



Influence of search engine optimization (SEO) on business performance: Case study of private university in Sarajevo

Mersid Poturak ^{(a)*} Dino Kečo ^(b) Eldar Tutnić ^(c)



^(a) Assoc. Prof., Faculty of Economics and Social Sciences, International Burch University, Sarajevo, Bosnia and Herzegovina

^(b) Assoc. Prof., Faculty of Engineering and Natural Sciences, International Burch University, Sarajevo, Bosnia and Herzegovina

^(c) Faculty of Economics and Social Sciences, International Burch University, Sarajevo, Bosnia and Herzegovina

ARTICLE INFO

Article history:

Received 16 April 2022

Received in rev. form 29 May 2022

Accepted 05 June 2022

Keywords:

SEO, digital marketing, marketing, business, online business, business performance, university

JEL Classification:

M3

ABSTRACT

The aim of the paper is to investigate the impact of SEO on the business performance of a private university in Sarajevo. Thus, the main research question provides the finding on how does the implementation of SEO influence the performance of business. Moreover, the tested hypothesis presents weather SEO positively influence business performance of International Burch University (IBU). The research strategy is to analyze primary data derived from a case study, which is generated following a conversation with the Head of IBU Marketing and PR team. Data sample is derived from Google Analytics (focusing on number of visits and sessions, average engagement time, keywords and SERP positioning). Seobility tools are employed in data analysis. Business performance is calculated through IBU CRM system, focusing on student enrolment. Findings indicate that increasing a site's rankings on search engine results pages (SERPs) led to a variety of positive outcomes for companies including an increase in the number of visitors to the site, an increase in the average amount of time users spent on the site, increased user engagement, and an increase in student enrollment, which resulted in IBU increased annual sales revenue. It will benefit many different groups, including the government, which will benefit in both microeconomic and macroeconomic senses, digital marketing enthusiasts and SEO experts, and the academic world, which will benefit as a framework for future studies and research in the field of SEO recognition and implementation in business queries.

© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

Search engine marketing platforms are unique to each search engine. From there, you can create campaigns and advertisements for searches. Google processes over 3.5 billion searches every day. And that equals a market share of more than 75 percent. Therefore, marketers strive to have their businesses appear at the top of Google search results. Putting it simply, that makes sense. Businesses should be where their customer bases are. Search Engine Results Pages also abbreviated as SERP are the results users see after submitting a search into a search engine. And there are two ways to show up on the top of the search engine results page, Search Engine Optimization, SEO, and Search Engine Marketing, SEM. Despite the high ROI of SEO, it is a long-term investment.

SEO refers to the technique of optimizing websites for search engines. It has been a focus of research in many digital marketing journals and individual researchers due to its considerable influence on the organizational structures of internet-based enterprises during the last three decades. The importance of SEO in company optimization is negligible, and when looking for other papers of a similar kind, it is evident that there are many unexplored topics. The absence of several research on the effect of SEO on business demonstrates the significance of this study. The fact that only domain owners have access to the SEO data further complicates the research process. The purpose of this study is to determine and analyze the significance and impact of SEO on company performance; if SEO does not boost business, why should anybody spend money on SEO specialists?

* Corresponding author. ORCID ID: 0000-0003-4179-5834

An in-depth review of the previous condition of the IBU website, which had a high bounce rate enhanced the demand for an optimized web source. Ability to associate the existence of an unoptimized website based on a WordPress theme with its impact on company performance led to a strong inclination to create a new, optimized, and quick website.

Not only was the website inadequately optimized, but it also lacked specified keywords, resulting in a terrible SERP rank for the IBU website. The issue of SEO's impact on company is incredibly essential, particularly when we consider that one of the primary ways companies attract clients is via their websites, and how would they entice the customer to the website if the website is scarcely visible? SEO is essential since it increases the website's visibility, resulting in more traffic and conversion potential.

The challenge of optimizing a website for search engine optimization (SEO) is not straightforward, as it necessitates a substantial investment and the collaboration of many different professional fields, such as SEO specialists, developers, UX/UI designers, marketing specialists, etc. Combining on-page and off-page SEO approaches is the answer to many of the listed issues, as well as its maintenance over the months and years.

The capacity of a business to adopt optimum organization with the objective of delivering a product or service that fulfills consumer and customer expectations influences business success, which is highly correlated with commercial effectiveness. According to studies, innovation promotes corporate performance since the output of innovation increases company competitiveness (Budur and Poturak, 2021) and the process of innovation transforms a company's internal capacity, making it more adaptive to change (Neely & Hii, 1998; Budur et al., 2019)

Internet and its subdivisions are one of the technical business advancements with which we are constantly confronted (Budur, 2018). World wide web or just web is one of its principal subsets, consisting of sites and programs that can be accessed using a web browser, employed by unified resource locators (URLs), and linked by hyperlinks. Without a search engine, which is essentially a software system for doing internet searches, it would be difficult to navigate the immensity of the World Wide Web (Sirovich & Darie, 2007)

The data processed by the search engine is so huge that it would be difficult to discover anything without appropriate classification and optimization; thus, we begin SEO, or search engine optimization, at this point. SEO is the art and science of modifying a website's components to get the greatest possible search engine ranking. (Ochoa, 2012)

Numerous modern organizations use their websites as their main or secondary lead generating platforms for prospective consumers. According to studies, a website is more likely to be accessed by a user if it ranks higher on a SERP (search engine results page). (Enge et al., 2009) 36 percent of consumers say that having a firm featured among the top results on a SERP creates the sense that the company is a leader in its industry. (Iprospect, 2006).

There are several objectives that we have an intention of achieving: (i) Keyword research: We will discuss how to find and choose potential keywords for use in a successful SEO campaign on a website, (ii) Website development and SEO implementation: The scope of this study includes the following phases: the conception phase of the website, development, launch, and implementation of SEO, (iii) Metrics analyzed: This study will concentrate on the following research factors in order to verify and assess the efficiency of the chosen SEO approaches; in addition, a definition of each of these variables is provided: Number of visits, meaning the number of times a visitor has visited your site is referred to as the number of visits (unique sessions initiated by all your visitors). Pageviews, which displays the total number of pageviews received by your site when the given time period is taken into consideration.

In the following section this paper will provide a comprehensive literature review consisted of relevant papers and studies that contribute to SEO as field of study in digital marketing. Data collection process and in-depth interview structure is explained in methodology section while main findings and hypothesis testing results are presented in results analysis and data discussion section. In the final part of the paper conclusion and study implications are provided.

Literature Review

This study focuses mostly on International Burch University, Bosnia and Herzegovina, and addresses SEO's critical and direct effect on company success. Stella Tomasi and Xiaolin Li (2015) provided the first study on SEO's impact on SMEs in their paper *Influences of Search Engine Optimization on Performance of SMEs*.

The findings of the iProspects Search Engine User Behavior Study provide specific data conclusions at various periods. (Iprospect, 2006) Bishnu conducted extensive research on SEO's impact, including several case study analyses of organizations like Nike Golf, UAV Coach, Your Foot Doc, and Talkpoint. Rana (2016) derived a conclusion that keyword selection, content with optimized keywords, and the use of various link building tactics have all been shown to have a major influence on growing traffic and getting high rankings in SERPs.

Websites are strongly related to business performance, particularly if a company requires brand recognition tactics. Enaceanu (2010) states that 80 to 90 percent of internet users, utilize search engines like Google to get relevant information; consequently, marketing strategies should reflect the significance of search engines. According to Pohjanen (2019), traditional search engines put a premium on the frequency with which a phrase appears on a website. Google uses PageRank to evaluate the whole Web's link structure and find the most important sites. It then does an examination of hypertext matching to determine which pages are relevant to the current

search. Google is able to highlight the most relevant and trustworthy search results by combining query-specific relevance with broad importance.

SEO, as a tool of digital marketing strategy, has permeated all types of business sectors, including small scale enterprises, multinational corporations, domestic corporations, education sectors, bank sectors, manufacturing sectors, and so on; as a result, many industries prefer to begin the process of implementing digital marketing strategies due to their cost-effectiveness and quick customer reach. (Thoti & Vyshnavi, 2019)

In his research, Binter (2019) found that the majority of his sample respondents strongly believe that digital marketing has a good impact on the performance of B2B enterprises. It has been observed that, in terms of business performance, business quality leads to productivity, and productivity increases business performance. (Prakash et al., 2017) It has also been shown that providing products that meet consumer needs may help a company gain a competitive advantage. This will ultimately lead to the production of high-quality goods, which will improve the company's profits. (Forker et al., 1996) Moreover, not only will quality help to a company's increased success, but all competitive quality dimensions are strongly correlated with several performance measures. (Curkovic et al., 1999; Rashid et al., 2020). Regarding the impact that SEO has on the visibility of universities on search engine results pages, Vallez & Ventura (2020) found that the findings of their study indicate that higher education institutions need to employ SEO techniques in order to boost their visibility in an efficient manner. This study has a direct link to our hypothesis since it demonstrates the significance of SEO for the visibility of university websites on SERP, which in turn affects the overall performance of businesses.

It is necessary to be aware that search engine optimization (SEO) should be planned on a long-term connection rather than on a short-term relationship, notwithstanding the significance of SEO implementation. According to research conducted by Erdman et al., (2022), it is possible to make long-term conclusions from projected cost per click, which serves as the economic cost of organic keywords.

Small firms are more likely to be successful if they apply a variety of marketing methods, invest in high-quality equipment, and depend on grants as opposed to family and friends for funding (Budur, 2020). Investments in marketing strategy, market research, and training are unlikely to improve performance in the medium term. (Wood, 2006) When assessing marketing's effect on corporate performance, we may consider two marketing capacity categories (outside-in and inside-out capabilities) (Budur et al., 2018). Researchers in European engineering nations observed that when SEM analysis is done, correlations between market orientation and outside-in capabilities and company performance are surprisingly small, in contrast to the large effect of innovation orientation and inside-out talents. (Jaakkola et al., 2010)

Additional writers that have studied diverse aspects and issues pertaining to SEO as a digital marketing strategy for company performance and search ranking algorithm include (but are not limited to): Norrgard (2018), Ochoa (2012), Hidayanto et al., (2012), Kivist (2016), Sharaf (2013).

Research and Methodology

Sorting through billions of pages is time-consuming and hard. If websites are less visible online, it will impact the company's client-acquisition success. Each search engine does something different. Search engines index web pages based on keyword relevance. SERPs list indexed pages for the user's query. Adopting this method may increase a company's internet-based client acquisition.

Research question and hypothesis

This paper discusses Google's search engine and company performance. It uses authors own experience designing and building an actual website to test SEO techniques. Using a sound keyword strategy and methodology, as well as particular SEO tactics, the effectiveness of SEO on Google search engine rankings will be assessed and discussed. The paper's central **research question** is formulated: „*How does the implementation of SEO influence the performance of business?*“ “The data may show that SEO may boost corporate performance. The business will compare all outcomes to prior data (website visits, average engagement time, keywords etc.). The hypothesis that we would have to defend would be presented as follows: *SEO positively influence business performance of International Burch University*

Data collection

The research method is to process primary data from a case study developed after a brief talk with the Head of IBU Marketing and PR team, Engin Obučić. A case study explores a phenomenon in its natural settings utilizing many data collection techniques (people, groups, or organizations). No experimental control or manipulation is used to establish the phenomenon's bounds at the start of the investigation. (Benbasat et al., 1987).

Data analysis will also employ raw Google Analytics data. Why Google Analytics? As Plaza (Plaza, 2011) states, Google Analytics tracks time - series data. It is utilized since it's a free, user-friendly application that Google provides to track website traffic. This tracking program, which is not part of the website, gathers data by embedding HTML code onto each page. Google Analytics tells website owners how users discover and use their site. Data will be chosen in accordance with the analytics timetable. Qualitative and quantitative methodologies can be employed in primary data gathering, since qualitative results may be used to interpret or explain quantitative findings in a largely quantitative analysis.

With the support of Google Analytics, we will have access to data visualization and monitoring capabilities. These tools include dashboards, scorecards, and motion charts, which illustrate the evolution of data across time; We will integrate data filtering, manipulation, and funnel analysis; predictive analytics, intelligence, and anomaly detection; segmentation for the investigation of subsets such as conversions; and customized reports for advertising, audience behavior, acquisition, and conversion.

Because it evaluates the whole of the website by crawling all of the related pages, Seobility was the tool that we utilized for the SEO in-deep study. Each project is continuously inspected and examined by Seobility crawlers so that a sustainable and ongoing examination of the website can be maintained. This also allows the crawlers to follow the progress of optimizing the website.

The important element to remember is that the data obtained is unique to this study, and no one else has access to it until it is published. It is critical to know what questions to ask and what subjects to cover before they are 'imposed.' After all of the necessary data has been given, the procedures of SEO analysis may be followed. It's crucial to identify the gaps in the literature as a result of the examination of previous studies on the same topic. Furthermore, the study may underline the notion of improving business performance in terms of SEO, through the collecting of data.

Website research

Following much discussion, the Marketing and Public Relations team at IBU decided on a custom-built website as the major basis for the new site's functionality. The technology that will be utilized in the project has been identified as React.js The second technology that was introduced while building IBU website is Next.js, a React production framework. Backend for the IBU website is KeystoneJS. It is an open-source, API-driven headless CMS. GraphQL is what our developers have opted to use for the application programming interface (API) aspect.

Keyword Research

Strong keyword research should form the basis of any effective search engine optimization (SEO) strategy. It is the responsibility of the SEO engineer to determine, using the method of keyword research, which keywords are the most relevant to the website that is now being construction.

The process of finding keywords that are pertinent to your website may be simplified with the aid of keyword generating tools such as Google Keyword Planner, SEMrush, and KWFinder. After entering Keyword Planner, we needed to get search volume and prediction to analyze our general keyword's SERP position (search engine results page).

SEO strategies implemented

Before moving on to off-page SEO tactics, which will be discussed in the next section, ensure that on-page SEO has been conducted appropriately. Meta tags are HTML labels that are put on web pages; we began with their optimization. The objective is to have a distinct set of meta tags for each page. When entered the page where the results of a search engine are shown and click on the result that is ranked number one, we are sent to a website that was designed with "International Burch University" keyword in mind. As can be seen in Figure 4, the title tag is entered into the HTML code of the website.

```
<html>
  <head>
    <meta name="viewport" content="width=device-width">
    <meta charset="utf-8">
    <title>International Burch University | IBU</title> == $0
```

Figure 1: Title tag optimization for "International Burch University" in HTML code

We created title tags in conjunction with the webpage address for use on our website, which is affiliated with the International Burch University. For instance, if we go to the page titled "Tuition and fees," the title tag will read: "Tuition and fees | IBU". When visitors click on a search result and are sent to the destination page, the description meta tag should provide them with an accurate and captivating explanation of what they will find when they are there. Website search engine URLs should be easy to comprehend for individuals who may desire to link to your sites; long and cryptic URLs will make it difficult for customers to understand your website.

Heading tags are used to emphasize important page content and structure. They also inform search engines what your website is about; the h1> tag determines the most important heading and the h6> tag defines the least important heading, thus it's crucial to include your target phrase in the headers, particularly the h1> tag.

In SEO optimization, it is an obligation to utilize the image alt property in order to offer a correct description of the image. If not, the website may not be accessible to certain users. It is recommended that an HTML sitemap is created for users and an XML sitemap for search engines. This type of sitemap is the sort of sitemap that makes it easy for search engines to identify the pages that are located on your website.

The Case

International Burch University (IBU) is in Sarajevo, BiH. It's owned by Stirling Education, a London-based provider of first-class education worldwide. International Burch University, which contains faculties in Engineering and Natural Sciences, Economics and Social Science, and Education and Humanities, is well recognized and follows to the 'entrepreneurial university model,' which fosters soft skills and an entrepreneurial attitude among its students.

It was founded in 2008 and employs full- and part-timers. Serving bachelor's, master's, and PhD students. The company's expected yearly income is 5 million Bosnian marks. It runs a call center at its headquarters, where direct sales are conducted and all services are arranged by phone calls, email or through an online form on their website, according to the company. It was in the year 2021 that IBU's websites evolved on the WordPress format, and the company's internal marketing staff ran a Pay-Per-Click campaign. They created several different landing pages through this platform. In spite of this, they were unable to discover the required website conversion rates depending on their investment in the PPC campaign and in the creation of new landing pages. It became obvious after a comprehensive study of their website data that one of the concerns originated from poor optimization of their main website, which had a negative impact on the overall SEO of the IBU website, which may have had an impact on the IBU business performance.

IBU had an issue with a very high bounce rate, which may reach as high as 90 percent or even higher in certain cases. The Google Insights page has a dismal performance rating of 18 on a scale of 1 to 10. Problems such as the time it took for the homepage to be completely interactive (20 seconds), the speed index of 14.7 seconds, and the 6.7 seconds required for the first text or picture to be painted were also mentioned.

This prompted the need for quick action. IBU formed a team composed of web developers, UX/UI designers, graphic designers, marketing and communications managers, communication managers, and social media managers to create a new page from the ground up with the specific goal of improving the website's search engine optimization, bounce rates, and overall performance. We used this page to demonstrate our expertise in the field of web development and Search Engine Optimization. (E. Obucic, personal communication, May 2022). Based on Google analytics, the IBU Head of Marketing and PR, Engin Obucic, suggested that this website received approximately 8.000 visitors per month before the SEO analysis, and that it now receives approximately 8.500 visits per month as a result of the SEO (actual numbers provided in the results and data analysis section). He suggested that the "SEO has increased our exposure to SERP (Search Engine Results Page), call volume, number of visits and sessions, average engagement time as well other outputs cumulatively resulting in increased sales, that is, student enrolment. New students were brought in as a result of the SEO, which has complemented our marketing and referral efforts.

Redesigning the website was necessary since it was just as crucial to retain the user on the webpage as it was to get the user to see the webpage on the search engine. The IBU marketing and PR team was heavily engaged in the SEO campaign and continues to meet and discuss with the consultants about keywords and geographic regions that should be targeted in future campaigns. Following some recommendations from their internal web development network, the IBU Marketing and PR Team has begun tracking the sources through which prospective consumers are learning about the IBU. The IBU Head of Marketing and PR feels that by doing so, they would be able to observe the advantages of the SEO even more clearly and determine the return on investment for such marketing activities. He believes that improved SERP exposure and increased student enrolments are the most significant gains the IBU has reaped from Search Engine Optimization.

Influence of SEO on business performance

Using business performance measurements, a company's management may monitor and analyze a business, project, or process. Business performance metrics are connected to an organization's KPIs, sometimes called organizational performance, outcomes, or key success indicators. These concepts are synonymous (KPI) (Business Performance Measures)

Connection between the innovation and performance

It seems, based on hearsay, that there is a direct connection between innovation and the performance of businesses. But how exactly can innovative thinking lead to improved performance? Geroski (1995) proposes two perspectives. First, a firm may strengthen its competitive position by developing new items or processes. Earnings and growth will be transient as long as the creative firm can fend off competition (Poturak et al., 2020). The second perspective says innovation improves a company's internal capabilities (Demir et al., 2020). Innovative firms are better equipped to face market problems than non-innovative organizations. SEO has the potential to positively affect the business performance of SMEs, despite the fact that it may sometimes seem to be much more difficult than it really is. In our particular circumstance, we determine the level of company performance based on the SEO methodology that has been implemented into the International Burch University website. In general, small and medium-sized enterprises do not have the resources necessary to boost website traffic without engaging in creative problem-solving and implementing strategies such as search engine optimization (SEO). The use of search engine optimization (SEO) tactics may assist small and medium-sized enterprises (SMEs) in increasing the visibility of their websites to potential consumers and in competing with bigger businesses. Small and medium-sized businesses (SMEs) may target clients within certain zip codes by using search engine optimization (SEO) tactics. The rating of the website maintains its position at the top of the SERP even when the number of people who access the website and the amount of website traffic increases. (Tomasi & Li, 2015)

Relation between SEO and business performance

SEO has had a significant impact on the likelihood of recognition as one of the important criteria indicating the legitimacy of the website, which directly may affect the customer's opinion of the degree of professionalism with a particular firm or, as in our case, educational institution. The client experience will be further influenced by all of the parts that have been described so far, such as the SEO strategy or the average website engagement rate.

Analysis and Findings

This section provides a discussion and analysis of the consequences of the implemented SEO tactics and methods, as well as data correlation analysis with other similar scientific papers. This website was selected to serve as the experimental page for the deployment of certain SEO tactics, which were then monitored using Google Analytics. Specifically, data for this study was gathered between the first of April 2021 and the last day of April 2021, and it was compared to the data set with exact values obtained between the first of April 2022 and the last day of April 2022, and Google Analytics is utilized in this process since it is a data collection and analysis tool for gathering, monitoring, and analyzing data. It is a Google-provided service. In the following sections, we will assess the key performance indicators (KPIs) as well as the efficacy of the SEO tactics employed on this website.

Number of visitors

Total website visits may be calculated to measure how successfully SEO was executed. We choose to utilize the number of visits as a statistic (to monitor and measure) since it reveals whether or not the optimized website is being located on the internet. This information can be gleaned by comparing the results that we obtained before optimizing SEO with the results that we obtained after optimizing SEO. At the time, the IBU website was based on Wordpress theme, and it suffered from a large number of technical flaws that needed to be fixed before the new version of the website could be launched. When we looked at the data sets from Google Analytics in March of 2022, we saw that there had been a decrease in the total number of IBU official website visits. As a result, we attempted to determine the cause of the issue. After gaining a deeper understanding of the number of visits to our website and carefully examining all of the potential causes of the decline of organic visits to our website in opposite to the same period of the previous year, we decided to resolve the issues that caused this. There were many unreliable backlinks, which lowered our SERP ranking. We removed all of them, and we also deleted previous sitemaps and deployed a new XML sitemap.

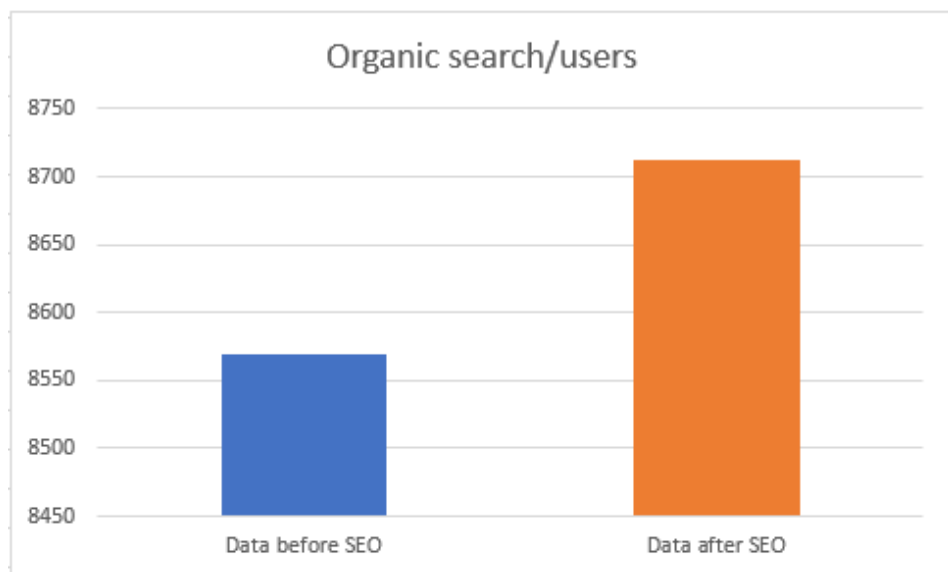


Figure 2: Website sessions before and after SEO implementation

SEO impact on number of visits

The Use of SEO by IBU Impacts the Number of Visits to the Company's Website. An increase in a company's website's exposure is required in order to accomplish a rise in website traffic. The use of SEO methods help small and medium-sized businesses target specific clients. The website's SERP ranking remains high even as its popularity and visitors increase. When the results from the official IBU website are taken into account, we found that there were a total of 8713 organic search sessions to International Burch University website in April 2022. We see an increase of 1.68% after the SEO implementation.

Impact of SEO on the average length of a website visit Using SEO tactics, the website of a business is rated higher so that it is more accessible to Internet consumers. However, if the visitor does not remain on the website to learn more about the items or services, a better placement on the search engine results page is ineffective.

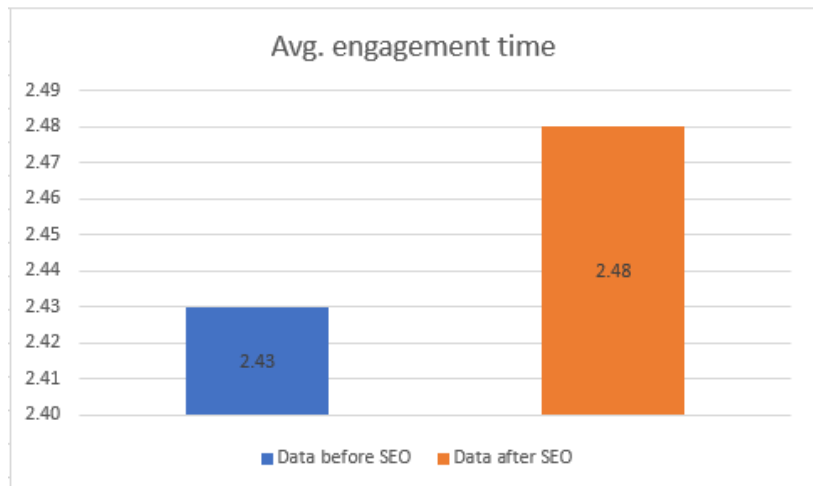


Figure 3: Average engagement time in both IBU websites, before and after SEO implementation

According to the SME in our case study, the SEO strategy optimized the website's design. The website's content was made more relevant, and its linkages were made more effective, in order to increase visit length, facilitate decision making, and facilitate purchase. This is known as SEO on-page categorisation. After SEO implementation, the average engagement session on IBU websites is 2:48 minutes, while it was 2:43 minutes before SEO implementation. We see a modest increase in average engagement duration.

Keywords results

As was said before, "International Burch University" served as the objective of our long-tail keyword research and was the primary concentration of our SEO efforts. It should come as no surprise that this particular term was the one that was most responsible for attracting people to the page. The primary target term, abbreviation of IBU, which stands for "International Burch University," and its derivatives with the keyword Burch are receiving the most impressions. The "IBU" keyword received 3,593 impressions, which is also responsible for generating a large number of clicks, which ultimately led to visitors to the site. In addition, take note of the other search queries (variations on the target phrase), which, when added together, are also accountable for driving a significant number of people to the website. The results for the search phrase "lms burch," which translates to "Learning management system Burch", is receiving a huge amount of search volume. The click-through rate (CTR) for this keyword is 93.46 percent, making it the second highest in the list. This shouldn't be a surprise as the median of most of our keywords is 1. If we combine "burch" with anything else, there's a good possibility International Burch University's website will come up in our search results (SERP). Before SEO, the website's keywords were in a very bad situation. This is because the keywords were not set, so when we try to access them, we get a message that says, "not provided" or "not set." This prevented us, on the old IBU website, from conducting further research and making the SEO better.

Before we implemented SEO, International Burch University averaged 390 monthly Google searches. After implementing SEO, we witnessed a boost in monthly searches. "International Burch University" was Googled 22% more in April 2022 than in the previous three months. YoY change has a 126% increase. Year-on-year growth, or annual growth rates are rates of change stated over the same period (month or quarter, depending on the frequency of the data) as the preceding year. (*OECD Glossary of Statistical Terms - Year-on-Year (YoY) Growth Rates Definition*, n.d.) When we extend our search, we find an even larger rise in the amount of people using the organic search term "International Burch University." In April 2021, searches for International Burch University were conducted 950 times across all locations. The following year, in April 2022, searches for International Burch University were conducted 1400 times across all locations.

Impact of SEO on IBU student admission

By implementing SEO, the organization examined in this research found a modest improvement in website traffic and visit length, which suggests an opportunity to boost total sales income. Consequently, this has a significant influence. After a thorough analysis of the firms' financial performance, we've determined that the increase in online traffic and visit length has actually translated into a rise in sales income, student admission.

Multiple factors determine a company's commercial success, including management style, customer relationship management, and service quality, as well as the efficiency of incentive pay systems and staff motivation. (*What Is Business Performance?* n.d.) This examination will concentrate on the CRM system of International Burch University. Student fees are the primary source of revenue for International Burch University. Throughout the preceding years, our team of engineers created a CRM system that meets the requirements of our admissions and marketing departments. Since we incorporated the query parameter on the scholarship application

form, we are able to trace the origin of application submissions (social media, SERP website visits applications, PR articles, print materials through QR code etc.)

In this study, we examined the number of scholarship applications submitted via our website in April 2021 and compare it to the number of scholarship applications submitted in April 2022. In April 2021, 60 new students directly applied to IBU using our website. Compared to the same month in the following year, April 2022, we observe that 80 new students applied directly via our website after we adopted SEO strategy on our website. This 33,3 percent increase in student admissions is sufficient evidence to establish that SEO has an effect on company performance. The entire process of gathering results and analyzing them led us to the conclusion that SEO does, in fact, have an effect on the performance of business. This came about as a result of the fact that we observed an increase in every facet of the information that we requested, ranging from the quantitative data to the practical results such as an increase in student enrollment. It is feasible, with more research on the IBU website, to further enhance the organic reach of the IBU website, and therefore, to even more significantly boost the exposure and performance of the IBU.

Implications

SMEs should know whether customers discover them via search engines. This shows whether SEO is being handled appropriately, since SEO aims to improve the website's organic rankings. This study has managerial implications. This is not the only study that has been done on the topic, as can be seen from the sections that came before this one, yet moreover, many of the other studies are cited in this article. Tomasi and Li (2015) came to the conclusion that search engine optimization (SEO) has a substantial positive impact on the number of user visits to SME websites, the average duration of user visits, as well as the company's overall sales revenues. Additionally, they came to the conclusion that factors for SMEs to be successful in SEO would be to identify an SEO expert to help with the campaign and to identify if customers are coming to their business based on search engine results or not. Ochoa (2012) concluded to a number of findings after doing an in-depth investigation of the effect that SEO implementation had on Google's search algorithm. It is mentioned in Ochoa piece of work that after the SEO implementation, the experimental website had a rise in the number of visitors of 353% and an increase in the number of page views of 234%. A high position on Google search results was not achieved by the experimental page of Ochoa's website prior to the deployment of the SEO tactics. At the time that Ochoa thesis was being written, the website had made it onto the top page of Google. The success of the SEO tactics for the target term that Ochoa's study is focusing on is shown by the prior data findings.

The findings of our study are in line with the findings of all of the articles that have been discussed before; this provides further validation for our findings and increases the likelihood that they can be replicated. Moreover, it should be kept in mind that we received a smaller increase in KPIs, than other studies, which may be the result of the time period of the investigation, since the data sets are only several months young.

Conclusions

After collecting and evaluating findings, we concluded that SEO affects company performance. We saw an increase in every aspect of the sought information, from quantitative statistics to practical effects like student enrolment. More research on the IBU website might increase its organic reach and strengthen its exposure and performance. Our hypothesis that SEO positively influences International Burch University's business performance is supported by the data showing that SEO increases the number of user visits to IBU websites, the average duration of user visits, and the company's overall sales earnings. This, in turn, leads to an increase in the number of student enrollments, which confirms that our hypothesis. The currency of the findings that we acquired during the course of our research demonstrates that SEO data may differ based on how they are implemented on the website. Since the gathered data is pertinent to the subject matter that we discussed, it is possible to do further analyses on it in order to generate findings that are even more intriguing. As a result of the fact that the data analytics tool that we employed was formed on a quantitative artificial intelligence service, the dependability of the information is guaranteed.

Our study shows that SMEs may improve website performance and boost income utilizing the Internet to compete with bigger companies. They only need administrative assistance and SEO marketing metrics. Due to a paucity of empirical research on SEO's commercial effects on SMEs, this study's results are significant for boosting SMEs' confidence and promoting their interest in SEO. Even if SMEs aren't acquainted with SEO, they should ask questions and provide suggestions. This study should help small and medium-sized firms understand which performance criteria indicate success.

Further research and SEO improvement

Based on our case, we identified numerous SEO performance influences: number of visitors, average engagement time, IBU website SERP position, and total sales revenues. These criteria may create a theoretical framework for future empirical SEO study, especially among educational institutions. Other studies may concentrate on the end user and compare where they obtain e-commerce information on SEO and non-SEO websites. This will show whether people can discover content on optimized vs non-optimized websites. Future researchers would be advised to go even deeper into the website's Google statistics and further explore the possibilities of long-tail keyword combinations in order to attract even more organic visitors. On the on-page SEO aspect of improving the IBU website, the meta side might be enhanced by eliminating duplicate page names and meta descriptions. Seobility indicates that more than 30 pages need improvement in their title tags, and more than 40 pages have issues with their H1 headers; in

addition, some image alt attributes are missing. Multiple pages on the IBU website have similar anchor text, which might be changed to enhance the site's structure. There are pages without H1 keywords in their page content and duplicate material. Since we saw that LMS Burch is one of the most often searched IBU keywords, we should develop a plan for using this keyword on our website in order to enhance the IBU website's ranking even more. Backlinks are the component that requires extra care. This is a long-term approach that has to be executed as soon as possible. On a monthly or weekly basis, a strategy of paid backlinks on reputable websites and general free material that may bring traffic to the website must be developed. Off-page SEO reflects the SEO's long-term connection with Google's search algorithm; therefore, it should not be taken lightly.

Limitations

We discussed the study's contributions, limitations, and future research. Due to the limited sample size, extending our results to other firms, particularly smaller ones, should be done with caution. The specific problem that could cause issues with the research's ability to be replicated could be found in the specificity of the IBU CRM system, which was designed by our in-house development team. They designed it while keeping in mind the urgent need of detailed tracking of the student enrollment process, and they did so through the use of query parameters. An interpretive study's goal is not to make judgments about SMEs in general based on the results of a particular SME, but to give information about SEO's impact on smaller enterprises. We didn't explore the effects of different SEO expenditure levels on performance, which would have been good. In actuality, the amount of investment may make a difference: although basic website and keyword modifications may have less influence on performance, advanced SEOs are predicted to deliver bigger impacts

Acknowledgement

Author Contributions: Conceptualization, MP., DK., ET.; Methodology, MP., DK., ET.; Data Collection, MP., DK., ET.; Formal Analysis, MP., DK., ET.; Writing—Original Draft Preparation, MP., DK., ET.; Writing—Review And Editing, MP., DK., ET. All authors have read and agreed to the published final version of the manuscript.

Institutional Review Board Statement: Ethical review and approval were obtained for this study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Benbasat, I., Goldstein, D. K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly: Management Information Systems*, 11(3), 369–386. <https://doi.org/10.2307/248684>
- Binter, U. (2019). Influence of Online Marketing Strategies on the Sales Success of B2B Companies. May, 96.
- Budur, T. (2018b). The impact of Al-Ghazali's virtues on organizational commitment and performance: A case Study at private education institutions in Kurdistan Region of Iraq. *Icabep, Erbil-Iraq*, 2, p21.
- Budur, T. (2020). Impact of Transformational Leadership on Customer Satisfaction: Mediating effects of Employee Performance and Organizational Citizenship Behaviors. (Unpublished doctoral dissertation). International Burch University.
- Budur, T., & Poturak, M. (2021a). Transformational leadership and its impact on customer satisfaction. Measuring mediating effects of organisational citizenship behaviours. *Middle East Journal of Management*, 8(1), 67-91.
- Budur, T., Faraj, K. M., & Karim, L. A. (2019). Benchmarking operations strategies via hybrid model: A case study of café-restaurant sector, 8, 842–854.
- Budur, T., Rashid, C. A., & Poturak, M. (2018). Students perceptions on university selection, decision making process: A case study in Kurdistan Region of Iraq. *International Journal of Social Sciences & Educational Studies*, 5(1), 133–144.
- Business Performance Measures – Skillmaker. (n.d.). Retrieved May 28, 2022, from <https://www.skillmaker.edu.au/business-performance-measures/>
- Curkovic, S., Vickery, S. K., & Droge, C. (1999). Quality and Business Performance: An Empirical Study of First-Tier Automotive Suppliers. *Quality Management Journal*, 6(2), 29–40. <https://doi.org/10.1080/10686967.1999.11919185>
- Demir, A., Budur, T., Hiwa, M., & Heshmati, A. (2021). Links between Knowledge Management and Organizational Sustainability: Does the ISO 9001 certification have an effect? *Knowledge Management Research & Practice (TKMR)*, Doi: 10.1080/14778238.2020.1860663
- Enaceanu, A. (2010). SEO Techniques for Business Websites. *Journal of Information Systems & Operations Management*, 2(1), 114–121.
- Enge, E., Spencer, S., Fishkin, R., & Stricchiola, C. J. (2009). Praise for The Art of SEO.
- Erdmann, A., Arilla, R., & Ponzoa, J. M. (2022). Search engine optimization: The long-term strategy of keyword choice. *Journal of Business Research*, 144, 650–662. <https://doi.org/10.1016/J.JBUSRES.2022.01.065>
- Forker, L. B., Vickery, S. K., & Droge, C. L. M. (1996). The contribution of quality to business performance. *International Journal of Operations and Production Management*, 16(8), 44–62. <https://doi.org/10.1108/01443579610125778>
- Geroski, P. A. (1995). Market structure, corporate performance and innovative activity. Oxford University Press.

- Hidayanto, A. N., Adha, M. S., Jiwanggi, M. A., & Melia, T. (2012). A study of impact of search engine optimisation to internet marketing strategy. *International Journal of Services, Economics and Management*, 4(4), 298–316. <https://doi.org/10.1504/IJSEM.2012.050950>
- Iprospect. (2006). iProspect Search Engine User Behavior Study. *Methodology*, April 1–16.
- Jaakkola, M., Möller, K., Parvinen, P., Evanschitzky, H., & Mühlbacher, H. (2010). Strategic marketing and business performance: A study in three European “engineering countries.” *Industrial Marketing Management*, 39(8), 1300–1310. <https://doi.org/10.1016/j.indmarman.2010.06.005>
- Kivist, M. (2016). Case Study: SEO Strategy and Implementation for Industrial Pump Company, Retrieved 15 February 2022, from https://www.theseus.fi/bitstream/handle/10024/115399/Kivisto_Miika.pdf?sequence=1&isAllowed=y
- Neely, A., & Hii, J. (1998). Innovation and Business Performance: A Literature Review. *Business*, January, 57. http://89.249.21.76/data/696/521/1221/litreview_innov1.pdf
- Norrgard, I. (2018). Search engine optimization (seo) as a digital marketing technique for internationalization in higher education, retrieved April 15, 2022, from https://www.theseus.fi/bitstream/handle/10024/142502/SEO_in_higher_education_for_internationalization.pdf?sequence=1&isAllowed=y
- Ochoa, E. D. (2012). An Analysis of the Application of Selected Search Engine Optimization (SEO) Techniques and Their Effectiveness on Google’s Search Ranking Algorithm. Retrieved May 28, 2022, from https://dspace.calstate.edu/bitstream/handle/10211.2/1077/An_Analysis_of_the_Application_of_Selected_SEO_Techniques.pdf?sequence=1
- OECD Glossary of Statistical Terms - Year-on-year (YoY) growth rates Definition. (n.d.). Retrieved May 24, 2022, from <https://stats.oecd.org/glossary/detail.asp?ID=6673>
- Plaza, B. (2011). Google Analytics for measuring website performance. *Tourism Management*, 32(3), 477–481. <https://doi.org/10.1016/j.tourman.2010.03.015>
- Pohjanen, R. (2019). The Benefits of Search Engine Optimization in Google for Businesses. Retrieved February 12, 2022, from <https://docplayer.net/225527224-The-benefits-of-search-engine-optimization-in-google-for-businesses.html>
- Poturak, M., Mekić, E., Hadžiahmetović, N., & Budur, T. (2020). Effectiveness of Transformational Leadership among Different Cultures. *International Journal of Social Sciences & Educational Studies*, 7(3), 119–129.
- Prakash, A., Jha, S. K., Prasad, K. D., & Singh, A. K. (2017). Productivity, quality and business performance: an empirical study. *International Journal of Productivity and Performance Management*, 66(1), 78–91. <https://doi.org/10.1108/IJPPM-03-2015-0041>
- Rana, B. (2016). The impact of SEO on business, Retrieved April 25, 2022, from <https://www.theseus.fi/bitstream/handle/10024/116634/The%20impact%20of%20SEO%20on%20business.pdf?sequence=1&isAllowed=y>
- Rashid, C. A., Salih, H. A., & Budur, T. (2020). The Role of Online Teaching Tools on the Perception of the Students during the Lockdown of Covid-19. *International Journal of Social Sciences & Educational Studies*, 7(3), 178–190.
- Sharaf, N. (2013). *Search Engine Optimization for E-Business*
- Sirovich, J., & Darie, C. (2007). *Search Engine Optimization with PHP*. Wiley Publishing, Inc.
- Thoti, K. K., & Vyshnavi, P. (2019). A Study on Digital Marketing Strategy Building for Teachonapp. *Com. Indusedu.Org*, 9(February), 556–566.
- Tomasi, S., & Li, X. (2015). Influences of Search engine optimization on performance of SMEs: A qualitative perceptive. *Journal of Electronic Commerce in Organizations*, 13(1), 27–49. <https://doi.org/10.4018/jeco.2015010103>
- Vállez, M., & Ventura, A. (2020). Analysis of the SEO visibility of university libraries and how they impact the web visibility of their universities. *Journal of Academic Librarianship*, 46(4). <https://doi.org/10.1016/j.acalib.2020.102171>
- What is business performance? (n.d.). Retrieved May 28, 2022, from <https://www.primeum.com/en/blog/definition-what-is-business-performance>
- Wood, E. H. (2006). The internal predictors of business performance in small firms: A logistic regression analysis. *Journal of Small Business and Enterprise Development*, 13(3), 441–453. <https://doi.org/10.1108/14626000610680299>

Publisher’s Note: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.