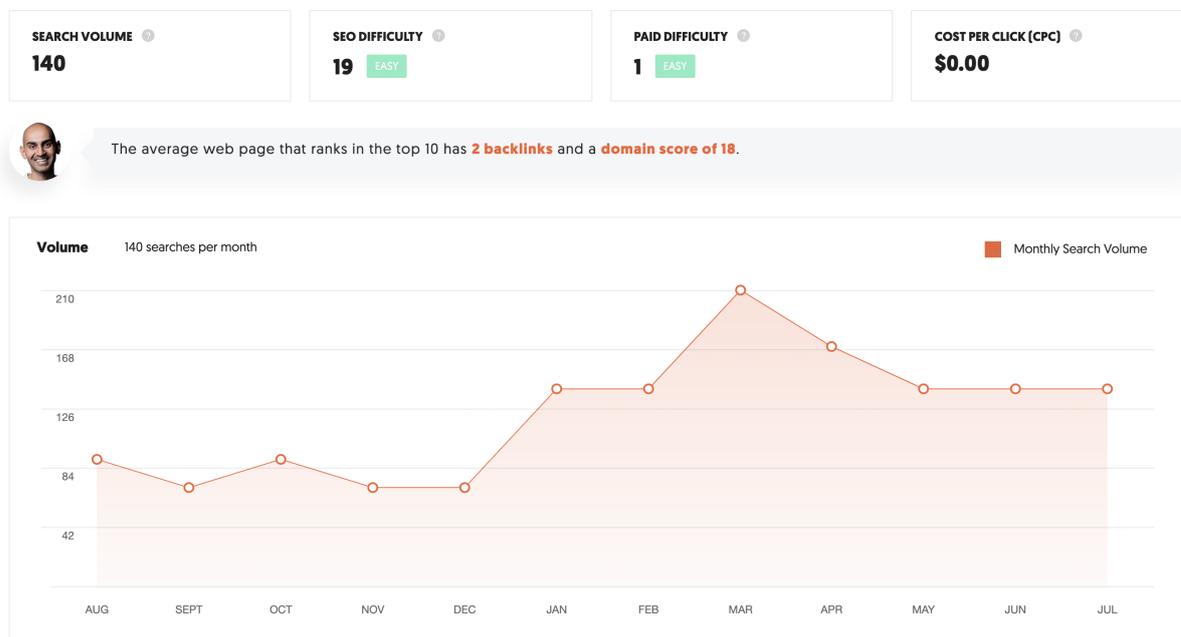


Fig. 5. The research keywords of polytechnic of tourism.

keyword phrase that has at least two or many five words in a phrase. Keywords are very specific. Then, it generates less visitor traffic on a website, but it tends to attract more that leads customers to make a transaction after finding the correct link in their search.

There are two specific reasons for a relevant keyword. First, if the web rankings for a website increase for the wrong keywords, it means the targeted keywords do not help to get web traffic. Second, if keyword competitiveness is not measured correctly, it may not appear on the first page. It means that it is not easy to rank with competitive keywords [10]. Figure 5 is the result of a keyword analysis taken from the Ubersuggest site. The search graph of the keywords that are specified can be seen.

D. Online Brand Visibility

Online visibility refers to the ease of the customers that can find company products and services on relevant online sites. If your company shows up in the search engine’s first page, the company’s online visibility is high [11]. Whatever the business is, the user’s experience will determine the aspect of the success level. Branding of a company is a reflection of how users feel to know or recognize the company. To make users feel comfortable with branding, the company focuses on the different user experience modules [12].

E. Website Visibility

Website visibility is the result of applying the SEO process to improve webpage rankings in search engines in searching for certain keywords or key phrases. The website can be the main communication and media tool to reach current prospects and all students, partners, and stakeholders. Implementing the latest SEO practices can strengthen website visibility, accessibility, and brand awareness [13]. SEO helps to increase the online visibility of websites or webpages in search engines such as Google, Bing, Baidu, Yandex, Yahoo, and others. It is a sustainable, economical, and effective way to get traffic to websites [14]. If users want to consider to increase online visibility, especially for brand awareness or branding, they must start thinking to improve search visibility. There are two primary sources of search visibility that can be pursued, namely organic search or paid search. Both of these options can provide exceptional value [15].

F. Website Branding

There are many ways for companies to promote online. It depends on how the companies want to attract and how they want to be seen. However, some techniques are almost universal. There are many ways to make web branding more attractive to customers, from customer service bots to simplifying ways to engage or discover content [16].

Comparison of Sources of Information Obtained by Participants (Interested People)

Total of interested people: 733 Total of participants: 230

Type of Social Media	Amount	%
1 Print and electronic mass media	41	5.59
2 Social media (Instagram, Facebook, Twitter, and others)	196	26.74
3 Lecturer or alumni of Polytechnic of Tourism	20	2.73
4 Socialization in school	67	9.14
5 Friend or relative	222	30.29
6 Palembang Polytechnic of Tourism website	163	22.24
7 Ministry of Tourism website	24	3.27
	733	

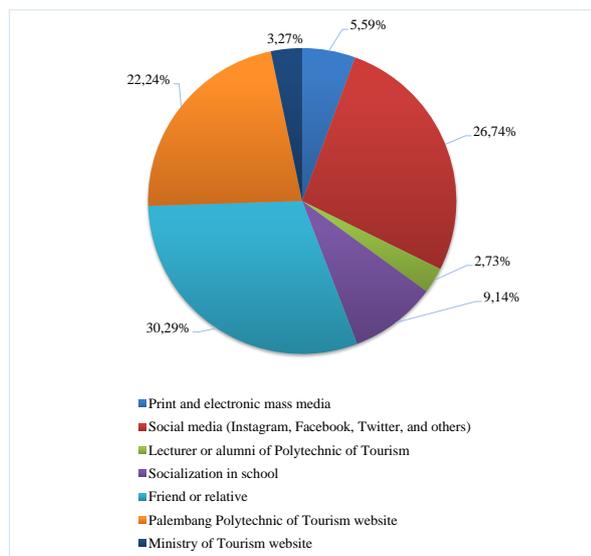


Fig. 6. The data of independent entrance selection in Palembang Polytechnic of Tourism in 2018.

In addition, because of the process of implementing SEO, businesses have more opportunities to increase exposure to organic searches for keywords and brands. In other words, SEO helps customers to easily find business websites when they enter keywords related to brands, products, or services into search engines. On the other hand, the majority of search engine users tend to click on the top five recommendations on the results page, because 67% of all clicks belong to the first five results [17]. Then, SEO is a viable marketing tool that can exploit this phenomenon and attract more visitors to a business website. Thus, the right application of SEO can increase visitors on the SERPs and page rank in organic search, contribute to the brand and consistent search results, and improve web ratings [14]. Moreover, many consumers are more likely to interpret the highest ranking on search engine results pages as implicit brand support. Therefore, SEO can help businesses improve their brand by building credibility [2].

G. Data of Independent Entrance Selection in 2018

Seleksi Mandiri Masuk Perguruan Tinggi Negeri Pariwisata ‘independent entrance selection of state tourism universities’ (SMMPTNP) is a registration and selection that has been carried out by the Palembang Polytechnic of Tourism. Meanwhile, Seleksi Bersama Masuk Perguruan Tinggi Negeri Pariwisata ‘joint entrance selection of state tourism universities’ (SBMPTNP) is a joint selection within the Ministry of Tourism of the Republic of Indonesia. It is registration and selection conducted jointly and integrated between Sekolah Tinggi Pariwisata ‘tourism college’ National Hotel Institute (STP NHI) Bandung, STP Bali, Medan Polytechnic of Tourism, Makassar of Polytechnic Tourism, Palembang Polytechnic of Tourism, and Lombok Polytechnic of Tourism. Figure 6 presents the data of new student admissions at tourism polytechnic in 2018.

The data of Fig. 6 are from the questionnaire results of prospective students enrolled in Palembang Polytechnic of Tourism. The number of interested students who know about the information regarding independent entrance selection through the website is 22%. It is about 163 from 733 students. The data are obtained from prospective students who wish to register online. They must fill the questionnaire. The data serve as a benchmark for the initial data as the comparison data for independent entrance selection data.

III. RESEARCH METHOD

This research uses descriptive methods to analyze the strategies in maximizing website visibility and branding by utilizing SEO. The researchers conduct the study by using primary and secondary data. Data collection in this research is from three main sources (literature reviews of books, online material, and articles). The data are used to gather information for the theoretical aspects of SEO by visiting the website and seeing the results of their research. The main reason for choosing a website source from experts is because it has good knowledge in the field and provides relevant information. Likewise, data are extracted by Google Analytics tools, which contains all website performance statistics since the SEO’s inception. Then, the researchers use Moz Pro SEO tools (<https://moz.com/products/pro>) and SEO Checker (<https://neilpatel.com/SEO-analyzer/>). Those are used to analyze the current site search engine. Moz Pro and Neil Patel are the most commonly used SEO tools for the analysis process.

A. Framework

Figure 7 explains how the website optimization process uses SEO. First, it analyzes the keywords for

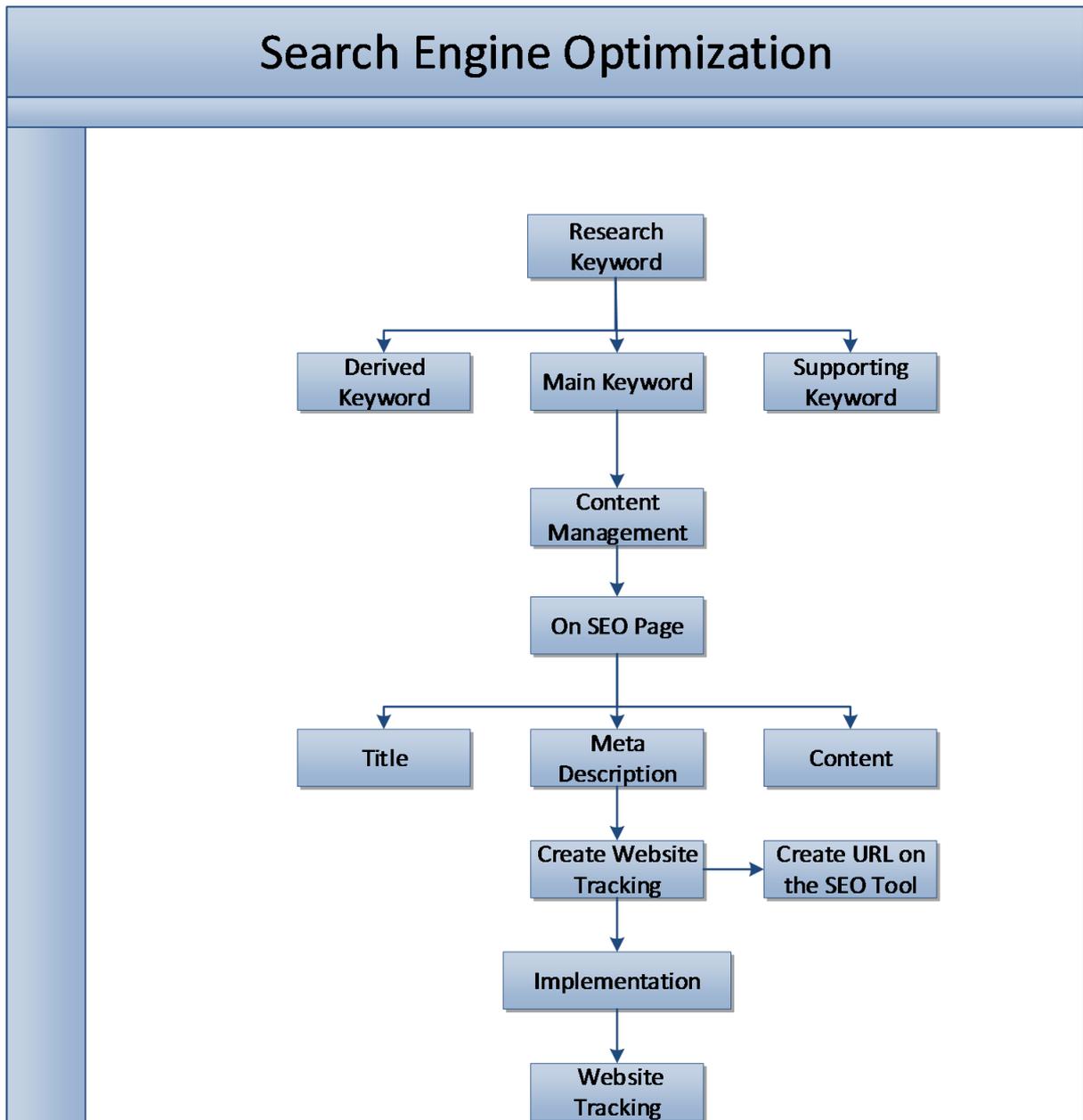


Fig. 7. The framework of Search Engine Optimization (SEO).

the website. Second, it determines the main keywords, derived keywords, and supporting keywords. Third, it is creating content or article used for the website. Fourth, the process is also combined with the on-page SEO process, which is entering the code (title, meta description, and content). Fifth, it is website tracking. It is also very important for analyzing and monitoring websites. Last, it is to monitor the website using online Serprox tools.

B. Research Flow

The implementation of SEO on the website is very important. The process must be systematic. It aims to increase the volume and quality of traffic visits through search engines to certain websites by utilizing the action mechanism. The flow of research is in Fig. 8.

IV. RESULTS AND DISCUSSION

This result is the comparison of data before and after the research. The data used is independent entrance

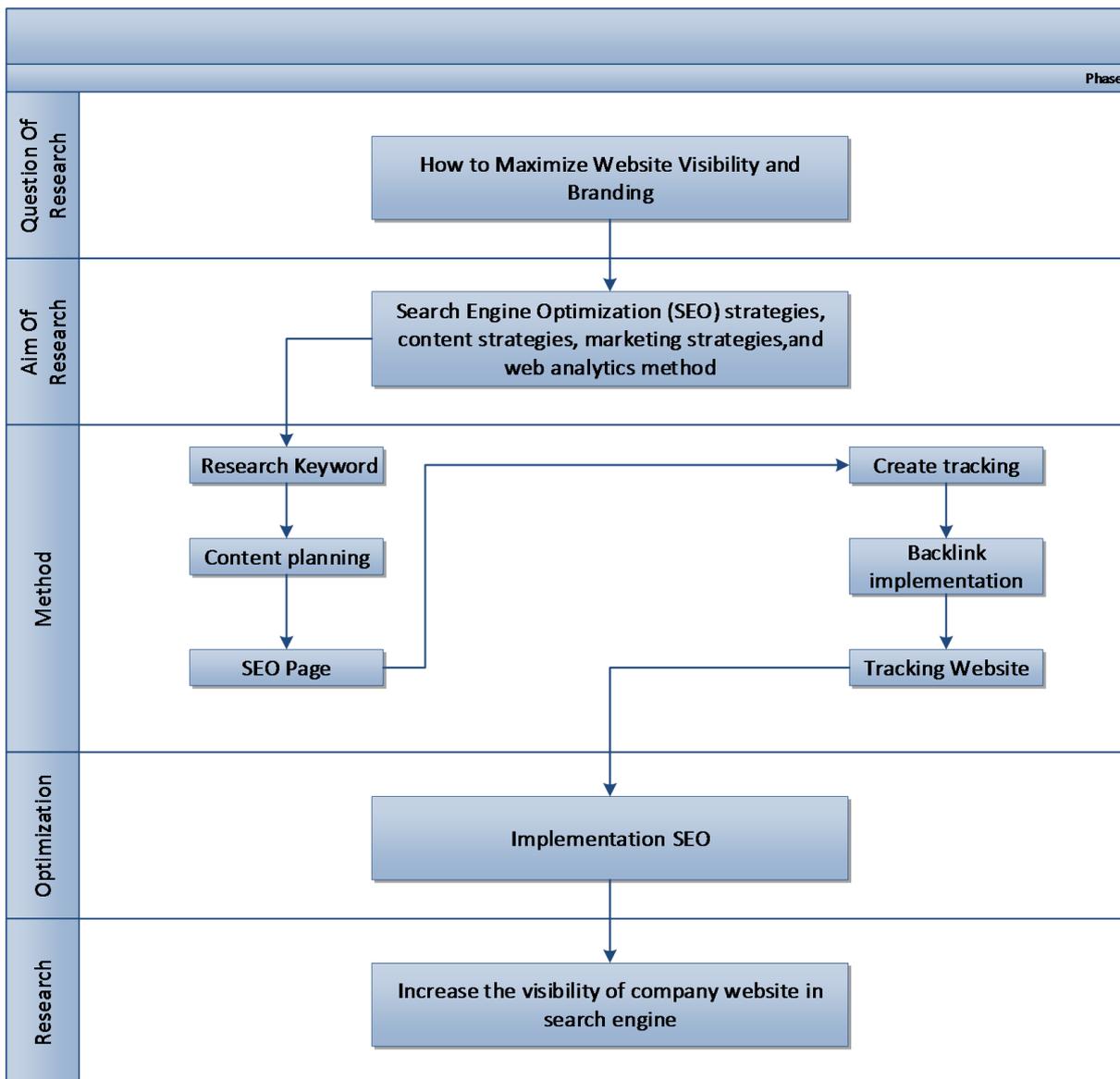


Fig. 8. The research flow of Search Engine Optimization (SEO).

selection in Palembang Polytechnic of Tourism, and website ranking in Alexa.com and Google based on keywords. Whether the implementation of SEO is going well or not, it can be seen from the number of visitors and applicant data.

A. Keyword Analysis

This research aims to search the keywords that are often entered by people on the Google search engine. It fits with the data taken from the website of Palembang Polytechnic of Tourism. Table I shows the results of research on the keyword analysis taken from <https://app.neilpatel.com/en/ubersuggest/>. The research iden-

tifies topics and themes in the target keywords that are searched actively. This process also helps to determine words and phrases that are not too competitive. In this way, the researchers have the opportunity to determine effective keywords and generate a maximum ranking for the website. It shows the results of keywords that have been entered into the keyword analysis tools. The data are used to determine the main, derived, and supporting keywords.

B. Backlink Analysis

One of the ways of Google to find a new page to display the search results is to use a backlink. Google

TABLE I
KEYWORD ANALYSIS OF POLYTECHNIC OF TOURISM.

Keyword	No	Search	Volume	CPC	Type of Keyword
Politeknik Pariwisata	140	\$2066.85	1	19	Main
Politeknik Pariwisata Makassar	880	\$0.00	1	14	Derived
Politeknik Pariwisata Medan	480	\$3681.36	1	14	Derived
Politeknik Pariwisata Palembang	260	\$0.00	1	14	Derived
Politeknik Pariwisata Lombok	170	\$0.00	1	14	Derived
Politeknik Pariwisata Batam	50	\$0.00	1	14	Derived
Politeknik terbaik di Jawa Timur	50	\$0.00	1	5	Supporting
Politeknik Pariwisata Bandung	40	\$0.00	1	14	Supporting
Politeknik Pariwisata Negeri Makassar	40	\$0.00	1	6	Supporting
Biaya Politeknik Pariwisata Batam	30	\$0.00	1	6	Supporting
Pendaftaran Politeknik Pariwisata Makassar 2018	30	\$0.00	1	6	Supporting
Politeknik Pariwisata Negeri Medan	30	\$0.00	1	6	Supporting
Politeknik Pariwisata Prima Internasional	30	\$0.00	1	5	Supporting
Politeknik Pariwisata Prima Internasional kota Cirebon	30	\$3733.93	5	7	Supporting
Politeknik Pariwisata Medan Pendaftaran	10	\$0.00	1	5	Supporting
Politeknik Pariwisata Negeri Lombok Mataram City West	10	\$0.00	14	10	Supporting
Politeknik Pariwisata Negeri Medan kota Medan Sumatera Utara	10	\$0.00	1	5	Supporting
Politeknik Pariwisata Sahid	10	\$1065.95	10	16	Supporting
Politeknik terbaik	390	\$0.00	1	18	Main
Politeknik terbaik di Indonesia	1600	\$8859.05	1	6	Derived
Politeknik terbaik di Indonesia 2018	390	\$0.00	1	5	Supporting
Urutan Politeknik terbaik di Indonesia	170	\$0.00	1	6	Supporting
Daftar Politeknik terbaik di Indonesia	140	\$4880.96	1	6	Supporting
Politeknik Negeri terbaik di Indonesia	210	\$0.00	1	6	Supporting
Politeknik terbaik di Asia Tenggara	10	\$0.00	2	6	Supporting
Politeknik terbaik di Indonesia tahun 2018	10	\$0.00	1	5	Supporting
Politeknik terbaik di Jatim	10	\$0.00	1	5	Supporting
Politeknik terbaik se Indonesia 2019	10	\$0.00	1	5	Supporting

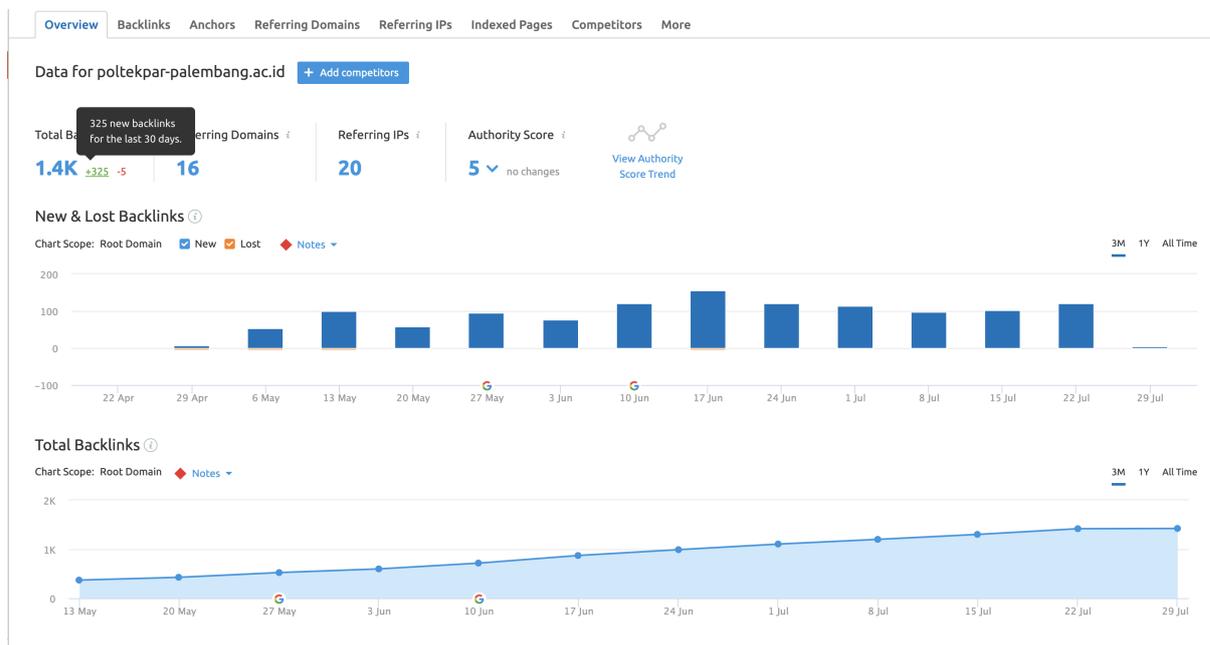


Fig. 9. The backlink graph of Palembang Polytechnic of Tourism website on SEMRush.

will continue to get the most relevant pages for certain keywords. Backlinks aim to help websites to be more easily found by Google so that they will appear in search results. The more the quality backlinks are, the better the assessment of Google of a website will be. Then, web pages can get high rankings in search

results.

In addition to traffic that can be obtained from search results on Google, backlinks can also bring traffic from links that have been on the backlink website provider. It also has a significant impact if the backlink provided by a website already has a good reputation on Google

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URL	Change	High	Low	Keywords	Movement
poltekipar-palembang.ac.id/	↑ 29	3	39	10	<div style="width: 100%; height: 10px; background-color: green;"></div>

Keyword	Rank	Change	Volume	Search Engine	Location	Platform	Updated
kampus terbaik				www.google.co.id (jd)	Indonesia	Desktop	
kampus terbaik di Palembang	25	↑ 20	30	www.google.co.id (jd)	Indonesia	Mobile	Jul 15 4:38:26 AM
pariwisata Palembang	13	↑ 7	210	www.google.co.id (jd)	Indonesia	Mobile	Jul 15 4:38:23 AM
pariwisata Palembang	14	↑ 1	210	www.google.co.id (jd)	Indonesia	Desktop	Jul 15 4:38:08 AM
politeknik pariwisata	3	0	140	www.google.co.id (jd)	Indonesia	Mobile	Jul 15 4:37:34 AM
politeknik pariwisata	3	0	140	www.google.co.id (jd)	Indonesia	Desktop	Jul 15 4:37:31 AM
universitas terbaik	-	-	1300	www.google.co.id (jd)	Indonesia	Mobile	Jul 15 4:37:45 AM
universitas terbaik	-	-	1300	www.google.co.id (jd)	Indonesia	Desktop	
universitas terbaik di Palembang	-	-	210	www.google.co.id (jd)	Indonesia	Mobile	
universitas terbaik di Palembang	39	↑ 1	210	www.google.co.id (jd)	Indonesia	Desktop	

Fig. 10. The PageRank result of Palembang Polytechnic of Tourism on Serpfox. The labels read: the best campus in Palembang ‘kampus terbaik di Palembang’, tourism in Palembang ‘pariwisata Palembang’, polytechnic of tourism ‘politeknik pariwisata’, the best university ‘universitas terbaik’, the best university in Palembang ‘universitas terbaik di Palembang’.

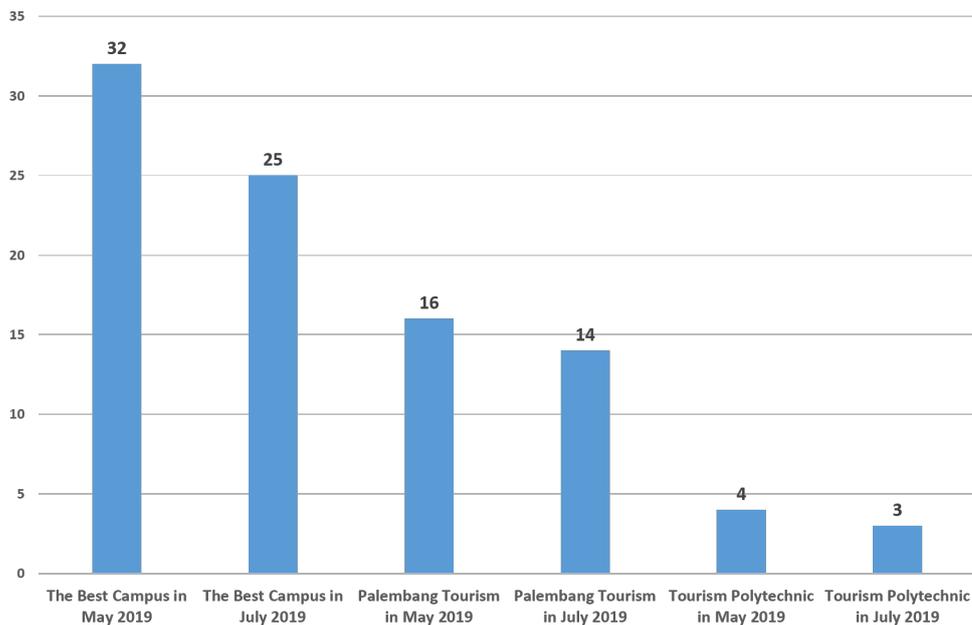


Fig. 11. Website rank based on the keywords on Serpfox.

and gets a lot of traffic. The traffic that has been obtained from the backlink gives website leads to the backlink website destination.

Building a website using quality backlinks requires a lot of effort. Before creating a quality backlink, the most important thing is to build the main foundation first, namely content. No matter how many backlinks

that have been made, everything becomes useless if it is without unique, complete, and quality content. The backlinks must also have certain criteria so that it can affect more accurately. Moreover, the users should always do their research first before deciding to apply backlinks using the specified indicators. Thus, the backlinks have a positive effect on the website or

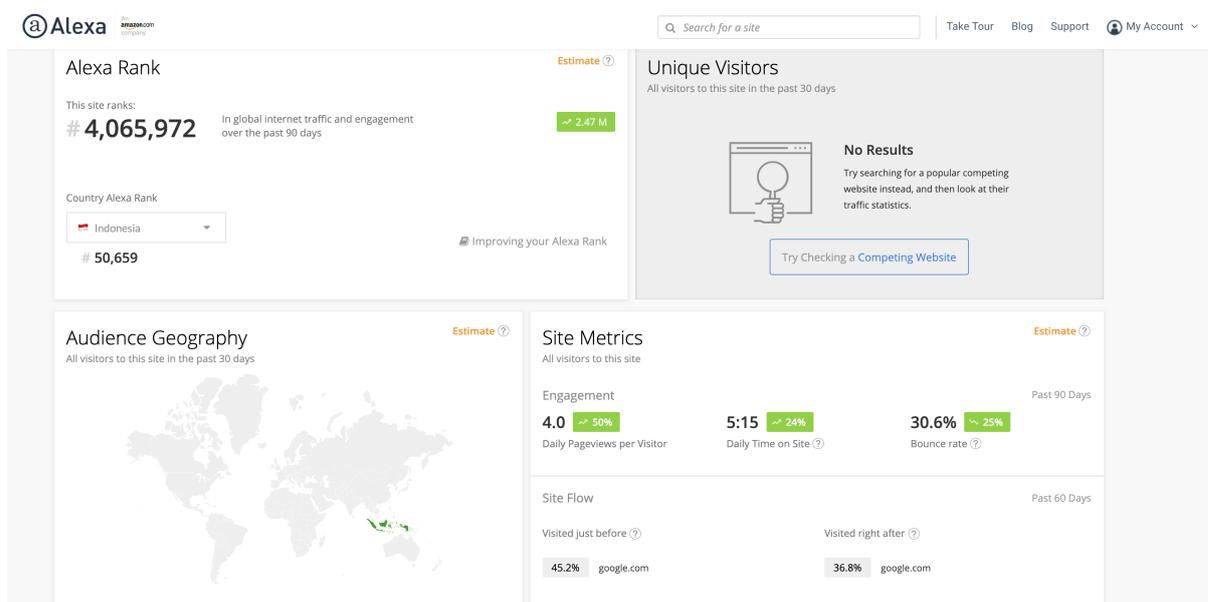


Fig. 12. The PageRank of Palembang Polytechnic of Tourism website on Alexa.com.

blog.

Based on Fig. 9, it shows the data on the number of backlinks recorded from May 13, 2019 – July 29, 2019. On May 13, 2019, the number of backlinks was 370. In each week, the backlinks continued to increase until July 29, 2019, amounting to 1424. Backlinks that have been made affect the SEO process. It is because the content or articles created must be original and relevant to the target of the backlinks. It is one of the important factors which influence the SEO process on the Palembang Polytechnic of Tourism.

C. PageRank (PR) Analysis

The ranking of Palembang Polytechnic of Tourism website (polteknar-palembang.ac.id) on Google search engine after the optimization that can be seen using <https://app.serpfox.com/>. The data in Fig. 10 are the result of the PR rank. As sample data, the researchers use three types of keywords. Those are ‘the best campus in Palembang’, ‘Palembang Tourism’, and ‘tourism polytechnic’. The rankings based on keywords reveal that the best campus in Palembang is 25th, Palembang tourism is 15th, and tourism polytechnic is 3rd. In Fig. 10, it can be seen that there is a change in PR of the best campus in Palembang to 20, Palembang tourism to 7, and tourism polytechnic to 1. It means that in that month, there has been an increase based on data recorded by the system.

Next, the test uses the predetermined keywords in 2019. The Serpfox tool is utilized to check whether the optimization of keywords has been successfully

carried out on the website or not. From the test results, it obtains significant results, as seen in Fig. 11. This increase is the final result of the initial data and final data. It is due to the time interval between the beginning and the end of the research that has already been increased and also decreased in the rank of the website.

The website position that is unstable or fluctuating up and down is normal. However, the most important thing is that the website ranking does not drop dramatically. What is happening right now is part of Google’s ongoing algorithm, increasing competition, not the well-maintained website, optimization errors, and disruptions that occur on the website, which causes the website’s unstable position. In Fig. 12, there is an increase in PR of the website on Google using keywords that have been determined. It shows that the website optimization process is going well.

Based on Fig. 12, it can be seen that the higher education website has different characteristics. It ranges from global to worldwide ranking based on traffic in Indonesia, backlinks, and frameworks applied to the website. At this stage, the process that the researchers make is based on ranking in Indonesia. Thus, in this case, the smaller the number is, the better the ranking reputation will be in Indonesia. The website ranking based on the Alexa website of all websites in Indonesia is 4.065.972. Based on Fig. 13, it shows that the ranking of the Internet visitor on the website has increased locally. There is a significant increase in ranking, but this ranking can change at any time due

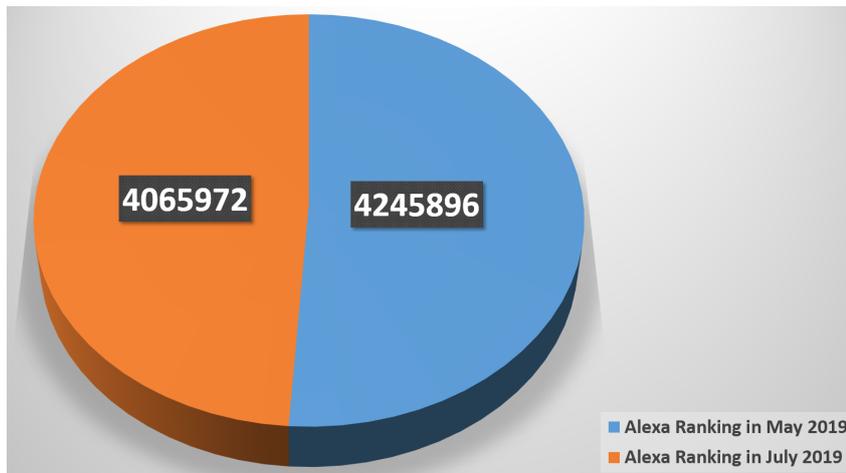


Fig. 13. The rank of Palembang Polytechnic of Tourism website according to Alexa.com.

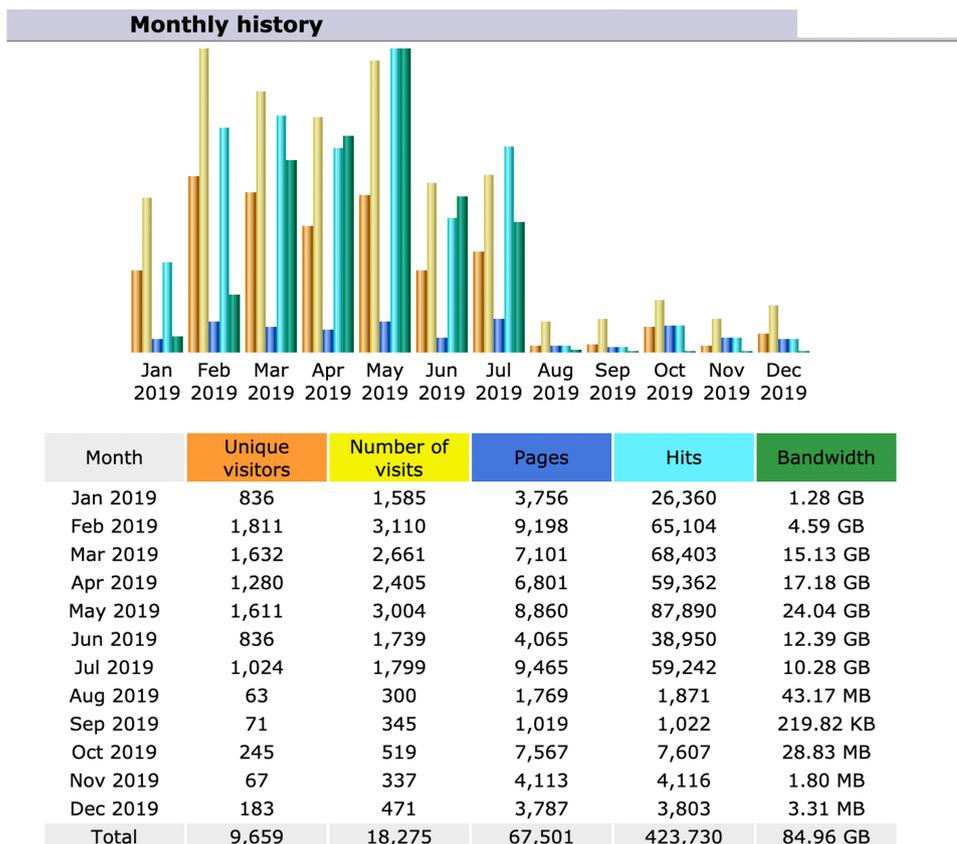


Fig. 14. The visitors of the website of Palembang Polytechnic of Tourism in 2019.

to competition from other competitors.

Next, the researchers see website visitors data seen from cPanel on the website of Palembang Polytechnic of Tourism. Figure 14 shows the visitor tracking that accesses the website. The conversions to Palembang Polytechnic of Tourism website can be displayed in

the searching number.

Figure 15 shows the number of prospective students enrolling in Palembang Polytechnic of Tourism. The number of interested students who know about independent entrance selection through the website is 16% (350 from 2139 students). There has been a significant

Comparison of Sources of Information Obtained by Participants (Interested People)
Total of interested people: 2139 Total of participants: 330

Type of Social Media	Amount	%
1 Print and electronic mass media	89	4.16
2 Social media (Instagram, Facebook, Twitter, and others)	545	25.48
3 Lecturer or alumni of Polytechnic of Tourism	78	3.65
4 Socialization in school	496	23.19
5 Friend or relative	540	25.25
6 Palembang Polytechnic of Tourism website	350	16.36
7 Ministry of Tourism website	41	1.92
	2139	

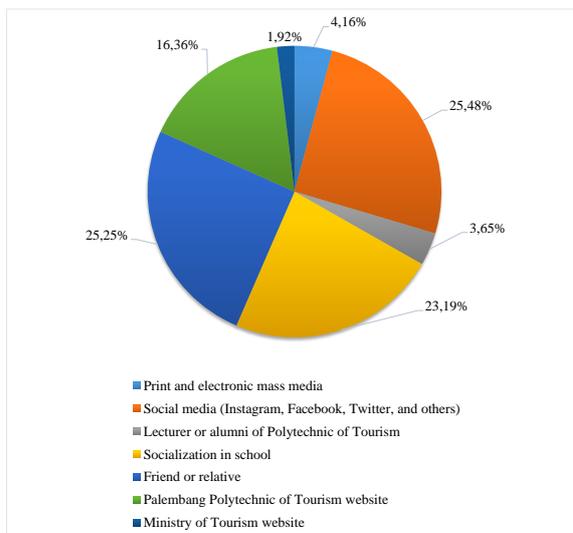


Fig. 15. The data of independent entrance selection in Palembang Polytechnic of Tourism in 2019.

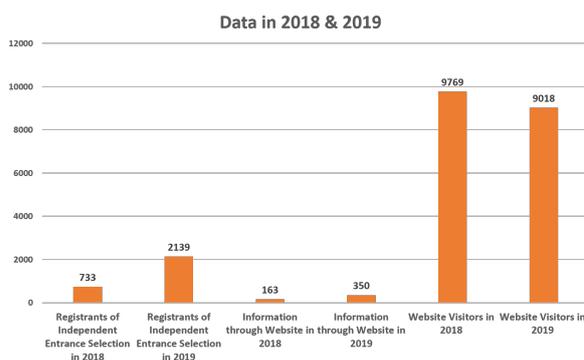


Fig. 16. The effects of the Search Engine Optimization (SEO) to the registrants and visitors.

increase from the data in 2018. The increasing number occurs from the amount of registrant data or students who know information from the website.

Figure 16 is a comparison between the data in 2018 and 2019. It shows an increase in registrants in 2018 with 733 to 2139 in 2019. Registrants, who have received information through the website, increase

twice as much as the previous data from 163 in 2018 to 350 in 2019. There is an increase in information dissemination through the website, so the optimization of website visibility and branding goes well. Figure 16 shows illustration of the success in maximizing the visibility and branding of Palembang Polytechnic of Tourism.

V. CONCLUSION

The research describes the situation of online marketing strategies by using website media. It is about how people find information about tertiary institutions, such as their thoughts on the online presence of tertiary institutions, as well as overall opinion about services and facilities. This research determines the aspects of keywords that must be considered in designing SEO on websites of tourism polytechnic in Palembang. It also contributes to the success of e-strategies. It can be observed that the popularity of the Internet is obtained through links and a good search engine position. It is because every Internet user who searches for information related to company activities will find the address of its website among the top ones. To achieve the long-term results, companies must add new backlinks on an ongoing basis, because, in SEO, it increases website traffic that comes from search engines "naturally". SEO can be used to reach the first position in search results sustainably and stably. Then, it results in the visibility and branding of a website on Google. The results also indicate the successful university's visibility and branding, so that it can develop a quality website, in terms of simplicity, efficiency, speed, and popularity. Although the research shows a good result, future researchers can present qualified keywords to increase visibility. It allows users to reach their website using more different search terms instead of only one search term. Besides, the optimization begins for a short period, and SEO requires a certain amount of time to observe the significant impact.

REFERENCES

- [1] Kementerian Komunikasi dan Informatika Republik Indonesia. (2018) Jumlah pengguna Internet 2017 meningkat, Kominfo terus lakukan percepatan pembangunan broadband. [Online]. Available: <https://bit.ly/3dAH1X0>
- [2] T. Vo, "Search Engine Optimization and its importance for business visibility and branding," Bachelor's Thesis, Oulu University of Applied Sciences, 2016.
- [3] S. Salehi, J. T. Du, and H. Ashman, "Use of web search engines and personalisation in information searching for educational purposes." *Information*

- Research: An International Electronic Journal*, vol. 23, no. 2, pp. 1–13, 2018.
- [4] J. D. Miller. (2017) 7 most important SEO focus areas for colleges and universities. [Online]. Available: <https://bit.ly/2zzNJO4>
- [5] Clave Digital. (2016) Fungsi dan tujuan SEO di bidang digital marketing. [Online]. Available: <https://bit.ly/2Z2s9wm>
- [6] M. Weideman. (2017) Website visibility & search engine rankings. [Online]. Available: <https://web-visibility.co.za/news-webvis/>
- [7] S. Shrestha, "Ember. js front-end framework–SEO challenges and frameworks comparison," Bachelor's Thesis, HAAGA-HELIA University of Applied Sciences, 2015.
- [8] P. Rai and A. Lal, "Google pagerank algorithm: Markov chain model and hidden Markov model," *International Journal of Computer Applications*, vol. 138, no. 9, pp. 9–13, 2016.
- [9] D. F. Gleich, "PageRank beyond the web," *SIAM Review*, vol. 57, no. 3, pp. 321–363, 2015.
- [10] A. Clarke, *Learn Search Engine Optimization with smart Internet marketing strategies*. Simple Effectiveness Publishing, 2018.
- [11] D. Murphy. (2013) 5 marketing activities to increase online visibility. [Online]. Available: <https://masterful-marketing.com/increase-online-visibility/>
- [12] N. Patel. (2017) How to use SEO to build your brand. [Online]. Available: <https://neilpatel.com/blog/how-to-use-seo-to-build-your-brand/>
- [13] Å. Kroon and G. Eriksson, "Messy interviews: Changing conditions for politicians' visibility on the web," *Media, Culture & Society*, vol. 38, no. 7, pp. 1015–1033, 2016.
- [14] D. Bhandari, "Improving online visibility of the web pages with Search Engine Optimization: Laurea University of Applied Sciences," Bachelor's Thesis, Laurea University of Applied Sciences, 2017.
- [15] A. Dennis. (2015) Building brand awareness through improved online visibility. [Online]. Available: <https://bit.ly/2WMVmZN>
- [16] Forbes Agency Council. (2017) 15 ways to improve your website's branding. [Online]. Available: <https://www.forbes.com/sites/forbesagencycouncil/2017/03/28/15-ways-to-improve-your-websites-branding/#5c12ca9d3091>
- [17] R. Fishkin. (n.d.) The beginner's guide to SEO. [Online]. Available: <https://moz.com/beginners-guide-to-seo>