

# **ANALYZING & OPTIMIZING A SMALL-SCALE E-COMMERCE WEBSITE.**

CASE COMPANY: KIPFASHION

Author(s)	Type of publication	Published
Gyamera, Josephine	Bachelor's thesis	Autumn 2020
Jah, Sede Isaiah Kodjo	Number of pages	
	62	
<p>Title of publication</p> <p><b>ANALYZING &amp; OPTIMIZING A SMALL-SCALE E-COMMERCE WEBSITE</b></p> <p>CASE COMPANY: KIPFASHION</p>		
<p>Name of Degree</p> <p>Bachelor of Business Administration</p>		
<p>Abstract</p> <p>Online businesses need to optimize their website as recent technology keeps evolving now and then. Adopting the factors that can help in keeping up with this pace is important in increasing the conversion rate. The main purpose of this thesis is to optimize the website of Kipfashion, the case company while looking into other areas that affect the conversion rate.</p> <p>The thesis consists of two main parts thus, theoretical background and empirical part of the research. The theoretical part of the thesis evaluates and analyses the evolution of e-commerce and WordPress to give more insight into how e-commerce has advanced over the years. Also, this part of the thesis examines Conversion Rate Optimization and methods that affect it. This includes the use of analytical tools such as Google, Facebook, and Pinterest analytics to evaluate the performance of the business throughout the research.</p> <p>The study results reveal the different strategies to adapt due to the several factors that affect the success of the business (maximizing conversion rate). These factors include website performance, user experience, visibility of search engines, and presence on social media platforms. From this study, it was discovered that optimizing an online business is a habit that must be adopted to successfully increase conversion rate.</p>		
<p>Acronyms</p> <p>UX, SEO, SERP, CRO, LPO, UVP and CTA</p>		

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#### Key terms

User Experience (UX) - This is how the user interacts with a website and the perceptions they get when or after using the website.

Search engine optimization (SEO) - Is the act of getting a website to appear prominently in organic search results.

Search engine results page (SERP) - Is webpages served to users when a query is entered in a search engine.

Conversion rate optimization (CRO) - Is the conversion of passive visitors to active visitors using methods of optimization.

Landing page optimization (LPO) - Is the first web page a user sees when the website is visited.

Unique value proposition (UVP) - Is a clear statement that describes the company has to offer to its customers

Call to action (CTA) - This is the next step a market wants the audience to take.

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## 1 INTRODUCTION

### 1.1 Research Background

E-commerce dates to the old days of “selling and buying” cables, computers, modems, and the Internet. It was introduced 41 years ago and still grows with the advancement of new technologies, innovations, and more businesses entering the market each year. Teleshopping in the 1970s paved way for today’s convenient and safe e-commerce. In 1979, a universal standard known as the ASX12 was introduced for businesses. It was used for sharing documents through electronic networks. The number of users continued to grow through to the 1990s. (Roos 2017)

As a result of rapid advancement in information technology, e-commerce has become an easier means of buying and selling goods and services via the internet from various parts of the world with a few clicks. E-commerce has created a new opportunity for businesses to set-up an online shop easily. The number of e-commerce enterprises keeps on increasing each second in various parts of the world. This makes it increasingly difficult for new entries as the competition is high. (Croxen et al. 2017, 17)

While most of these entry companies tend to focus more on designing a sophisticated website and generating more revenue, they mostly leave out the basics of the human psychology of buying. The Conversion Rate metric is black or white. The user either buys or not. However, this is not clear cut in the consumer’s mind. There are huddles and interruptions in the brain before the final decision of whether to buy or not. (Croxen et al. 2017, 17)

Though one might think using the things that we buy is what drives us to purchase, this is not the case. According to Paco Underhill, author of *Why We Buy*, “If we went into a shop only when we needed to buy something, and if once there were bought only what we needed, the economy would collapse – boom.” In other words, there are many reasons why people buy things. (Croxen et al. 2017, 17)

According to Miklosik et al. (2019), search engine visibility is an essential factor in achieving a marketing or business goal of an organization. Due to the changing behavior of customers, it is therefore important for businesses to implement search engine marketing and search engine optimization tools to have a higher ranking on the search engine result page.

In this research, the authors focus on using the findings from this research to increase and improve visibility and conversion rate respectively for Kipfashion. Kipfashion is an African

fashion apparel company. The company has been a sustainable and prestigious retailer and wholesaler in selling women and men's clothing, accessories, bags, and shoes. The company's main mission is to design and manufacture African prints that convey the African image and unique lifestyle. The store has been in existence since 2012 in Lahti Finland. Kipfashion operates in the USA, Europe, and Africa. The company aims to adopt new strategies to create a more convertible and successful business.

## 1.2 Research Objective, Research Question

The most critical part of creating a more convertible business is the user experience. This experience gained by a visitor will either encourage them to proceed to perform more actions or go to a different platform. (Lieb 2009)

The purpose of this thesis is to find some of the most effective ways to increase conversion rate and visibility on a search engine for Kipfashion, the commissioner of this research. Consumers' journey of buying will be analyzed. Also, the authors will apply the findings of the study to increase traffic to Kipfashion's website and improve the website's search engine visibility on Google.

The results of the thesis project are expected to give recommendations that will help the commissioning company and other small-scale e-commerce businesses to implement tools recommended for optimization to improve online store visibility and conversion rate.

The main research question of this study is as follow:

### **What are the most effective ways of increasing conversion and visibility on search engines for a small e-commerce business?**

Many factors determine whether a particular online store is going to succeed or be visible for conversion. The most critical part of a great user experience is the quality of design and content on the website in which the sales are going to be delivered. (Lieb 2009)

According to Enge and Stephan, et al. (2010), the value of keyword research and how to develop an SEO-friendly website is by avoiding some common pitfalls. They also explain how content and link marketing can contribute to visibility; however, these are general assumptions for online businesses. But the authors want to measure how these, and other factors can affect small e-commerce businesses with small budgets to fuel SEO and content marketing to achieve a measurable conversion.

The potential ways for improving conversion and visibility include:

- Search engine optimization: to increase visibility on a search engine, it is necessary to know what a search engine is, how it can be optimized, and the factors that affect search ranking on the search engine results page (SERP).
- Content marketing: to determine how relevant content is in marketing, it is essential to find a theory that proves the importance of content marketing to search engine optimization since search results are content-oriented.
- Technical performance: it is relevant to determine ways of improving the performance of the business based on the results received and analyzed from analytical tools such as GT Metrix. Slow loading pages can hurt SEO and increase bounce rate but improving page load time can have a dramatic effect on the conversions. The authors will consider practical steps for improving page load times.
- User experience: It is necessary to also investigate how a website user experience affects its ranking on search engines and how to improve it. Extraordinary web and mobile experience are key to engaging users but are extremely difficult to achieve.

### 1.3 Research Limitations

This thesis focuses on finding out effective ways to increase the conversion and visibility of a small-sized online business. Additionally, the commissioning company deals with African apparel. Thus, the findings cannot be generalized to all online businesses, but they could apply to other e-commerce store in the same market segment.

The data used in measuring the effectiveness of the findings in this research study is limited to the Google analytical data collected from the commissioning company. This means the analyzed data will not be compared to other research results or theories.

Lastly, Kipfashion has a website and therefore, the study is limited to implementing new features that can improve the visibility on search engine results and conversion.

### 1.4 Theoretical Framework

This thesis focuses on finding an effective way of increasing conversion and visibility on search engines for small e-commerce businesses. The main concept for this thesis is search engine optimization, which is further broken down as content marketing, keywords, and user experiences. This concept is analyzed to support the potential ways for improving conversion and visibility introduced earlier in Chapter 1.2.

Firstly, the concept of search engine optimization will be discussed as well as the factors affecting SEO as shown in Figure 1.

Secondly, the concept of conversion rate and how it contributes to determining an effective way of increasing conversion in an online business.

Thirdly, the authors will use Google Analytics to measure different metrics that will be analyzed later in the thesis to determine how effective these findings are.

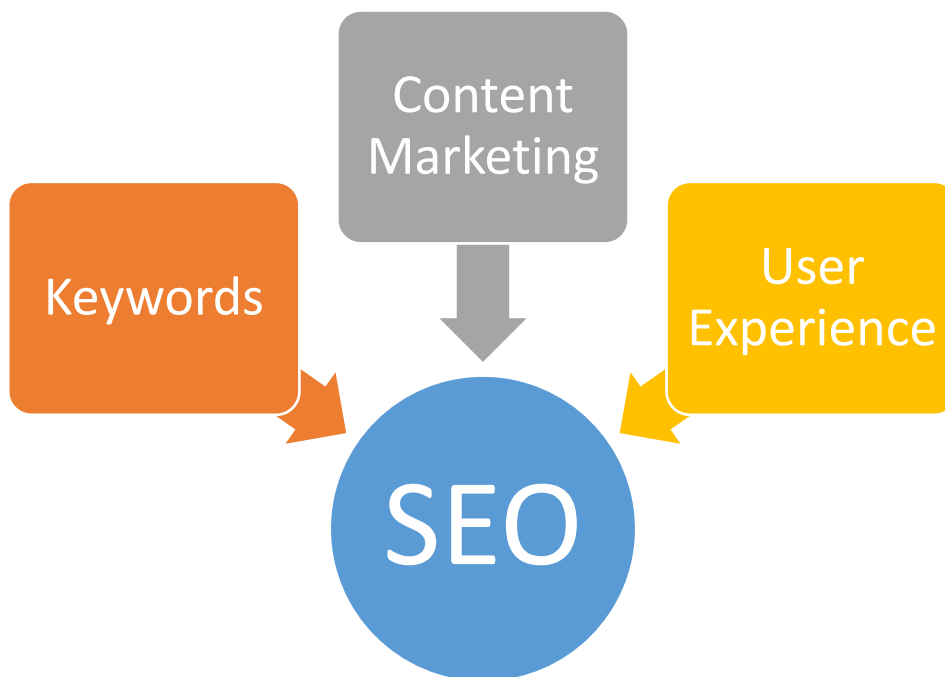


Figure 1 SEO and concepts affecting it.

## 1.5 Research Method, Approach, and Data Collection

This chapter focuses on the methodology and approach used for this study and, the reason for choosing a particular approach and methodology will be justified per the research purpose.

### **Research Method**

There are several types of research methods which include: descriptive vs analytical, applied vs fundamental, quantitative vs qualitative, and so on (Kothari 2004, 3).

This thesis analyzed the qualitative vs quantitative method from which the authors chose the most suitable method.

According to Kothari (2004), a quantitative research method is based on measurements, statistics, mathematical and numerical analysis gathered from a data collection to determine the relationship between one thing and another. Qualitative research method, on the

other hand, focuses on phenomena involving the quality rather than the quantity of the data

This research study applies the quantitative method as it aims to answer the research question by analyzing large numerical data for eight (8) months indicating the performance of the case company's conversion and visibility on the search engine. Since the quantitative method focuses on reliable results, questions related to this method include how many," "how much," "what proportion"," what percentage" and so on. For this reason, the research will be conducted in eight (8) months to produce a large sample of data that can be compared to previous data to draw a valid and reliable conclusion.

### **Research Approach**

A general understanding of the deductive and inductive approaches shows that the deductive approach usually merges with quantitative methods and the inductive approach with the qualitative methods. The deductive method starts with a hypothesis and examines this to confirm or deny it. On the contrary, the inductive approach creates a theory by monitoring and detecting certain patterns and occurrences. (Hyde 2000, 82-90)

In this study, the main research approach is deductive. The deductive research approach involves the use of existing concepts and theories to develop a hypothesis which will then be designed and tested. This approach offers the possibility for the authors to observe, design, implement, and test features on Kipfashion's website. The approach also makes it easier for the authors to draw solidly tested conclusions.

In addition to this, the authors have chosen to analyze the theories based on the four multi-faceted characteristics of a reliable website (Ali et al. 2011). These include:

- Usability
- Accessibility
- Search engine optimized
- Social Media/Network enabled

Also, the authors will make use of previous analytics data from the company's website which includes google analytics on the website in general, the home page, customer involvement, and the most-clicked pages, to compared to the data after the website has been optimized and improved. The period of this comparison is eight (8) months to provide reliable data for a comparison for a clear conclusion.

## Data Collection and Analysis

The authors will use google analytics data of the commissioner's website from the previous 4-5 months. The data collected from the commissioning company will provide information on the following:

- Conversion rate.
- Audience overview and acquisition
- Traffic sources on the website.
- Acquisition channels and results.
- Chatbots leads acquired.
- Referrals

The authors will implement the optimization process on the commissioning company website for six weeks starting from 7<sup>th</sup> of April to 31<sup>st</sup> of May 2020. This data generated will then be compared using google analytics after the authors have optimized and added new features to the website. Also, the authors will use GT Metrix to measure the technical performance thus, the page-load time.

### 1.6 Thesis Structure

This study is established based on the LAB University of Applied Science's guidelines which consists of the overview of the thesis, theoretical background of the study, empirical research, and conclusion.

In the theoretical part of this thesis, the authors provide a general overview of the research. This includes a brief background introduction of the study, the problems the authors seek to solve and the approach to be used. Also, the limitation of the study is discussed in this part of the research. In the theoretical background of the study, the authors further discuss the concept of CRO and SEO and other factors such as content marketing, user experience, and keywords.

In the empirical part of the research, the authors will analyze the overall performance of the commissioner's online shop from the start of the thesis to the end to measure the effectiveness of the findings of this thesis. Finally, the latter part of this thesis presents the conclusion draw.

Visual representation of the thesis structure is presented in Figure 2 below:

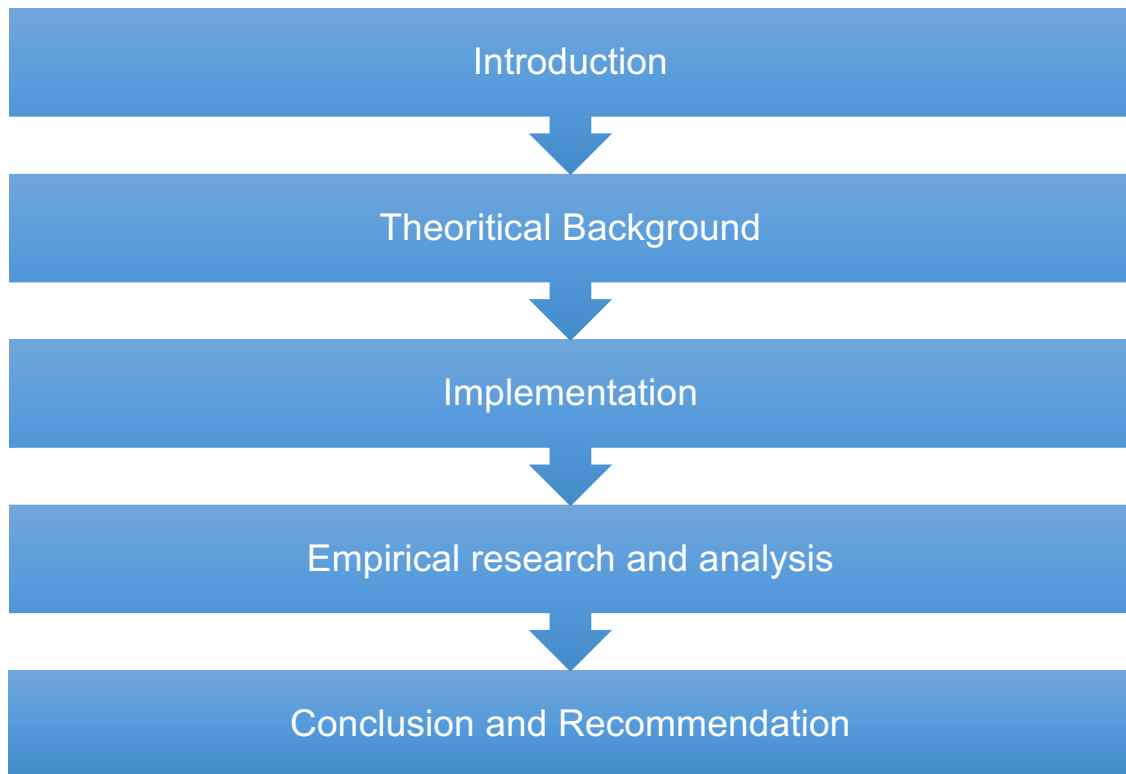


Figure 2. Thesis structure

## 2 THEORETICAL BACKGROUND

In this chapter, the authors describe the concepts of search engine optimization and analysis tools used in the optimization of the commissioning website. The authors explain the process optimization and conversion in an online store. Including the use of on-page and off-page optimization, content marketing, keyword research, user experience, conversion rate optimization, redesigning of landing pages, and the use of Google analytics tools.

### 2.1 Basic concept of e-commerce

E-commerce is not a subject with a specific definition as it consists of a variety of mediums and processes. According to Maria Manuela Cruz Cunha and Joao Varajao, it is exceedingly difficult to get an accepted definition because writers such as Kim and Moon define it as a platform for selling and buying goods and services, sharing information, settlement of funds through phone lines and computer networks while other writers define it as a distribution channel for making business transactions through telecommunication networks, sharing business information, and sustaining business relationships. The conclusion drawn from the different opinions on the definition after the argument by Maria Manuela Cruz Cunha and Joao Varejao was the use of electronics for buying and selling purposes. This was accepted by most scholars, practitioners, and field marketers (Cruz-Cunha & Varajao 2011).

E-commerce is the buying or selling of products and services via the internet. This involves the use of the World Wide Web and other technologies such as mobile devices and computers.



Figure 3. Different cycles of e-commerce. (adapted from Yang 2020)

Figure 3 is an illustration of the cycles involved in e-commerce from the point of the customer making an order via the internet, through to all verification processes, credit-card payments, shipment, and delivery of the product/service to the customer.

## 2.2 Benefit of E-Commerce

The start-up cost involved in e-commerce is low as compared to physical stores (traditional stores). In physical stores, a lot of money will be spent on rent, utilities, and other things. The location of the store could even be a problem. This is the reason most physical stores are trying to incorporate e-commerce into their businesses.

E-commerce website development and maintenance is flexible. One does not need to be an expert in Information Technology to build a website. There are many options which include buying an online solution, using platforms like WordPress to build the website, or hiring a web developer to do the job.

Advertisement is a crucial factor in promoting a business. Modern advancement in technology has made it easier for e-commerce to be advertised on different media such as

social media (Facebook, LinkedIn, and Instagram), YouTube, Google Ads, and other media. This has made it easier to reach out to thousands of people with just a click.

E-commerce planning is flexible. When an e-trailer uses drop shipping, there will be no need to store bulk inventory (Ferreira 2017). Using drop shipping helps e-commerce businesses process a high number of orders easily. In a traditional retail store, customers will have to wait in an extensive line before even being able to make payment which can be very frustrating. On the other hand, e-commerce has no waiting lines. Customers place an order, make payment with credit cards or online banking, and within a few days, the product arrives at their doorstep or an agreed location for collection.

Customers can be retargeted easily on an online store. E-commerce blogging is one way to do this. The use of videos, writings, and pictures optimizes e-commerce stores by adding traffic and sales without spending a lot of money. This increases organic traffic thereby improving or increasing sales. E-commerce uses ads to retarget customers making it easier and faster to increase traffic to the business. (Turban et al.2015,17)

### 2.3 Search Engine Optimization

Search engine optimization (SEO) is the art of getting a website to appear prominently in organic search engine results when a search submits a query to that website. (Lieb 2009). In other words, it is about standing out from the crowd in a search result. It is being front-and-center when a searcher requests information by querying in a search engine.

Often, that question relates to where can I buy? Or who can I do business with? A well-optimized website, therefore, is something akin to marketing. It provides the right message to the right person at the right time. The search became the second-largest online activity (after email). Search has evolved from merely providing answers to the stated problem and queries. Today, it's the way most people navigate the web. The major search engine is so good and so fast, search has replaced even the necessity of bookmarking favorite online destinations. In recent years, we have seen the search bar come close to taking the place of the navigation bar in most major web browsers (Lieb 2009.)

Even the most casual searcher has noticed that search is changing. It is becoming deeper, more specific, more personalized, and more customized. Now, the searcher can search for (and site owner can optimize for) shopping, blog, video, images, local resources, books, or audio files. There is almost nothing in the world that cannot be found by or optimized for search engines.

A business with a web presence, not being findable on the major search engine is crucial to making sales. At the same time, how can one ensure that they find the right queries for users? A properly executed SEO strategy helps in being conspicuous “there” for contextually relevant search queries. The goal is not just to attract traffic to a website, but qualified traffic. Both the site owner and the searcher alike benefit from solid SEO (Lieb 2009).

In SEO, spiders, robots, and crawlers are synonymous. A crawler is a program or automated script (often called a bot, short form for robot) that scuttles around the web visiting URLs. Crawlers navigate from URL to URL by following links on the pages of websites that they visit. The major search engine continuously sends its crawlers across the vast expanses of the internet. Crawlers find web pages and copy the text and code on them. They keep these copies in their vast index in a process called spidering. This enormous index, which is a database of all the pages on all the website a search engine crawler can successfully visit, is what the search engines use to provide a lightning-fast result when a user makes a search query. When a user enters a search query in a search engine’s entire index, not the internet as it exists at the very instant in time. (Lieb 2009.)

Gaining more visitors to a website somehow meant indicates progress in doing an excellent job even if one is not necessarily making money, or even if those visitors left after viewing just one page on your entire website. Search is about relevance, and about the relevant results. Without SEO, it is more than likely to be a tiny needle in a gigantic haystack. With a well-optimized site, it is possible to capture qualified traffic and come close to the marketing ideal for sending the right message to the right person at the right time. (Lieb 2009.)

A well-executed SEO plan will help in capturing qualified traffic to reach searcher with an expressed interest in what the business is offering, or saying, or doing- while at the same time saving one’s time, effort, and money. SEO can create marketing nirvana: the right message to the right person at the right time (Lieb 2009)

Building a strong site architecture and providing clear navigation will help search engines index the website quickly and easily. This will also, more importantly, provide a visitor with a pleasant experience of using the website which might eventually lead to repeated visits. It is worth considering that Google is increasingly paying attention to user experience. When it comes to how much traffic is driven by the search engine to a website, the percentage is substantial, and the clearest indication of the importance of SEO. In 2014, conductor suggested 64% of all web traffic comes from organic search, compared to 2% from

social, 6% from paid search, 12% direct, and 15% from other referral sources (Search Engine Watch 2016.)

E-commerce keeps on advancing with the pace of technological advancement. To keep up with this, the company must adopt the strategy of optimizing every aspect of the website, from performance to individual products. Also, adopting new strategies such as using social media to connect to the store to increase traffic which can potentially increase revenue or achieve the targeted revenue.

Online businesses can set a clear goal that is sustainable, measurable, attainable, relevant, and time-bounding. These goals must be broken into smaller chunks that can be optimized individually. Some aspects of the goal might evolve as others and therefore, optimizing set goals helps in avoiding many obstacles on the journey of success in the online business.

### **Off-Page Optimization**

Off-page SEO involves external strategies that focus on bringing value to the content from outside of the website. For instance, posting links and information about a website on the social media platform is a form of off-page SEO. Common off-page SEO actions including building backlinks, encouraging searches, and increasing engagement and shares on social media. (Dan 2017)

Search engine optimization is one of the techniques used to improve traffic to a website by obtaining high-rank placement on search engine pages such as Google, AOL, Yahoo, Bing. Here are some of the off-page SEO techniques: creating quality content, social media engagements, submitting an article in forums, blog directory submission, video submission, image submission, press releases, and using google my business. (Dan 2017)

### **On-Page Optimization**

On-page SEO involves changes made directly to content, rather than external attempts to draw attention to it. They are both valid ways to build an online presence, but on-page SEO is more valuable because it offers a much greater degree of control (Dan 2017). On-page is the practice of optimizing website pages to rank higher and earn more relevant or organic traffic on the search results page.

Many factors have an effect on-page and off-page optimization ranging from. the domain authority, website title tag, page meta descriptions, headlines, headlines tags, SEO

contents, keyword usage, image optimization, and user engagement. Focusing on the aforementioned factors can contribute to an organic search result for e-commerce stores. Relevancy of content is important because it focuses on how closely the content matches the search keywords. The authenticity of a website is used in measuring how genuine and trusted a website's content appears to be. One way to increase authenticity is to place a link to a target website on other external platforms which also have a high degree of relevance and trust. SEO is all about precision. Quality always wins over quantity (Dan 2017.)

### Organic Search Results

Organic search results are the website's listings that closely matched the user's search query based on relevance. It is also termed as "natural" search results. In retrieving data from the search engine, Google tends to consider the relevance of the website to the user search query. These results are often generated based on SEO factors including relevance and backlinks. Organic traffic is an important source of inbound marketing. However, the process of succeeding with organic results can take time. Once succeeded, it's a long-term source of traffic and more likely to generate conversion which could turn into leads and revenue since it is a non-disruptive form of delivering content (Rebecca 2020). Though this type of search result might be a better option, it is still important to look at the negative side of using this search results option. Table 1 provides both the pros and cons of the organic search results

Pros	Cons
- No cost involved	- Takes a long to see satisfactory results
- Boost credibility	- Does not offer keywords for SEO
- Attracts relevant users	- Not easy to attract ready-to-buy users
- Compounds on benefits	

Table 1 Pros and cons of organic search results

In Google's search engine, when a user submits a search query, Google bases on this query to suggest a list of websites that are relevant to user intent and query. To sort out this, Google compares this index (search query) submitted with all the hundreds of billions

of webpages. It then ranks the list based on how the content of the webpage is relevant to the query. In Image 1, a user enters “African clothing shop in Finland”, the search results page (SERP) is ranked based on the relevance, thus, if the title and content match with the user query.

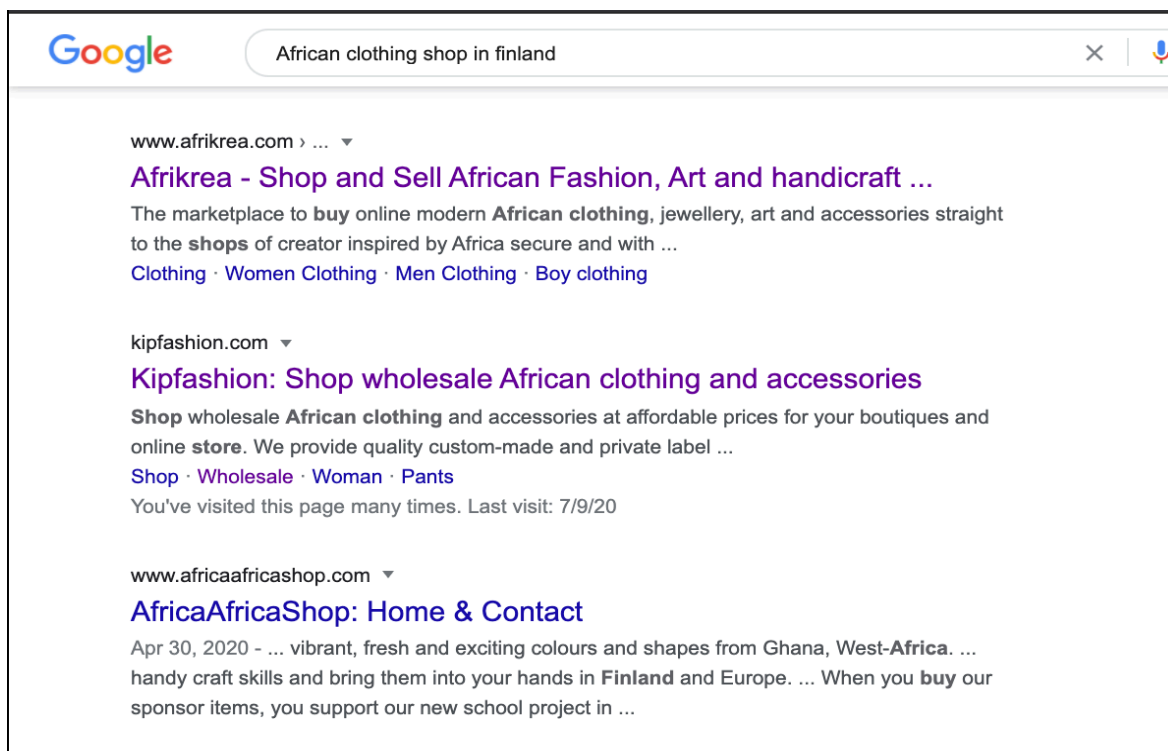


Image 1. Organic search results for the query, “African clothing shop in Finland”

### **Paid Search Results**

The paid search result is when a company pays Google for their website to show up on the top of the search engine results page (SERP). (Google Ads 2020). Though when using paid search, the website is more likely to show up on top of the search results, Google using another technique to determine which website appears on the topmost. According to Google Ads Help, the quality of the ads and landing page is relevant to the ranking of the search results. When calculating Ads rank, Google looks at the search query the time and location of the user during the search, the nature of the search, the device been used, and other ads. Additionally, Google has a minimum threshold that must meet to ensure high-quality ads. In Table 2, the authors illustrate both the pros and cons of using this option in improving the visibility of search results.

Pros	Cons
- No cost involved	- Involves cost
- Generate instant results	- Does not boost credibility
- Attract ready-to-buy users	- Does not compound benefit
- Offers keywords data for SEO	

Table 2. Pros and cons of paid search results

In Image 2 a user enters “African clothing shop in Finland”, the search results page (SERP) is ranked based on the relevance of the ads to the user search query, quality of the ads and the landing page of the website.

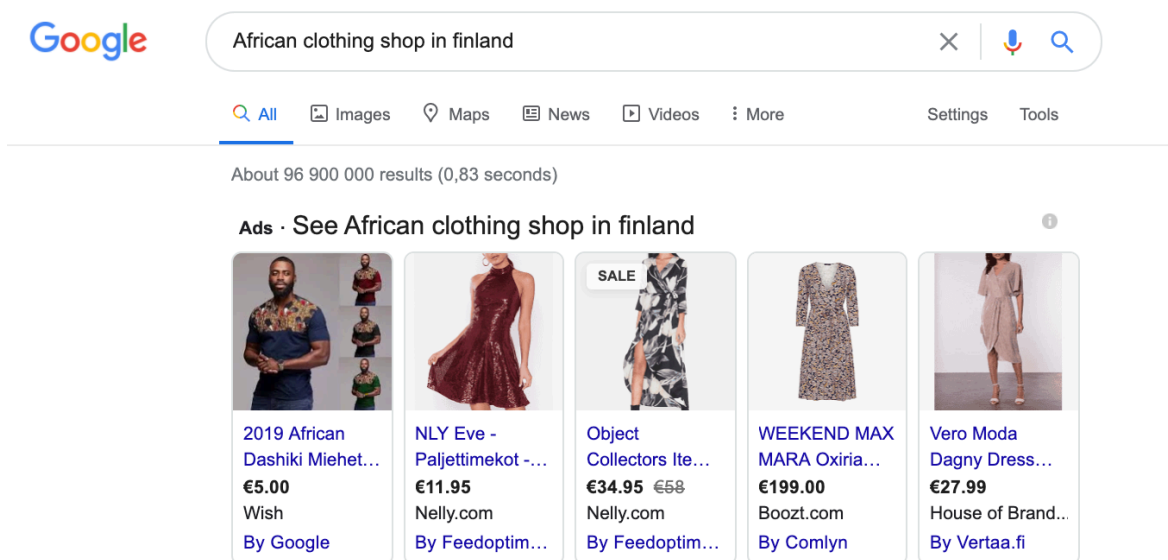


Image 2. Paid search results for the query, “African clothing shop in Finland” (20.08.2020)

## 2.4 Content Marketing

SEO without content marketing is like a body without a soul (Karan, 2018). Traditional marketing is becoming less, and less effective as technological advancement increases every second. To move along with the pace of change, a content marketing strategy should be adopted. Content marketing is a strategic marketing method that is focused on creating and distributing valuable, relevant, and consistent content to attract and retain a clearly defined audience and to drive profitable customer action. (Content Marketing Institute 2020)

According to the Content Marketing Institute, most marketers use content marketing. This strategy has been adopted by popular brands including P&G, Microsoft, Cisco Systems, etc. Not only are larger brands using it but also, small businesses have developed and executed this strategy. (Content Marketing Institute 2020)

Additionally, content marketing is a long-term strategy that is focused on building a strong and retainable customer relationship by giving them high-quality content that provides them valuable and relevant content consistently.

A proper public affair poll found 80% of business decision-makers prefer to get information about a company from the article rather than from ads. Some 70% say content marketing makes them feel closer to the sponsoring company, and 60% believe company content helps them make better product decisions (Lieb 2011.)

Content marketing aids in brand recognition, trust, authority, credibility, loyalty, and authenticity. Content marketing can help accomplish their task for a variety of constituencies, and on several levels: for the organization, it represents, for company products and service, and for the employee who represents the business or service. Content marketing creates value and helps people. It answers questions and provides foundational information. It makes customers and clients more educated and informed so they feel they can make a purchase decision, or in an organization, to recommend the purchase to a colleague or superior. It's used by marketers large and small by those selling business-to-business (B2B) and business-to-consumer (B2C). Some are using content to augment traditional advertising campaigns. Other are leveraging content to completely replace more traditional form of advertising's and marketing. Content can spark customer engagement at all stages of the buying cycle, including helping to establish an ongoing relationship when a prospect becomes a customer. Content can reinforce an existing relationship, inspire upselling, cross-selling, renewals, upgrades, and referrals (Lieb 2011.)

Website, blog, YouTube, eBooks. Downloadable whitepapers. Twitter. Facebook. LinkedIn. search engine. All these channels (and many, many more) remove many of the hard cost barriers that were once a mandatory part of creating and disseminating great content. No more paper, printing, shipping, warehousing, postage, filmstock, processing, and developing. Many of the physical and logistical hurdles to creating and disseminating great content are gone.

Although content marketing may be cheaper thanks to digital innovations, it certainly is not free (even for a Facebook account is), nor has digitally made it any easier. Consistently delivering quality content to a target audience requires thought work, originality, strategy, experimentation, and persistence. A plethora of potential outlets for content online (the

options seem to multiply every day) add complexity to the choice one makes about what content to create, in what form, and how to disseminate it—not to mention measuring its effectiveness. One thing is certain: digital channel overwhelmingly accounts for the preponderance of content marketing outlets as images below illustrate Image 3.

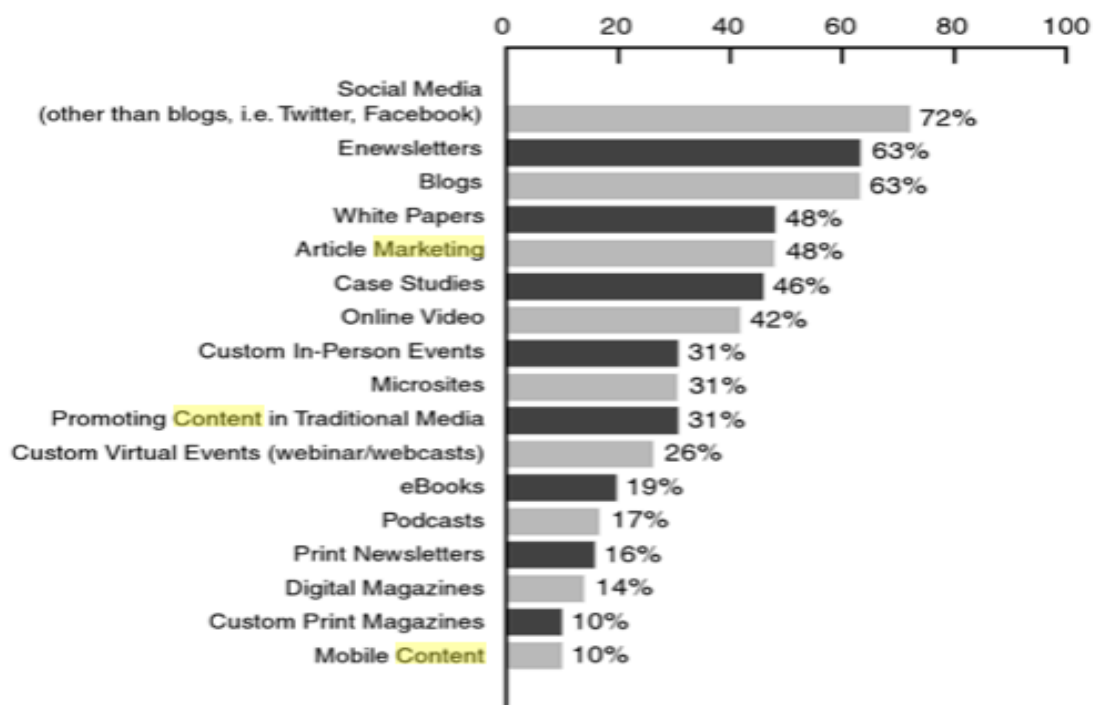


Image 3. Importance of content marketing (Lieb 2011)

## 2.5 Keywords

Keywords are the ideas and topics that define the content of the website. In SEO, the reference to the search queries submitted by searchers in a search engine. This is relevant in determining how visible or ranked a company's website will appear on search results lists after Google has done its algorithm sorting. (Moz 2020)

Keywords are important because they are the bridge between the company's website and a potential customer or visitor. In other words, the keywords the company chooses to target will determine how easy the searchers find them among the hundreds of websites on Google search engine. Keywords can be viewed from a unique perspective, what might seem to the company as a query that could be made by a searcher could be either correct or not as different people have diverse ways of making a search query. (Moz 2020)

To be ranked well organically to drive more audience to the company's website, it is important to understand the need of the visitors of the website, in other words, the language

they use and the type of content they seek to find. Companies can get this by talking to customers or visitors and using tools like Google Keyword Planner. This tool provides valuable keyword data, such as keyword suggestions, related search terms, trending keywords, and more. (Moz 2020)

Keywords strategies are an essential element of SEO and making use of them makes it easier to be ranked on top of search engine results page (SERP). It is important to use keywords strategically as SEO and content work in balance. (Karan 2018).

According to Smart Insights (2018), 40% of all search traffic on the internet is driven by long-tail keywords as shown in Image 4 below.

### The search demand curve in numbers

Bucket of searches	# of keywords	% of keywords	% of total searches
100M+	2	0.0000001%	0.6%
10M+	35	0.000002%	2.5%
1M+	620	0.00004%	6.0%
100K+	14,522	0.001%	14.1%
10K+	222,443	0.02%	27.4%
1K+	2,641,412	0.2%	42.9%
100+	26,942,210	1.9%	59.3%
50+	48,694,494	3.5%	62.9%
All keywords	1,405,616,978	100.0%	100.0%

Image 4. The search demand curve in numbers (Smartinsights.com 2018)

## 2.6 User Experience

User experience (UX) is how users interact with a website and the perceptions they get when or after using the website. SEO and User experience work hand in hand. In other words, SEO focuses on driving more traffic to the website, and UX targets the users from the traffic generated through the SEO. Both share a common aim, thus, to give the best user experience. (Sherry 2017)

User experience is the impression that the website leaves in the mind of the user, which can be pleasant and easy to use or vice versa. When the user experience is improved, it creates a more desirable environment for customers to interact with the company's brand.

This can serve as a guide for users in the conversion funnel. The conversion funnel can now turn prospects into leads, which can then be turned into customers. (Sherry 2017)

In improving site performance, there are a lot of factors that may be considered. These include compressing and optimizing files, optimizing the website's database, using caching plugins, removing unused and unnecessary plugins, and choosing a good host.

A responsive website is a necessity in archiving a successful business. Users have diverse ways of reaching the website, thus, it can be via mobile, tablet, or laptops. How the website looks on each of these devices is important. To create a responsive website on either of these devices, the following factors must be taken into consideration. These include using the write styling and fonts, targeting vital content, using the right image resolutions, and using the right layout for each of these devices. (Sherry 2017)

Google has rapidly evolved over the past few years and to ensure users have the best experience using their search engine, it sorts out the search engine results page (SERP) to provide searchers with trustworthy, relevant results and high-quality results. This has made it important to ensure the website provides a good user experience.

UX is a broad topic that can be treated in isolation. In this thesis, the authors highlighted its relevance to SEO. Given this, there are certain elements of UX that affect the SEO one way or the other. They are as follow:

- **Page Load Time (Performance):** the page speed is an essential element in UX as it is now easy to improve page load time with the latest Speed Updating tools. According to statistics made by The Daily Egg (2020), a one-second delay in page load time yields: 11% decrease in page views, a 16% decrease in customer satisfaction, and a 7% loss in conversions. This means, a few extra seconds lost could make an enormous impact on conversion and sales. It is therefore essential to have a fast website.
- **Responsiveness:** as people move towards accessing the web via mobile devices, it is important for an online business to incorporate this trend into their business (website). According to Digital Commerce (2019), 50% of shoppers accessed the web via mobile, 41% via desktop, and the remaining 9% via tablet. This shows that increased people are moving towards the usage of mobile devices as it is portable and easily accessible. Making a website that is responsive not only to a desktop but also to other devices such as mobile and tablet contributes to good UX.
- **Engaging tools:** engaging visitors on the site after they have been acquired is another factor that must be considered if the company plans to have a long-term relationship which is normally the aim of most online businesses. Several tools can be

useful in engaging customers. These include live chat, visitor recording software, and online seminar software. Providing live chat helps visitors clear all doubts in mind and this can position the company on the right side of the customer. Additionally, educating customers on the reason to buy the product is equally important as trying to make sales. (Digital Commerce 2019)

## 2.7 Conversion Rate, Conversion Rate Optimization

The goal of most businesses is to increase their conversion. Building an audience to increase the conversion can be affected by many factors. In this chapter, the researchers discussed conversion rate optimization and the methods that can ease the optimization process.

### Conversion Rate

Conversion rate is the ratio of conversions over traffic. In other words, the conversion rate is the percentage of visitors that saw a certain product over the number of visitors that ended up performing actions to achieve a desired goal in the website, thus buying the product. (Benji, 2013, 6.) The conversion rate can be calculated with the formula below:

$$\text{Conversion rate} = \frac{\text{Conversions}}{\text{Total visitors}} * 100\%$$

Formula 1. Conversion Rate Formula (Google Ads Help, 2020)

So, if 1000 people saw a new set of furniture on Amazon, out of 1000, 100 of the people purchased the furniture. The conversion rate can then be calculated as follow:

$$\text{Conversion rate} = \frac{1000 - 100}{1000} * 100\% = 90\%$$

According to Benji (2013, 6), some people believe the concept of conversion rate optimization was influenced by search engine optimization (SEO). Usually, people who practice SEO aim at being ranked higher on Google either using organic or natural search results. Because of this, the conversion rate is usually a guide to making decisions concerning advertisements and visibility on social platforms.

## Conversion Rate Optimization

Conversion Rate Optimization (CRO) is the conversion of passive visitors to active visitors using methods of optimization. The whole idea of CRO is to generate more income by increasing the conversion of the website. Benji (2013, 8) argues that, often, companies or people fail to distinguish between usability and CRO. Failing to understand the difference between these two concepts can cause great harm to the company. While usability focuses on improving user experience, CRO is focused on generating more money by increasing the conversion rate. Though usability can be a factor that causes more conversion rate, the two concepts play distinct roles in e-commerce. Below outlines the seven (7) factors to consider in improving conversion rate, in other words, optimizing conversion rate

- Performance, the page load times. According to François (2017), even though it is recommended for web pages not to take more than 2-3 seconds to load, the practice has shown that visitors tend to click on the “back” button when the page takes a longer time to load with the assumption of the page could not exist or unavailable. Therefore, web pages need to load within the shortest possible time in CRO.
- Personalization is the practice of delivering brand content to targeted customers. Customers need to be able to see all the offers been provided by the company or online shop. Assuming a customer whose purpose is to buy a T-shirt must browse through ten (10) pages of accessories to get to the desired page. The probability of the customer purchasing the product after browsing through all these pages will drastically drop. Therefore, the use of intelligent data to provide customers with a wide classification of products which can be easily maneuvered. (François 2017.)
- Responsiveness is the adaptation of the website on different screens, thus on, mobile, computers, laptops, and tablets. According to (François 2017), it is expected that 50% of e-commerce transactions to take place on mobile devices by the year 2021. Regardless of this, most e-commerce company primarily design their websites for desktop. Being able to meet responsiveness demand in the market is crucial to succeeding in the market.
- Customer Services, this is the practice of providing services to online shoppers. These features help customers to clear doubts, questions they encounter while using the website. This is to make the customer journey easy in achieving their goals. Communication can be done via online forms and email addresses. In addition to these communication channels, it easier now to offer customer services via live chats, or video and phone calls which is much easier than the typical online forms and emails. (Clint 2020)

- Search Engine Optimization (SEO), involves achieving the highest ranking on search results after a combination of keywords typed in a search engine such as Google and Bing in the unpaid section, also known as the organic listings. Effective SEO can generate more quality traffic to your website which gradually improves the results. (Chaffey and Smith 2017, 368.)

## 2.8 Landing Page

According to Ash (2008), define the landing page is the first page that a visitor lands on because of your traffic acquisition effort. He further explains the three main flavors of the landing page. Main site optimization which could be a part of the corporate website. Micro-site landing page which focuses on a specific design for a single audience or to serve a special purpose. This always has a call-to-action funnel for the visitors to a desire conversion action. And lastly, a stand-alone landing page is designed for a particular marketing campaign. They provide offers or action for marketing campaigns.

### **Landing Page Optimization**

A landing page is the first web page a user sees when the website is visited. The landing page can be part of the main website or a stand-alone page design specifically to received traffic from an online marketing campaign (Ash 2012). The whole paths that lead to the landing page should be optimized, such as purchases, form-fills, and download which often happen deep inside the website. More attention is required in conversion paths instead of optimizing the whole website.

The famous 80/20 rule applies perfectly here- landing page and paths represent your business-critical activities. They drive revenue and business efficiency. They are the money pages.

Websites and stand-alone landing pages have three properties that make them ideal as online laboratories. They are as follow:

- A high volume of traffic: with high website traffic volumes, statistical analysis allows one must find verifiably better landing page and to be confident in the decision-making process. Without enough traffic, you risk making a decision that is not representative enough of your true audience.
- Accurate tracking tools: web analytics tools support accurate real-time tracking and recording of every interaction with your website. Each visit was recorded along with a mind-numbering number of details. The report can tell you the source of the visitor, the pages the most visitors, their paths through your website, the time they

spend lingering over certain content or products, and whether they were persuaded to act and return in the future.

- Ability to easily make content changes: it can be easy to swap or modify the content that a particular visitor sees on the landing page. The content can be changed to show many variations of the same landing page and can be customized bases on the source of the traffic (referred to as the segmentation). Different content can also be displayed bade on the visitor behavior on the page or their history of interaction with your site (referred to as targeting). The more easily you can make changes to your website, the more flexibility, and options you will have at your fingertips when producing ideas for improving your landing pages.

## 2.9 Web analytics tools

According to Rouse (2005), web analytic is the measurement, collection, analysis, and reporting of web data for purpose of understanding and optimizing web usage. Web analytics applications can also help companies measure the result of traditional prints or broadcast advertising campaigns. web analytics provides information about the number of visitors to a website and the number of page views. It helps gauge traffic and popularity trends which is useful for market research.

According to Farney (2018), many comprehensive web analytics tools, such as google analytics and Piwik, label themselves as digital analytics tools. Indeed, they are digital analytics tools because they can import and analyze data beyond traditional website statistics, but they still perform website use analysis.

### **Important data points**

Web analytics tools generate so much useful data that it is easy to get lost. Digital analytics helps by focusing on conversion and metrics related to those conversions. To simplify this, the researchers recommend regular monitoring of a mixture of basic metric and custom metric as follow:

- Session: number of visitors to the website, the metric reported overall traffic to a website.
- User: number of web browsers that views your website, this is another useful metric for understanding the overall traffic to a website.
- Pageviews: number of times a webpage is viewed in a web browser, this is a useful metric for measuring content usage.

- Geographical location: identifying the location of a user based on IP (internet protocol) address, this dimension can help identify where the website's audience is greater.
- Referral source: identifying how users found the website, this data point is useful for understanding how visitors found the website's content to enable future improvement in the website outreach to your audience.
- User action: clicks (especially on any link on your website), files download, video plays, form submissions, and other user activity you wish to track, this custom data point demonstrate how user engage with the content of your website.
- Conversion: Desired actions on your website, this custom data point evaluates the success of a website by reporting when users perform actions to complete the website goals.

Sessions, user, pageview, geographic location, and referrals source are basic website usage metrics that can be found in any web analytics tool. Yet, the data point may be defined differently, therefore it important to review tools documentation for their exact names and definitions (Farney 2018.)

### **Internal usage report**

There is little consistency in the data search tools automatically collects and reports. Some search tools have robust usage-reporting features, while other search tools offering nothing. At a minimum, most search tools provided search log data that report the number and types of search user perform and the actual search queries (search terms) user input. This data helps understand what visitors or potential customers are looking for and how they are finding it. If the search tool does not provide their basic data points, then web analytics with search analytic features to capture the data tool should be added.

### **Important data points**

The important data point for search tools involved search-related data and user action, so the researcher recommends adding a web analytics tool to track those actions. Having both tracking options will lead to a better understanding of search behaviors because together they provide more data point, including the following:

Searches: total number of searches performed by users; this basic metric measures the usage of the search tools.

Search type: the type of search used such as keywords search, title search, author search, or any search facets, this demonstrates how users search for information.

Search text: the search query, or search terms that the user entered in the search box, this is useful data for determining the intent of a user's search.

Failed searches: the number of times a search yielded zero results. This is a useful metric for usability testing but also collection development and other purposes.

Users: number of web browsers that visited the search tool, this is another basic metric to monitor a search tool's usage.

User action: Click on any link on the search tool (especially links to full text) and the use of search tool features, such as citation generators, data exports, or online chart widgets, this data allows you to see how users interact with the search tool.

Conversions: Desired actions on your search tool, potential conversions include the link to full text or hold places on items because each demonstrates the user successfully found an item in the library's collection (Farney 2018.)

### **Google Analytics**

According to Jerri and Ledford (2009), Google Analytics is a web analytics service offered by Google that tracks and reports website traffic and conversion. These tools help you to better understand your customer's need and those insights can be used to act, such as improving the services rendered. This web tool also helps you measure Advertising ROI (return on investment) from social media sites and applications.

Google Analytics is a powerful tool for measuring the success of your website, your marketing efforts, and your products and services (Jerri & Ledford, 2009). Analytics are software programs that generate metrics. Metrics are measurements. And measurements can help you benchmark desired results. Good understanding of how the available measuring tools work is essential. Most analytical applications measure how many people come to your websites, how they get there, and what they do while there are there. This is not as easy as it sounds but it's a good description of analytics. This data can be collected using the following ways:

- Client-side data collection: this uses data that's installed on the user's computer to collect data about user movements on the web.  
Server-side data collection: the software collects information is stored on the web servers to collect data about a visitor's movements on the web.
- Server logs: this collects files of data from the webserver, about the visitors to a specific web site. Server logs are usually unintelligible until they are processed by software such as stats packages or log Analyzer.

- Analytic applications: an application that analyzes data such as google analytics takes raw data (collected using a small snippet of JavaScript code) and create information out of that data that is understandable and can be used to improve website performance.

In using google analytics as a decision-making tool, companies cannot afford to rely on partial, inaccurate, or otherwise misaligned data. Google analytic must be set up properly to meet the measurement need and business objective of companies (Waisberg 2015.)

There are various steps involved in setting up a successful google analytic in an e-commerce store.

- Understanding the web analytic process: before implementing google analytics on the website, it is vital to understand how and what the data will be used for. This will assist in deciding what is the best metric to use in measuring the success of the data.
- Implementing and customizing codes: once your data needs and success metric are defined, you should start looking for the necessary google analytic code the suit your need for customization on your website.
- Setting up google analytics interface: code implementation is the next step to setting up your google analytics interface that processes your data in the way you want it.
- Tagging inbound traffics: Accurately measuring website traffic especially marketing campaigns, you will need to tag inbound links with custom URL parameters.

The objective of web analytics is to improve the experience of online customers while helping a company to achieve its results; it is not a technology to produce reports and spill data. Web analytics is a virtuous cycle that should never start with data collection: collection data is a means to an end. The company must decide what process works best for them. The following are an important process to follow:

- Start with a clear definition of business goals
- Build a set of keys performance indicators (KPIs) to track the goals achievements.
- Collect accurate and complete data.
- Analyze data to extract insights.
- Test alternative based on assumptions learned from the data analysis.
- Implements insight based on either data analysis or website testing.

## 2.10 Social Media

Social media is a digital tool that allows users to create or share content, ideas, career interest, and other forms of expression to the public via the internet. (Hudson, 2020)

Many social media platforms, such as Facebook, Twitter, Snapchat, YouTube, and Pinterest, are available for libraries to use to engage with their users. Whatever social media platform library that is been supported by the business; it should be able to track the usage like any other library content you maintain. Social media analytics is a huge business. The good news is that there are a lot of options for libraries seeking to track their social media usage, but the sheer number of options is overwhelming (Farney 2018.)

### **Important data point**

Social media analytics generates a lot of data. Gathering all this data into one tool can be difficult. The following highlights some important data that should be collected for analytical purposes:

- Audience: number of followers/subscribers and their demographic data when possible, this basic user data show who is listening to your social media content.
- Engagement: The number of views, likes, or comments a social media post or content received, this can include multiple data points, depending on your social media content received.
- Sharing: the number of shares or reposting of your library's content by social media users, this is a super-engagements metric, as its show user interaction with your social media content and sending it to their followers.
- Sentiment: A subset of sharing metrics focusing on how social media users describe your content or organization, sharing content can be a good or bad thing depending on how users describe or relate to the content by repost. This is an advanced social media metric requiring content analysis of the shared content.
- Referral: this is traffic generated from social media to another website and the researchers recommend tracking referral data with campaign URLs.
- Conversions: the desired action performed by social media users, social media-related conversions can take place on the social media platform or when socials media users are directed to one's online presence.

### 3 IMPLEMENTATIONS

The optimization and analysis of e-commerce are a lengthy process that requires a series of materials, resources, and tasks to follow. Defining the goals and objectives of e-commerce with a well-planned strategy can make the process easier. It is also essential to identify the elements that need the most attention and are affected the most. According to Shopify Plus (2020), the longer one takes to optimize the performance of a website, the more customers that will be lost to faster competitors.

Before starting to implement new features to the commissioner's website, the authors analyzed the website as follows:

#### **Chatbot**

Chatbot has become one of the popular ways to increase customers' or visitors' engagements. A chatbot is a virtual advisor, consultant, or assistant whose main purpose is to talk to a user in real-time without any intervention of a human, thus, it is artificial intelligence. The advantage of having a chatbot is the possibility of providing 24/7 customer service (Pietruszewska, 2020). The chatbot was implemented on the company's website to increase customer engagement while decreasing the workload on the owner. There are tons of free chatbots on WordPress but there are certain factors the authors considered before choosing one. They considered its effect on page-load time, its ability to detect customer's language, and the possibility of promoting products that might be of interest to visitors. The researchers, together with the company decided to use Tidio Chatbot plugin since it was rated the most used and fulfilled all the requirements the company needed.

#### **Currency Switcher**

One of the reasons why WordPress is used in website management is due to the different plugins it provides. Taking advantage of that, the researchers decided to implement a currency switcher to the website since the company's main market lies in Europe and the US. The plugin provides two main currencies, thus, euro and dollar. By default, the currency switcher uses visitors' or customers' current location to switch the currency. Also, the plugin provides the alternative of customers switching to a preferred currency from the landing page. This automatically converts the currencies on all pages of the website.

#### **Headline**

It is important for the user's most important question, 'Am I in the right place' to be answered when they see the headline. This title from SERPS that landed them on your page should also be on the website's landing page. The headline should be concise and appeal

to emotions (Wilson 2018). Kipfashion has a good headline that briefly tells customers what they provide. However, the title is restricted to the wholesaling aspect of the company's services. Also, the headline does not appear on any of the company's webpages but has a similar description on the About Us page of the website.

### **Unique Value Proposition**

The unique value proposition, UVP, helps in differentiating the company from other organic search results. The company does portray their uniqueness; thus, they provide wholesale and retail services, different shipping methods, customized clothing, and accessories.

### **Media**

Since most users prefer to get information through images, videos, and gifs than to read web page copy, it is essential to have a better way to get your information across with some engaging media. Currently, Kipfashion engages media through images. They do not have any other sort of media, thus, videos or gifs. Images on the post-click landing page should showcase the product, tell a story about the brand, highlight customers, and appealing. The company's landing page uses images to categorize products based on gender, type of purchasing, and product type.

### **Trust Indicators**

It is extremely hard to trust a company that you do not know. Humans tend to trust popular brands more easily. To earn visitors' trust, it important to prove statistical evidence, ratings, customers' logos, customer testimonials, and privacy policy. Kipfashion does have some ratings on Google reviews from their customers and a category in the footer that links users to use links such as privacy policy, terms & conditions, shipping, and returning policies. However, they do not have any review customer testimonials on their landing page or other pages on the website.

### **Sufficient white space**

Though it is important to get your message to visitors, using sufficient white spacing is important. This does not necessarily mean using "empty area" but positioning specific elements in key areas on the landing page. This creates a good visual hierarchy and reduces page clutter. Unfortunately, the company does not have sufficient white spacing on the landing page making it difficult to figure essential elements out.

## Call to Action

The call to action, CTA should create no confusion as to where visitors need to click to redeem offers. In designing a CTA button, factors such as position, size, color, and font are crucial and must be implemented not only to redeem offers but to attract users to click. Though Kipfashion has some functional CTA buttons, some are still not functional making its purpose irrelevant.

As mentioned earlier in chapter one, this thesis uses the findings during the study to implement tools that could potentially increase the conversion and visibility of the commissioner's online business on the search results page. Because of that, the authors did hands-on activities as follow:

### 3.1 New Plugins

WordPress provides a lot of plugins that enable tools to be implemented or added to the website easier. The authors installed two (2) main plugins, thus, chatbot and currency converter. A chatbot is an application used to conduct online chat conversations via text by providing direct contact with a live human. The authors discover that the commissioning company is losing a customer due to a late email reply. For the commissioning company to engage more users on the website, there was the need to provide some tool that users could use to always reach out to the commissioning company. For this reason, the Chatbot was added to provide 24/7 customer support to users. Image 5 provided the screenshot of the user interface of the install chatbot powered by Tidio.

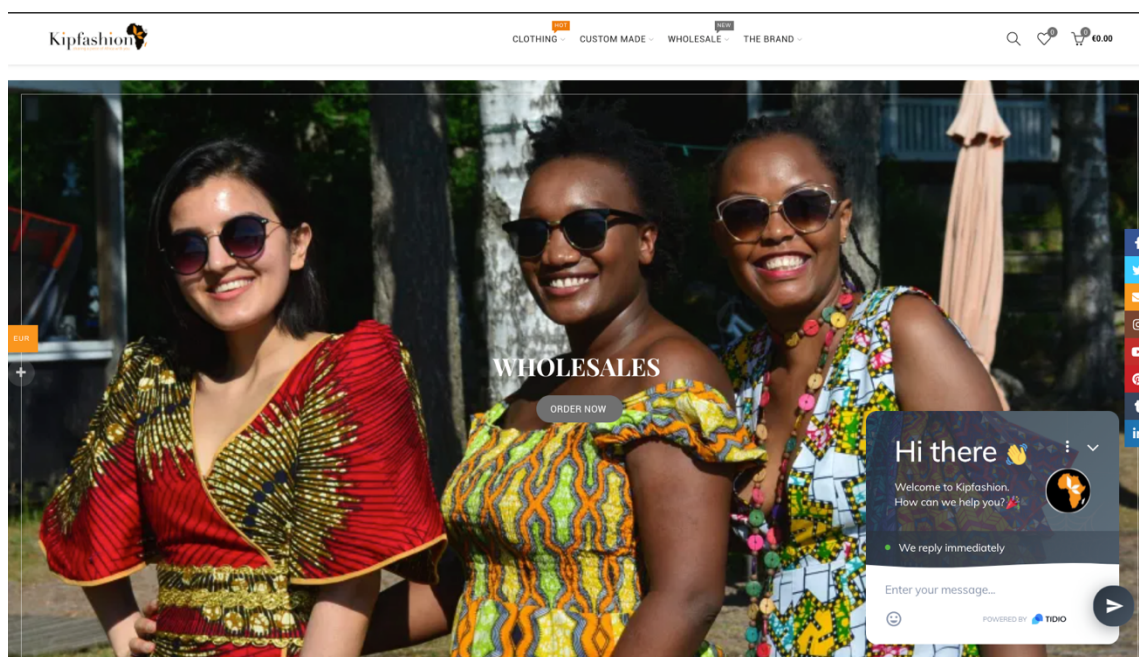


Image 5. Chatbot implementation

Additionally, currency switcher is a plugin that allows visitors to switch between currencies according to their preference. This also displays selectable currencies on the webshop and checkout page. The authors added the currency switcher to the website since the market segmentation included countries with different currencies as shown in Images 6 & 7. The main currencies that were added are the EUR (euro) and USD (US dollars) since most of the customers are based in either Europe or the US.

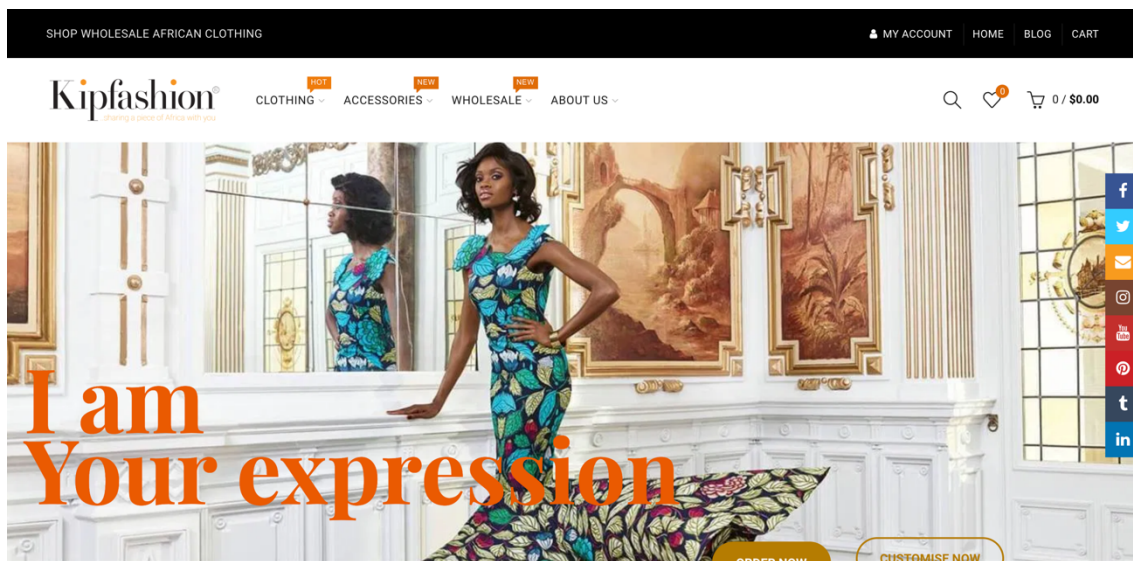


Image 6. Screenshot without currency switcher

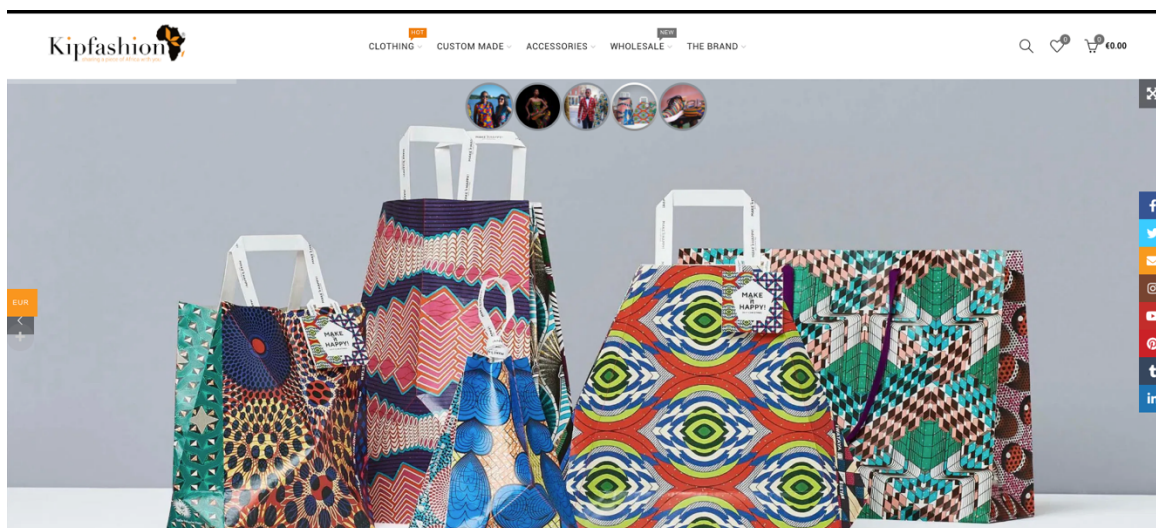


Image 7. Screenshot with currency switcher implementation

### 3.2 Page Layout

A good user interface is a crucial factor that must be considered in the optimization process as mentioned earlier in Chapter 2.5. For this reason, the category section page layout was changed from Image 8 to Image 9 to create more space to avoid distracting the user's visual hierarchy. The page layout was done so that users would have the chance to focus on relevant things at a time. These changes will make it easy for users to receive information and focus on the main products.

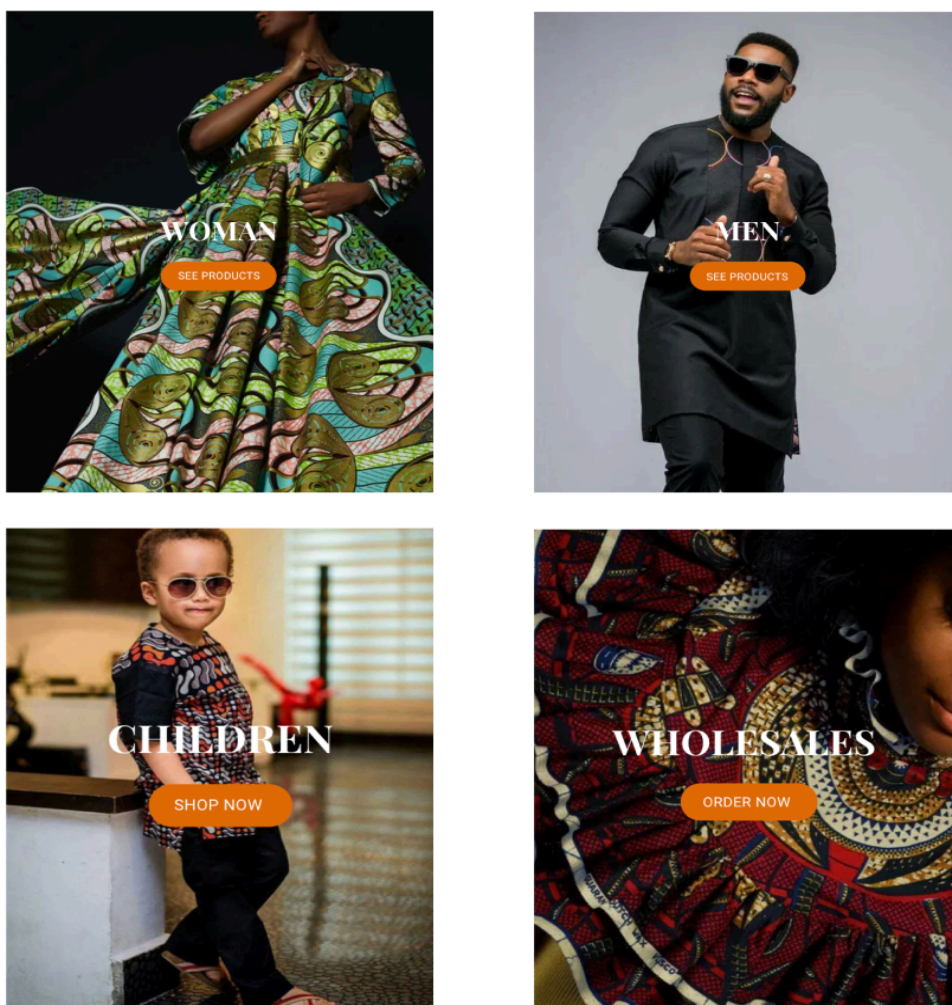


Image 8. Category section page layout before

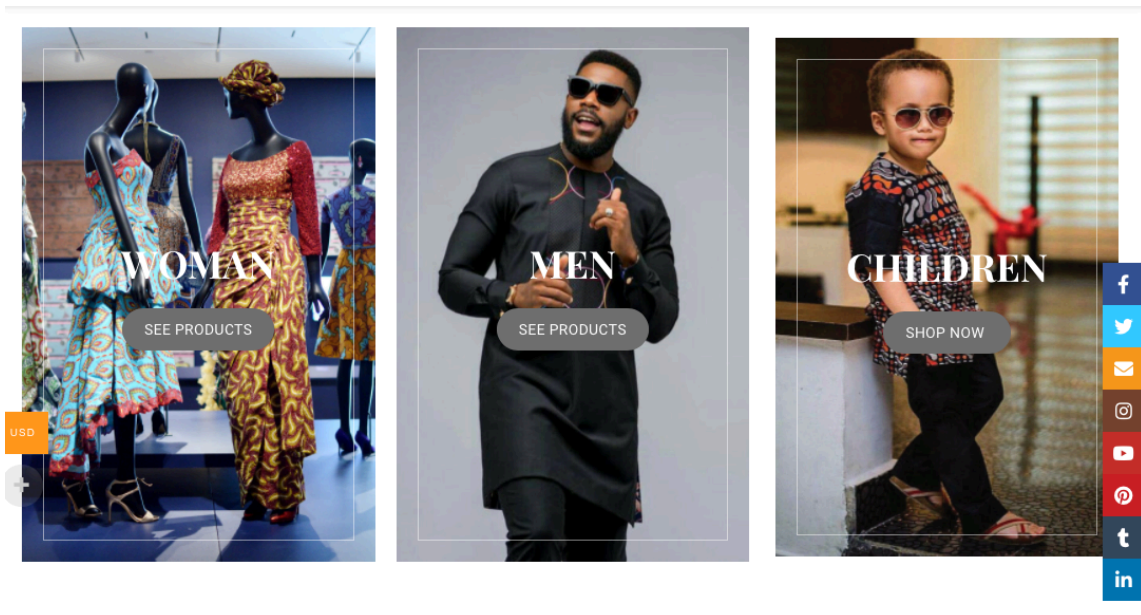


Image 9. Category section page layout after

### 3.3 Image Quality

Good image quality contributes to a good user interface. This allows the visitors to explore an in-store experience of the store and increase the confidence in the products and deciding to buy. The authors replaced some product images with the sole purpose of improving the quality. Consumers rate high-quality product images as the most influential factor when making a buying decision. The authors ensured that product photos have front, back, and side views that enable the customer to make a purchase decision. The authors also improve the consistency in product images on the store as shown in Image 10.



Image 10. Image quality and positioning

### 3.4 Page Performance

When dealing with customers who have no time to visit a physical store. It is important to have a fast-loading website. A sluggish and unresponsive e-commerce website is a major deterrent because the average online user will only tolerate load time of up to 1-2 seconds. (Anderson 2020) As shown in Figure 12, it took 11.10 seconds for the website to load at the beginning of the research which does not help the user experience. In analyzing this problem, the authors were able to determine some of the contents that took a long to load when the page is accessed. This was done with the use of Google Developers tools and the GT matrix. Additionally, the authors refactored the backend of the website and added new codes while removing some. The following activities were conducted on the back end of the website; JavaScript was minified, images optimize, Cache leverage, landing page redirect avoided, reduced the HTTP request, and finally used content delivery network (CDN). (Appendix 1,2,3 & 4)

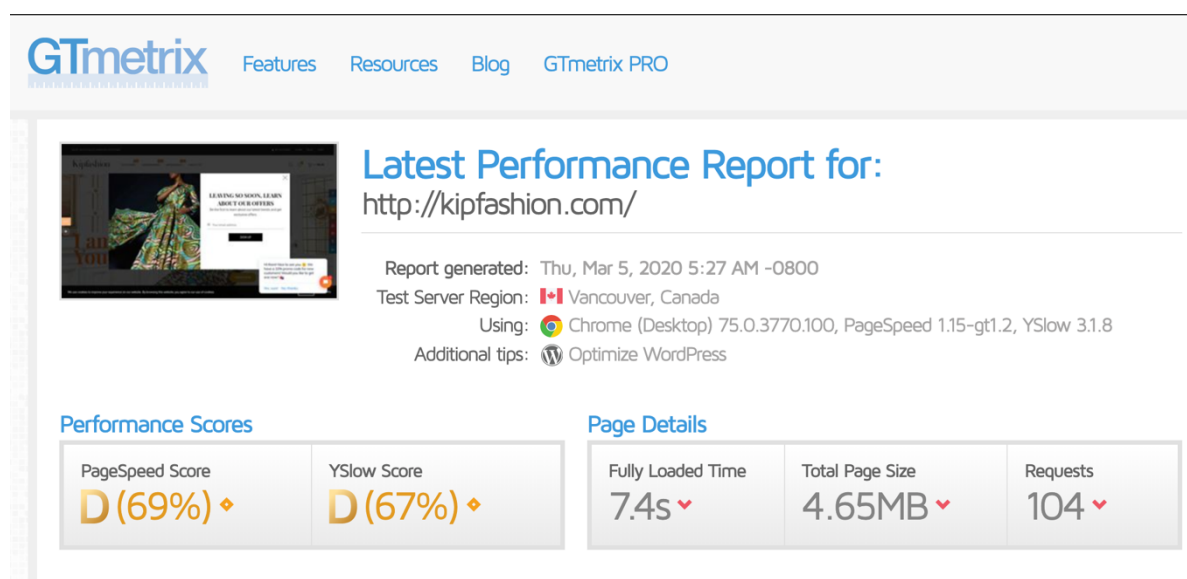


Image 11. Page performance before

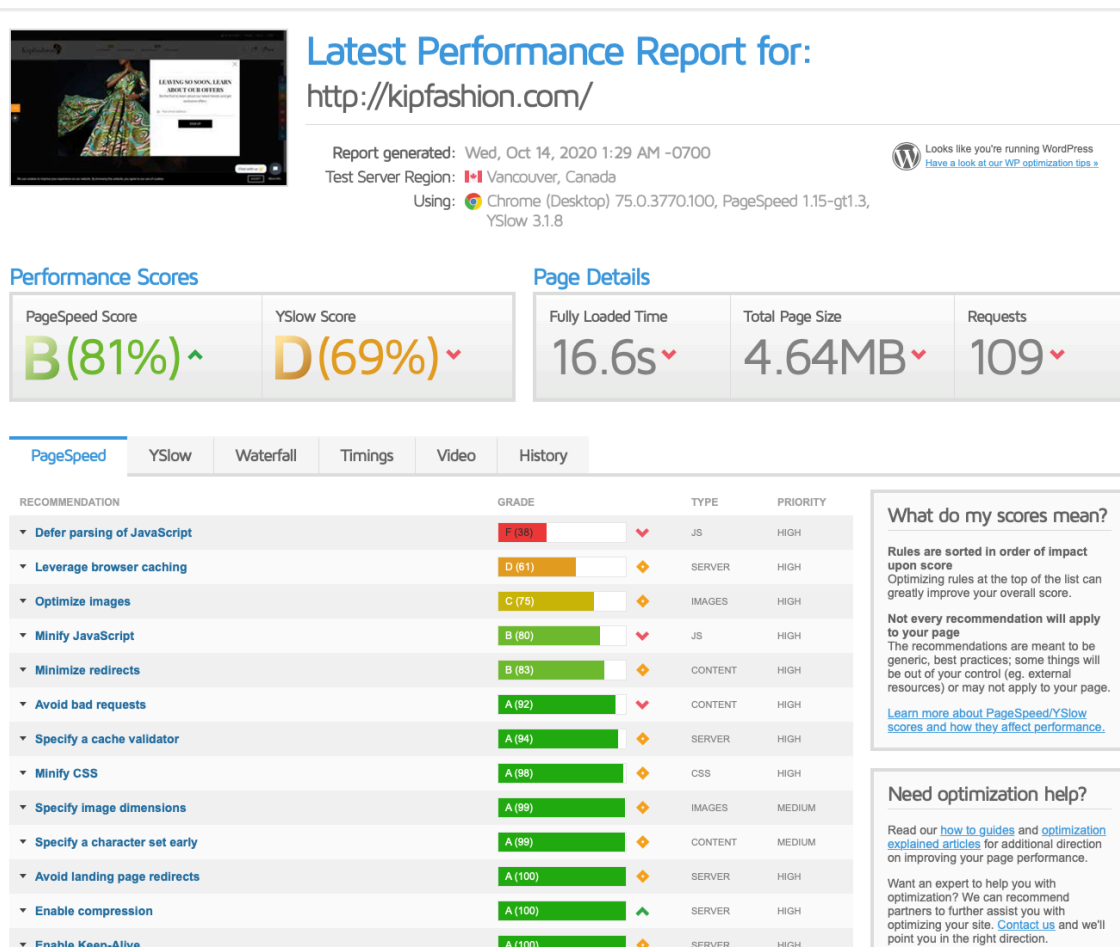


Image 12. Page performance after

### 3.5 Off-page Optimization

Off-page SEO is the actions taken outside the website by the Authors to impact the ranking of the search engine result. For the commissioning company to benefit from off-page optimization, the researchers embark on a list of activities to boost the off-page ranking.

The first activity was to contact influencers, to review the commissioning company products on their blog and social media. The influencers requested free products, which were provided by the commissioning company for review. This activity increases the organic traffic and the domain authority of the website.

The second activity was guest blogging. The researcher requested guest blogging with a blogger so that, the blogger can link back to the commissioning company website for organic traffic and visibility. This was also a successful off-page optimization that generates returns and visibility.

The third activity conducted was to build a web presence in online business directories. The authors submitted the commissioning website into the different online business

directory for a backlink. There was also the creation of a Google MyBusiness page for the commissioning company.

Referrer	Views
Search Engines	17,586
Pinterest	471
Facebook	272
lipstickalley.com	231
WordPress Android App	231
WordPress Dashboard	203
afrikanza.com	133
Instagram	83
wholesaledeals.co.uk	44
esources.co.uk	39
ecosia.org	29
maisondekodjo.com	17
afrooutfits.de	10

Image 13. Off-page optimization

### 3.6 On-page Optimization

Organic ranking required optimizing for search engine for visibility. On-page SEO requires constant practice of optimizing web pages to improve website search engine ranking and visibility to earn organic traffic. The researcher achieves this by re-editing all the website title tags, from the product tags to pages tags. The headlines, meta descriptions, product descriptions, images resize, and labeling are re-edited to optimize the website.

As part of the on-page optimization, all the landing pages are redesign with new keywords. Added content was created in the blog section of the website. After the keyword and content were created, there were internal and external links were put in place to improve the domain authority. There are Google and Bing search engines conducted with the generated keyword to see if the website is ranking with the new keywords.

### 3.7 Keyword Research

Keyword research is the process of discovering unfamiliar words or phrases that the commissioning company customers used in the search engine, such as Google, Bing. This keyword affected the SEO task the authors performed including finding a content topic and on-page SEO. The authors research the competitors keywords ranking using

Ubersuggest and keyword generator tool online. This finding helps the authors to generate new keywords for the commissioning company for easy ranking on search engines.

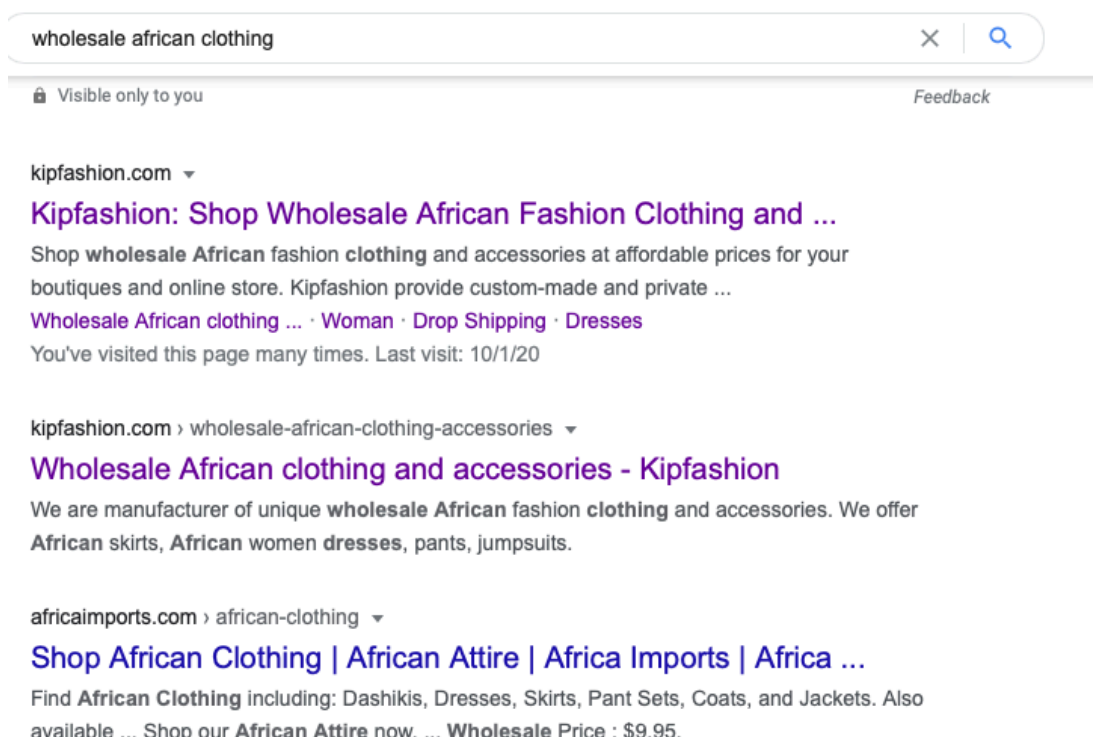


Image 14. Improved keyword usage

### 3.8 Content Creation

In the product description, the content keywords matter since it also determines how the product will be visible on google search. Content creation improves conversion and allows the commissioning company to educate its lead customers. After the content was created, and shared with a blog post, it created leads and build brand authority. in improving this, WordPress provides several SEO analytical plugins that rate the number of keywords, and the number of words been typed. In this research, the Yoast SEO plugin was used in evaluating content mostly on the product description. This plugin provides a live evaluation of the content written making it easier to instantly edit or use the right keywords. Google analytic was also used in this research to measure the impact of the content created.

### 3.9 Using Backlinks

A backlink is a link created when one website links to another. Backlinks play a significant role in the search engine algorithm and the overall growth of the website. Backlinks for a given web resource is a link from some other website (the referrer) to that web resource (the referent). Search engines often use the number of backlinks that a website has as

one of the most key factors for determining that website's search engine ranking, popularity, and importance. The significance of search engine ranking is high, and it is regarded as a crucial parameter in online businesses and the conversion rate of visitors to any website particularly when it comes to online shopping. Several factors determine the value of a backlink. A backlink from an authoritative site on a given topic is highly valuable. Another principal factor is the anchor text of the backlink. Anchor text is the descriptive labeling of the hyperlink as it appears on a web page.

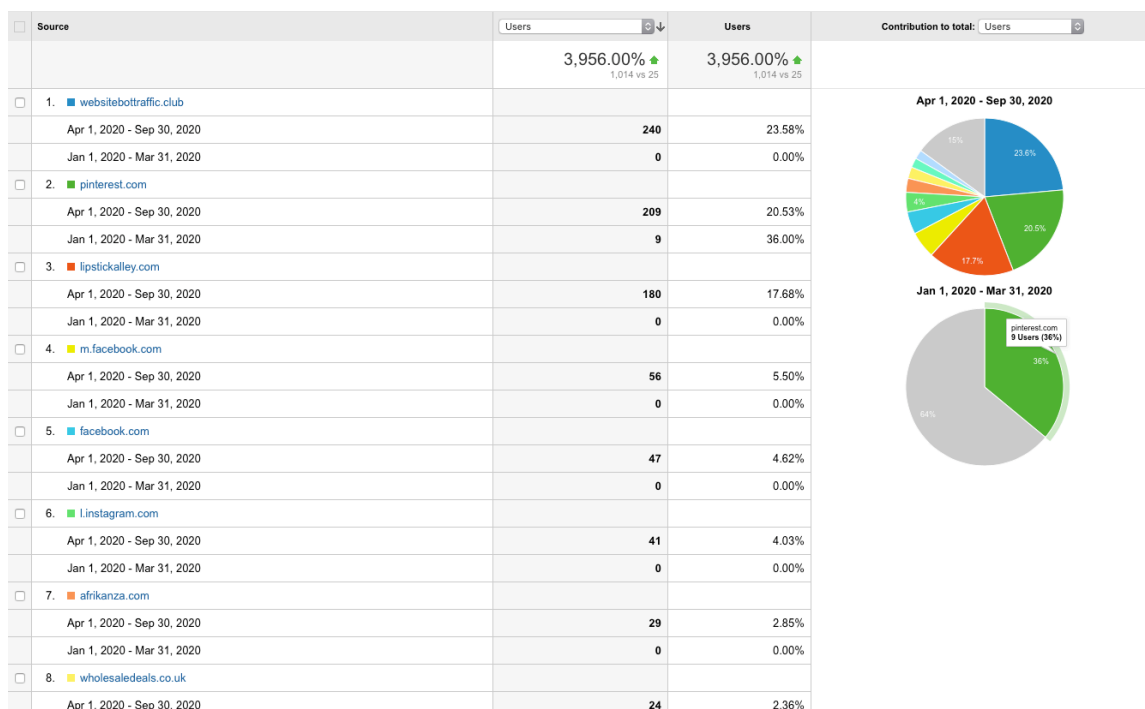


Image 15. Backlink performance

### 3.10 Logo

A logo is a visual representation or an emblem that appear on company signs that customer used to identify a company, products, or brand. This is a symbol that differentiates the company from other providers. The logo should have decent quality and meaningful that aligns with the company's purpose. The company does have a logo that meets the mentioned requirement. Not only do they have a symbol, but also a pitch about what the company making it exceptional and appealing to visitors to explore their website.

Kipfashion  
*Sharing a piece of African with you*

Image 17. Logo before the thesis

Kipfashion ®  
*...sharing a piece of Africa with you*

Image 17. Logo after

## 4 EMPIRICAL ANALYSIS

This chapter will discuss the analysis of each analytical tools used and then comparing the tools to give insight into the optimization process carried out on the commissioner's website. The Authors made use of Google Analytics to measure their goals and decide as mentioned in Chapter 2.8.1. These goals are remarkably diverse and are based on the commissioner's website. The researchers used this tool to measure conversion, customer acquisition, and engagements. The commissioner already has Google analytics install on his website making it easier for the researchers to compare the difference before and after the optimization.

Conversion is a completed activity, online or offline, that is important to the success of an online business. This action can be measured after the customer has checked out from the online store or scheduled an appointment for further purchases.

The google analytics acquisition reports on where the visitors of the website originated from, such as search engine, social networks, or website referrals. This is a key sector when determining which online marketing tactics are bringing in the most visitors to your website.

The goals of the authors are to measure the conversion rate and the visibility of the site after optimization since the commissioning company wants the author to use their knowledge of SEO and to improve the conversion. Besides, the authors and the commissioning company believe that action is required in other to optimize the site for visibility and conversion. The authors use Google analytics to measure the result of the optimization processes.

### 4.1 Google Analytics

Google dashboard allows users to view key information in a single report quickly. The company can customize a dashboard for different reporting requirements to meet the need of team members in your organization.

Analytic tools such as Google Analytics provides geographic reports of the website and products. It is then easier to determine which area of the world does your product sells the most. Also, it gives a much broader picture of what to sell in distinct parts of the world. For example, an online business dealing with African apparel within Africa could potentially succeed in the United State as there are many African Americans in such areas.

Web analytic tools help online businesses measure traffic, track bouncing rate, find the right audience, optimize marketing campaigns, improve conversion rate optimization, and helps generate a new creative idea and enter new markets.

## Audience

Image 18 shows the google analytic home dashboard of user data comparing three (3) months data received after the commissioner website has undergone optimization and six (6) months data from April till September after the optimization was completed. The data collected shows an increase in website users, new users, session, page views, session duration, and bounce rate before and after the optimization process was completed.

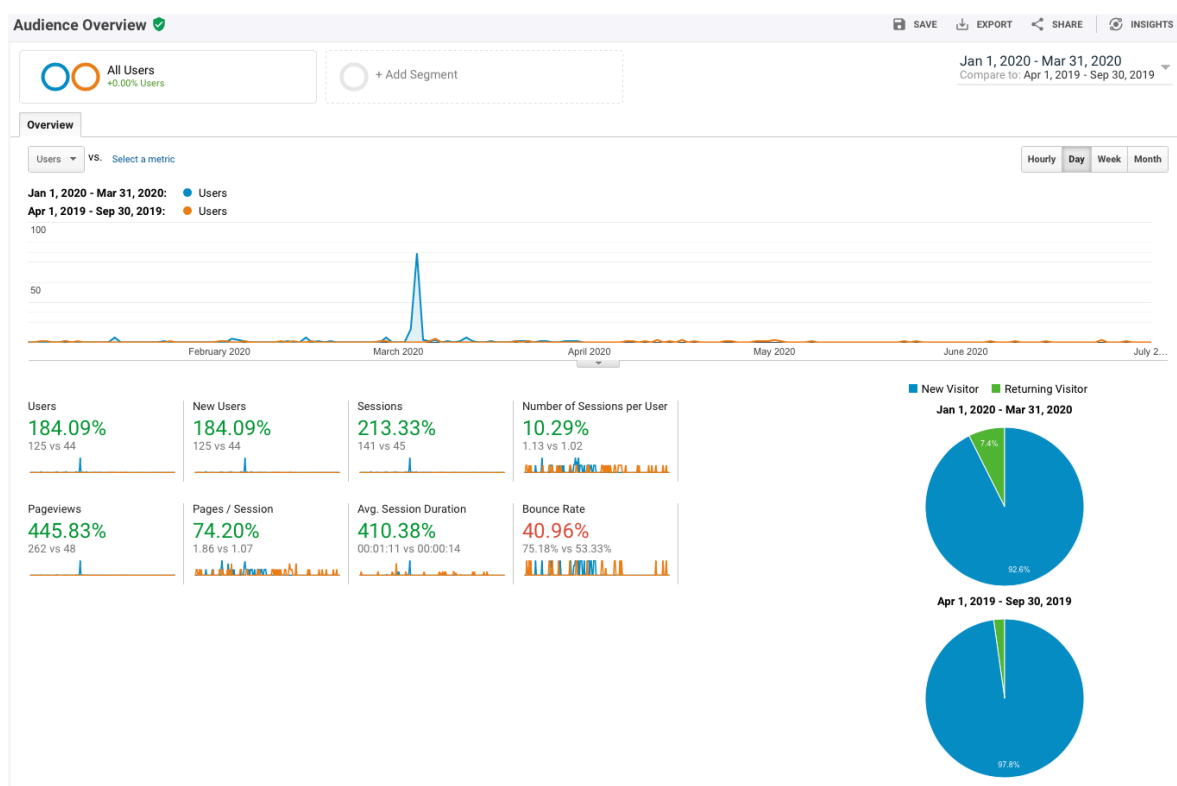


Image 18. Audience Overview Analytics from Google Analytics

The audience report provided information about the number of visitors who have accessed the website over a period. For example, a company can determine the number of users from a specific location or the device these users used in viewing the website. Throughout the research, the case company's new users from April 2020 to September 2020 increased from 92.6% to 97.8%. However, from April to September, there was a decrease in page view, page session, bounce rates, and returning visitors as seen in the Table 3 below.

Audience Overview	Before (January-March)	After (April-September)
User	125	44
New User	92.6 %	97.8 %
Session	141	45
Pageviews	262	48
Page session	1.86 %	1.07 %
Bounce rate	75.18 %	53.33 %
Returning visitor	7.4 %	2.2 %

Table 3. Audience overview table (before and after optimization)

After the optimization phase, keywords had the main effect on the acquisition of new users and decrease in returning visitors as the commissioning company now has a target audience with the use of new keywords. The implementation of on-page and off-page optimization has also contributed to the increase in new users and the amount of time spend on-page interactions. The decline in returning visitors could be attributed to the new SEO keywords changes on the commissioning website. However, the authors could not determine if the global pandemic COVID-19 is a factor to consider for the decrease in session, page views, and user.

### Traffic

Image 19 shows an overview of the traffic that was built for four months.

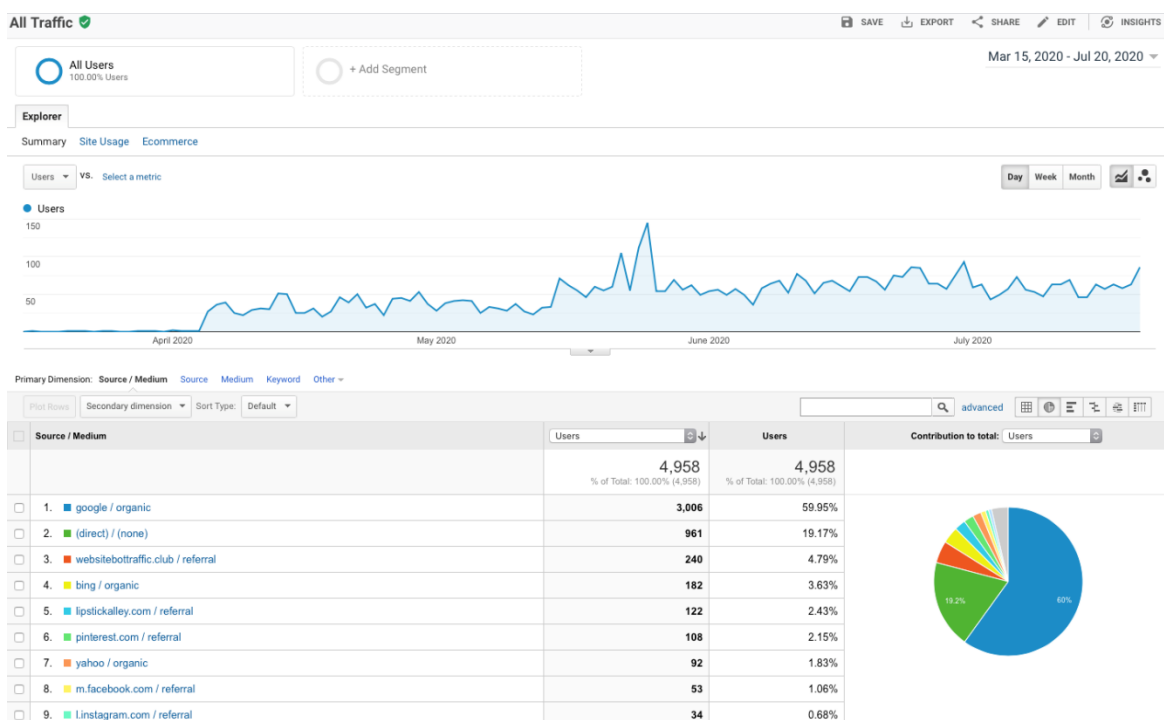


Image 19. Traffic overview analytics.

The traffic report provided information on what search engine or social media led to the most traffic. Organic traffic, users accessing the website through search engines such as Google, Bing, and Yahoo formed 65.41%. From Image 18, most of the organic traffic that was built on the page were from Google search. It consists of approximately 60% of the overall traffic. Direct traffic, thus, traffic built when a user directly types the site's URL was 19.2%. Referrals from other websites and social media platforms including Facebook, Instagram, and Pinterest, lipstick alley, and website bot consisted of approximately 11.11% of the total traffic. Facebook and Instagram marketing were introduced to the case company during the research. The audience built over a short period could be improved.

### Audience Acquisition

Gaining a new audience was a big challenge that was faced during this research. The competitors of the case company's website had already established a good and long-lasting relationship with their audience making it difficult to attract a new customer. However, with the help of google analytics, the researchers were able to see where most of the audience were acquired from which enabled them to write recommendations based on the report.

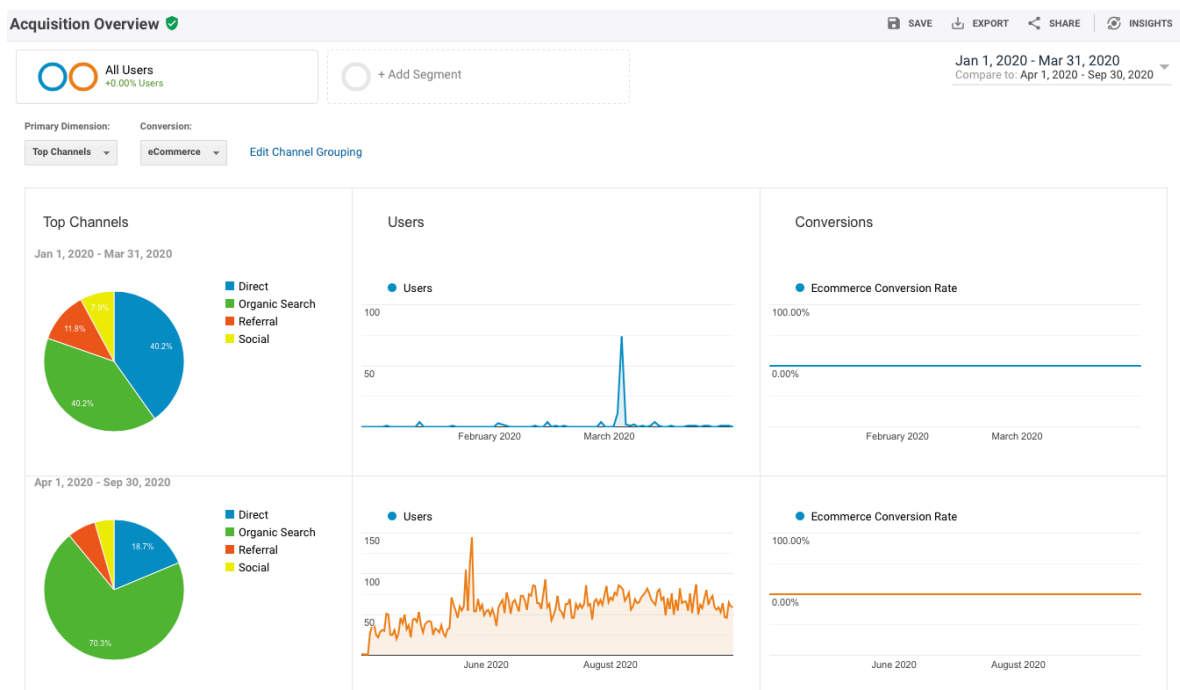


Image 20. Audience acquisition overview analytics

After the optimization of the commissioning company, the google analytical data show in image 20 prove that there is an increase in organic search which is a result of the SEO optimization. The data shows an increase of 70.3 % from April to September 2020 compared with 40.2% from January to March 2020 before the optimization occurs. The top channel experience declines in direct search, referrals social media traffic as shown in the Table 4 below.

Acquisition Overview	Before (January-March)	After (April-September)
Direct	40.2 %	18.7 %
Organic search	40.2 %	70.3 %
Referral	11.4 %	6.5 %
Social media	7.9 %	4.4 %

Table 4 Audience acquisition table (before and after optimization)

The audience acquisition report shows an increase in organic search on search engines due to the effort of SEO. The data show an increase from 40.2 % (January – March 2020) to 70.2% (April - September 2020). This increase also affects the visibility of the

commissioning website in google search engines. However, there are decreases in direct search, referrals, and social media traffic from the same given period. During the re-search, the authors focused more on google organic search by improving SEO and other factors that affect the website ranking on google. The authors could not establish the factors affecting the decrease in social media and referrals acquired during the period of this research.

## Landing Page

The authors optimized all pages of the website. During the start of the thesis, there were some pages of the website that were not functional or had no content. All these pages were fixed, and the necessary content was provided. The authors also optimize new landing pages due to the data extracted from the google analysis page.

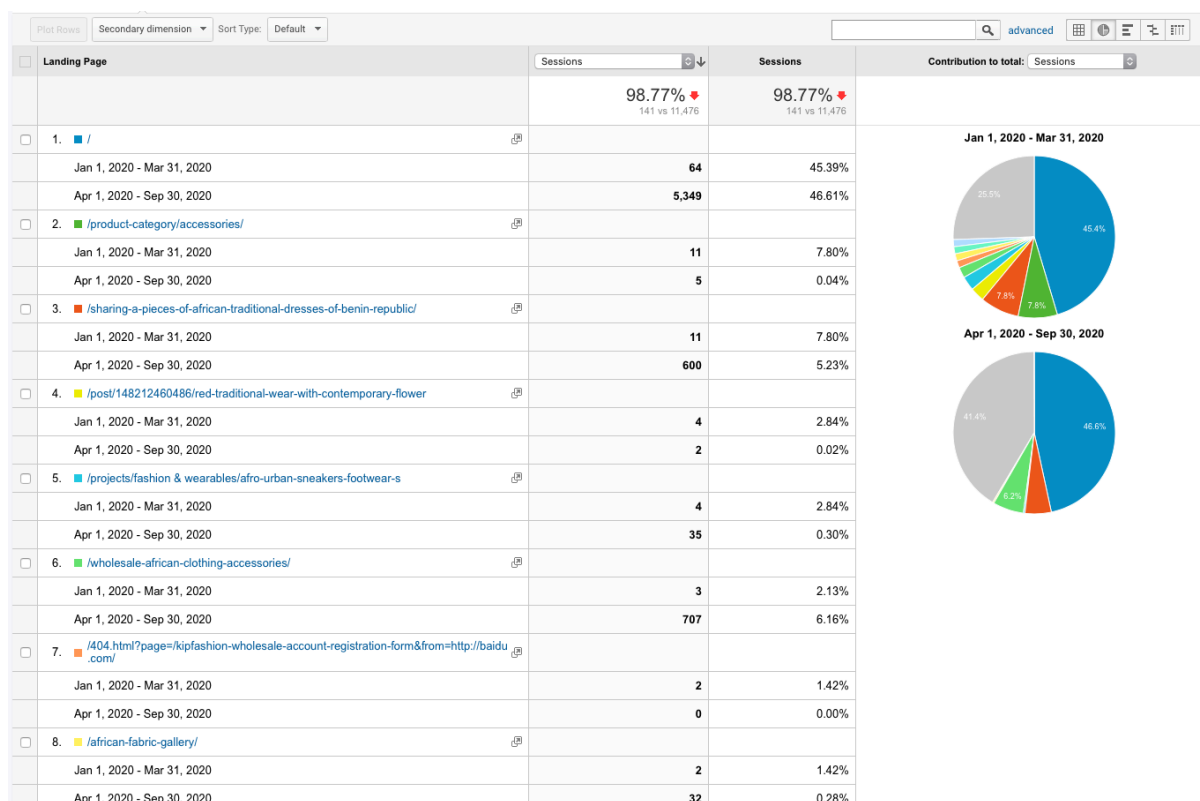


Image 21. Landing page analytics

From Image 21, most of the visitors landed on the homepage of the website. Depending on the search keywords used, some visitors landed on pages of specific products such as wholesale and custom-made clothing page. The data show a 1.2% increase in traffic landing on the homepage, while a total absence of other landing pages from the blog between (January – March 2020). After the optimization, the landing page traffic was divided into four-part (home page, wholesale landing page, 1 blog page, and other smaller landing

pages). During the research, the authors focused on using the right keywords for product description and content creation. These keywords affect the traffic generated after the optimization is completed. It further narrows down the customer's needs. These keywords helped reposition the commissioning website appearance on google on the first page when the right keyword is searched (wholesale African clothing).

### Organic search

Organic search also known as natural search refers to the search results of a search engine that cannot be influenced by paid per click advertising. SEO optimization influences organic ranking with relevant keywords. Image 21 shows the analytic of users before and after the optimization process of the commissioning company. This also contributed to the visibility of the commissioner's website on search engines with the use of relevant keywords.

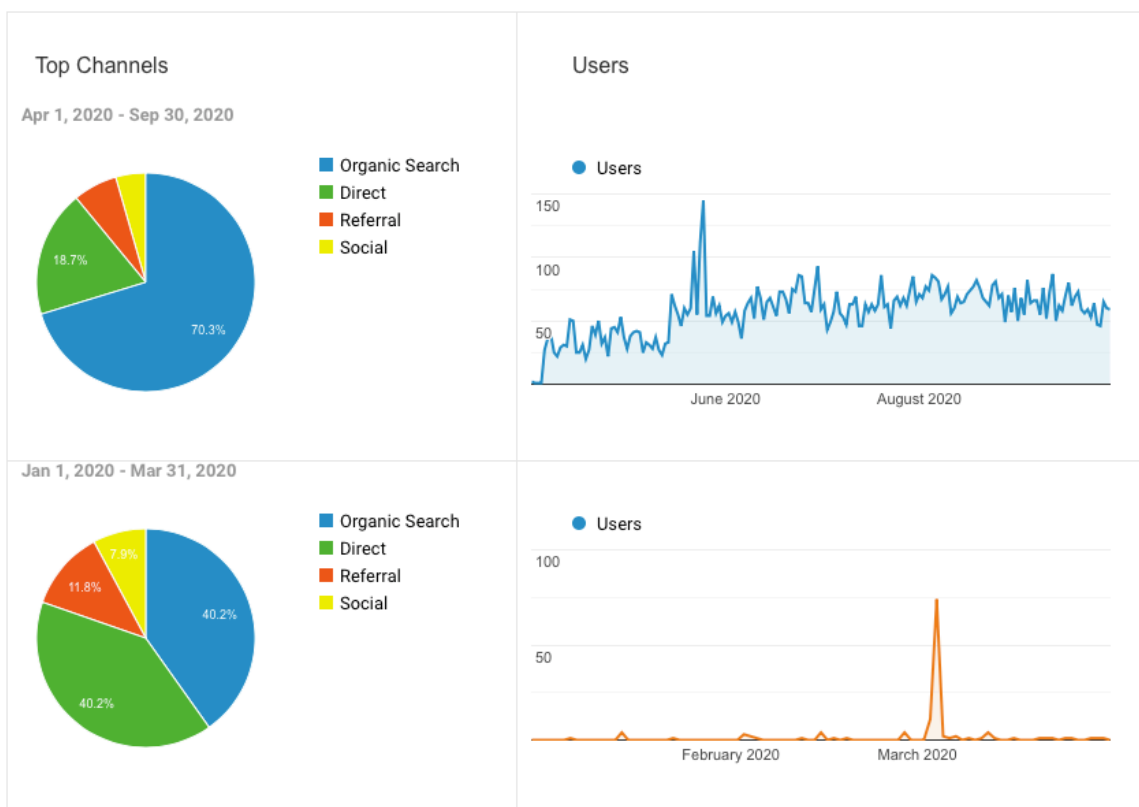


Image 22. Organic search analytics

### Conversion

Image 23 shows the report of the conversion rate for nine (9) months, thus from January to March 2020, there is no conversion during that period. The graph below shows the increase in conversion from March 2020 after the optimization was completed.

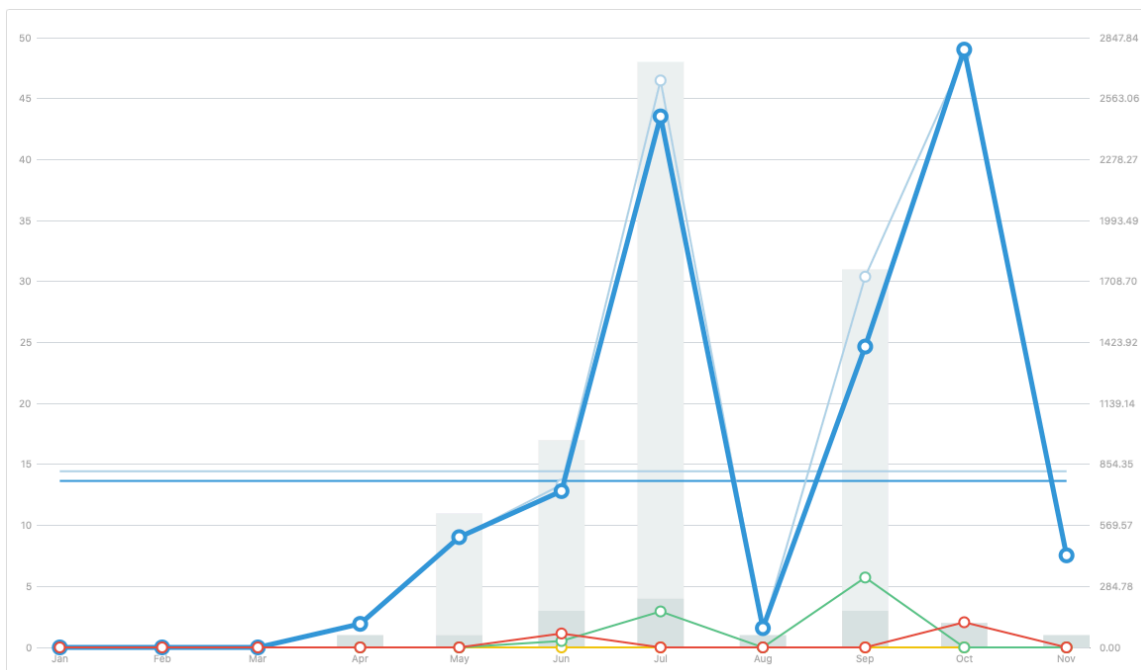


Image 23. Conversion Overview Analytics from Google Analytics

Image 23 shows an increase in conversion rate at the beginning of March 2020 after the authors implemented SEO optimization on the commissioner website. The increasing surge in June 2020 as the effect of the SEO implementation was completed. In August 2020 there was a decline in conversion as this could be attributed to the COVID-19 restrictions. But the authors experience and in September 2020 as the conversion rate increase again. This could be attributed to the optimization effort by the authors as there is a significant difference in the conversion rate compared to the period without optimization.

One of the main goals of this research was to find ways to optimize the case company's online business to maximize the conversion rate. During the research, the researchers focused on finding ways to improve factors that affected the website's performance such as page load, user experience, and using the appropriate keywords to improve SEO. The researcher can now conclude that SEO and use of keyword is a contributing factor to increasing conversion on commissioning website.

### Chatbot

In e-commerce, users usually want instant assistance and for this reason, the authors installed a chatbot to help users get needed help to make purchase decisions. Image 24 shows the leads acquired for four months. 115 lead was acquired which increase customer satisfaction and conversion for the commissioning company.

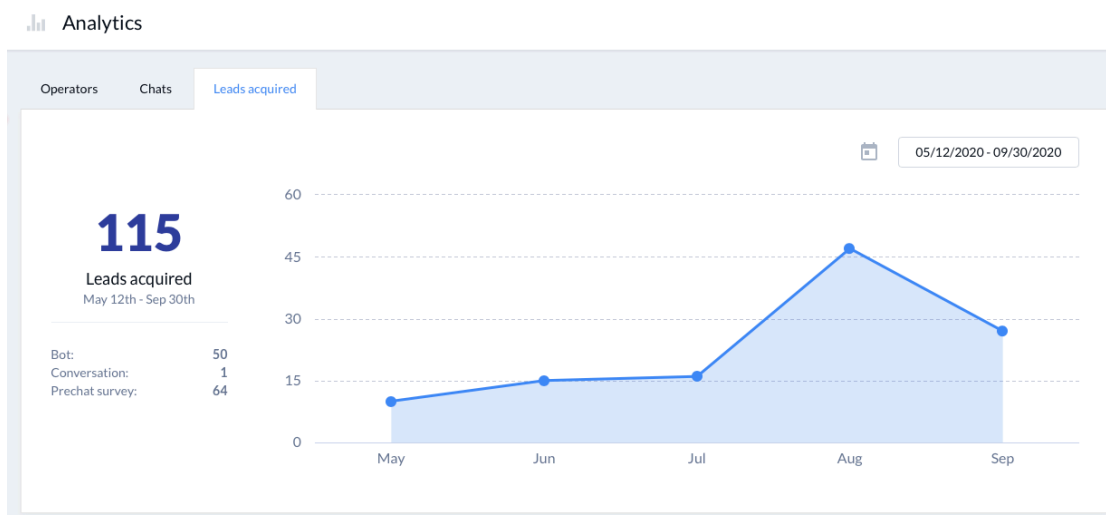


Image 24. Chatbot lead acquired

Image 24 show that it took two (2) months before the lead was generated. This indicates that visitors that wanted to make purchase decision did not embrace the chatbot immediately as they were used to the email correspondence. The chart also shows that there is an increase in leads between June and August 2020, as there was also an increase in conversion within the same given period as seen in image 23 above. Based on the hypothesis drawn in Chapter 1.5.2, the authors then concluded that the increase in conversion can be attributed to the use of chatbots for customer experience and satisfaction.

## 4.2 Pinterest

The case company already had a greater number of audiences on Pinterest before the start of the research. Image 25 shows the Pinterest performance from January 2020 to September 2020 where there was a decline in performance due to the global pandemic. The audience interaction and engagement reduced from August 2020 due to the global pandemic.

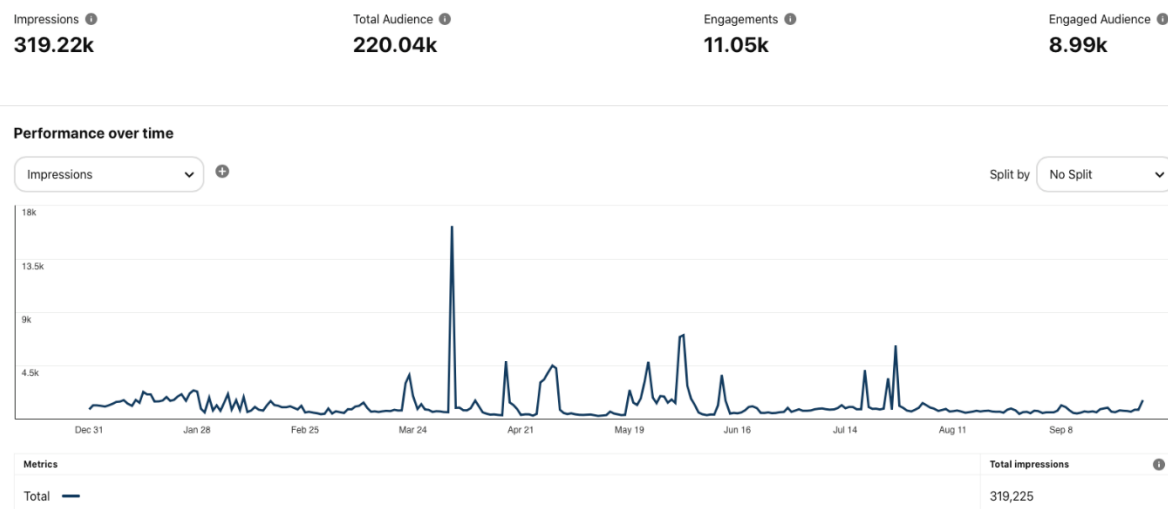


Image 25. Pinterest Performance

The performance report of Pinterest shows a depreciation from July to September 2020. During the start of the research, the audience Pinterest increased by 32,5k audience. However, as the research went on, the audience began to depreciate. The researchers focused on building a new audience on other social platforms including Facebook and Instagram and therefore, a lesser amount of time was spent on Pinterest since the case company had already built an audience on this platform. However, there was an average performance on impression, audience, and engaged audience as shown in image 25.

### 4.3 Facebook

Social media is an important piece of the marketing strategy for an online business. It helps online businesses connect with customers or potential customers. In using social media to fuel business growth, one must include, using social media to drive traffic to the online store, building an audience by using targeted social media influencers, providing value such as takeaways before asking anything in return from the customers.

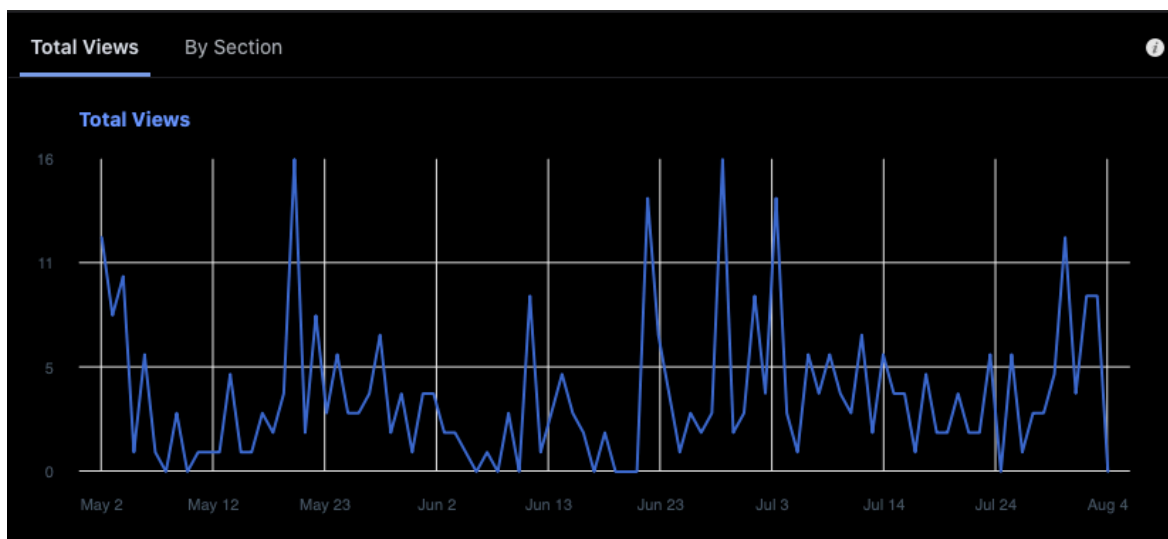


Image 26. Overview of Views on Facebook

Facebook marketing was a marketing strategy that had just been adopted by the company during the start of research. The report from Facebook shows a non-linear declination or inclination. The Facebook page had an inconsistent number of audiences. In middle May and late June, there was an increase in the number of viewers and the rest of the month maintain similar patterns.

The Facebook referral has more bounce rate as most of the audience didn't spend more time on the website. As shown in image 20 there was a decline in the social media audience after the optimization was completed compared to before the optimization was conducted. This concludes that the target audience is coming from social media as this is not a source that the commissioning company.

## 5 CONCLUSION

### **Answers to Research Questions**

This thesis has two main goals: (1) optimize for visibility on search engines and (2) increase conversion for small businesses. The authors are determined to find effective ways to increase visibility and conversion. The tool selected to measure this increase is google analytics. After the implementation of the SEO and other optimization processes, the authors must determine if the commissioner website has increased visibility and conversion level.

### **What are the most effective ways of increasing conversion and visibility on search engines for small-scale E-commerce Enterprise?**

The SEO process has led to a dramatic improvement in site ranking and visibility on search engine results. This increase in visibility was due to the use of new keywords that is different from that of the competitors. The authors also note that on-page optimization also contributed to the increase in visibility as the products description and pages were optimized with new targeted keywords.

However, there are a lot of factors that must be considered in increasing conversion and visibility on search engines. While these two concepts (conversion and search engine optimization) are different, they can be affected by each other. For example, increasing visibility on search engines does not guarantee an increase in sales, likewise, vice versa. However, optimizing the general performance of the website while improving user experience is one of the effective ways to increase conversion. Content used on the website must contain keywords that are relevant to the customer which can go on to improve visibility on search engines. This creates a mutual connection between these two concepts in such a way that both are taken care of separately with a common goal of increasing sales while creating a long-term relationship with customers. We also discovered that effective and accessible customer service plays a major role in conversion. Access to communication channels to customers either through phone, email, or chat had contributed to the conversion of the commissioning company.

Additionally, we discovered that off-page and off-page optimization play an important role in the visibility of the website. Other bloggers who were linked to the website increased the organic traffic of the site and targeted a more specific audience. The on-page optimization like keywords and clear images added to the visibility of the site.

Target keywords have contributed to 70.3 % of the organic traffic received from the time when the authors commence their optimization process. The referral from off-page optimization of the commissioning company from the time of optimization has increased from 15 users (January – March 2020) to 605 users (April – September 2020) within the optimization period. This has also increased the wholesale customers from 59 in March 2020 to 398 wholesale in September 2020.

The social media referral has also experienced a decrease from 7.87 % (January – March 2020) to 4.45 % (April – September 2020) during the period of optimization. The impact of COVID-19 on the business activities of the commissioning company has caused this decline.

The implementation of the chatbot has increased user interaction and customer satisfaction by 43 %. The data shows that from the time of chatbot implementation the researcher has acquired 115 new leads, which also affects the conversion rate.

We noticed that there has been a 3% increase in returning customers after the optimization process, while there is a 2.5% decrease in new visitors to the website due to the use of target keywords. The most interesting thing is that there is an increase in the average session duration spent on the website and a decrease in bounce rate.

For effective visibility and conversion, online store owners must optimize content, site speed, easy to use payment system, and excellent customer service. Search engine optimization and conversion rate optimization need to work together for any online store to be profitable. It can be concluded that for online stores to be profitable it needs to be optimized for search engines, keywords, content, images, and videos.

Based on these findings from the authors, there is solid evidence to believe that optimizing a website required more than just focusing on SEO. However, SEO is a major part of optimization, but other areas need attention to acquire leads and generate conversion.

During the research, we found out that with the use of specific keywords, the commissioning company cannot generate new leads from social media platforms because the targeted customers are using a search engine to find the relevant suppliers of the needed goods and services.

In conclusion, the authors agreed that on-page and off-page optimization is the most important aspect of the online visibility of an e-commerce website. However, this conclusion is based on the analytical data received from the commissioning company. It also shows that keyword is also vital in search engine ranking. Optimization is an ongoing process and needs to be revisited if the commissioner wants to stay visible on the search engine.

The study can be used by small enterprises without an advertising budget for visibility and conversion, but they must use relevant keywords that meet the target audience's needs.

This study gives an overview of how to effectively increase conversion and visibility on a search engine for small businesses. There is room for more improvement and more data can be analyzed to further determine other ways to effectively improve conversion and visibility.

In conclusion, based on the hypothesis (Ali et al. 2011) choosing the following as characteristics of a good website: usability, accessibility, search engine optimization, and social media/network enabled. The authors find SEO and usability as a contributing factor that contributed to visibility and conversion. But in the case of the commissioner website, Social media did not contribute to visibility and conversion as that is not a source for the target customers.

## 6 RECOMMENDATIONS

The website speed makes the first impression of your business. It is essential to understand that one cannot get a second chance when it comes to user experience. Low website speed is one of the most frustrating things that will turn customers off about your resource.

High-performance websites result in high return visits, low bounce rates, higher conversions, engagement, higher ranks in organic search, and better user experience. Slow websites will cost you money and damage your reputation. By reducing the page load time, it will positively impact marketing and sales processes. Also, it will get higher traffic and attract more qualified leads that can be converted into customers. In this research, the following recommendations about how to improve your website performance and page load time. Page load time is a web performance metric that shows the time needed for a page to show on the user screen.

### **Visibility**

The load time of your website also influences how easily users can find your website. Website speed is one of the factors that Google takes into consideration when ranking sites. A low-performing website has a poor user experience and as a result, gains less promotion in search results. Since December 2017, the Google search engine has started ranking also based on mobile versions of pages, even for desktop searches. The goal of this decision is to protect users from websites that have low performance and are not responsive to all devices.

### **Usability**

Website usability like website page speed, load time, and website responsiveness to user requests directly impacts customer loyalty. The better the website's performance, the more satisfied a user will be. A great user experience is a way for building a large customer base and a strong brand.

### **Use a Content Delivery Network (CDN)**

A content delivery network is a set of web servers distributed across various geographical locations that provide web content to end-users regarding their location. When one hosts the website on a single server, all users' requests are sent to the same hardware. For this reason, the time needed to process each request increases. On top of that, the load time increases when users are physically far from the server. With CDN, user requests are

redirected to the nearest server. As a result, the content is delivered to a user quicker and a website works faster.

### **Optimize the size of images on your website**

Everyone loves eye-catching images. In the case of successful e-commerce sites, images are a vital part. A lot of photos, images, videos, graphics on the product pages improve engagement. The negative side of the image use is that they are usually large files that slow down a website. The best way to reduce the image size without compromising its quality is to compress images using such tools as JPEGmini. Another way to reduce the image size is to use the HTML responsive images `<img srcset>` and `<img sizes>` attributes that adjust image size based on user display properties.

### **Reduce the number of plugins**

Plugins are common components of each website. They add specific features suggested by third parties. Unfortunately, the more plugins are installed, the more resources are needed to run them. As a result, the website works slower, and security issues can appear. Based on this thesis, it is important for an online business to check out all the plugins that have been installed and deleting unnecessary ones. First, run the performance tests on your page to find out which plugins are slowing down your website. Try to avoid plugins that load a lot of scripts and styles or generate a lot of database queries. The best solution is to keep only the necessary ones and ensure that they are kept up to date.

### **Minimize the number of JavaScript and CSS files**

The website contains a lot of JavaScript and CSS files which make several HTTP requests when the website is visited. These requests are treated individually by the visitor's browser and slows down the website work. If the number of JavaScript and CSS files are reduced, this will undoubtedly speed up your website. Try to group all JavaScript into one and do so with all CSS files. This will reduce the overall number of HTTP requests. There are a lot of tools to minify HTML, CSS, and JavaScript files quickly.

### **Use website caching**

In case there are a lot of users accessing the page at one-time servers work slowly and need more time to deliver the web page to each user. Caching is the process of storing the current version of the website on the hosting and presenting this version until the website is updated. This means that the web page does not render repeatedly for each user. Cached web pages do not need to send database requests each time.

### **Database optimization in CMS**

Database optimization is an effective way to increase performance. When using a content management system (CMS) packed with complex plugins, the database size increases, and the website works slower. For example, the WordPress CMS stores comments, blog posts, and other information that take up a lot of data storage. Each CMS requires its optimization measures and has a few specific plugins.

### **Reduce redirects**

Website redirects create additional HTTP requests which negatively impact performance. First, a business should identify all redirects on the page by running a site scan. This can be done by using for example, Screaming Frog to quickly identify redirects. After this, it is recommended to check if they serve a necessary purpose and leave only the critical ones.

## 7 SUMMARY

Optimizing an online business is essential to the success of the business. While technology advances, it is important for brands to adopt new strategies to increase conversion rates while maximizing user experience.

The main objective of this thesis is to analyze and optimize an e-commerce store. There were some processes of optimization that were implemented which is highly relevant to the decision-making process for the commissioning company. These include: SEO, landing page optimization, product pricing, site speed, online and offline optimization, chatbot, website responsiveness, currency switcher, Google Analytics integration and social media analytics.

In summary, this thesis provides theoretical and empirical information on optimizing an e-commerce store and how to use the collected data to increase conversion. The data collected also help in developing new products for some target audiences. This optimization process has also generated new leads and the opportunity to enter new countries.

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## APPENDICES

### APPENDIX 1: Javascript for minifying cache.

```

<IfModule mod_expires.c>

# Enable expirations
ExpiresActive On

# Default directive
ExpiresDefault "access plus 1 month"

# My favicon
ExpiresByType image/x-icon "access plus 1 year"

# Images
ExpiresByType image/gif "access plus 1 year"
ExpiresByType image/png "access plus 1 year"
ExpiresByType image/jpg "access plus 1 year"
ExpiresByType image/jpeg "access plus 1 year"

# CSS
ExpiresByType text/css "access plus 1 month"

# Javascript
ExpiresByType application/javascript "access plus 1 year"

</IfModule>

```

### APPENDIX 2: PHP for defer parsing

```

if (!(is_admin() )) {
    function defer_parsing_of_js ( $url ) {
        if ( FALSE === strpos( $url, '.js' ) ) return $url;
        if ( strpos( $url, 'jquery.js' ) ) return $url;
        // return "$url' defer ";
        return "$url' defer onload='";
    }
    add_filter( 'clean_url', 'defer_parsing_of_js', 11, 1 );
}

```

### APPENDIX 3: PHP for removing query string from static resources.

```
function _remove_script_version( $src ){
    $parts = explode( '?ver', $src );
    return $parts[0];
}
add_filter( 'script_loader_src', '_remove_script_version', 15, 1 );
add_filter( 'style_loader_src', '_remove_script_version', 15, 1 );
```

### APPENDIX 4: Plugin Performance Profiler

#### ExpiresActive On

```
ExpiresByType image/jpg "access plus 6 hours"
ExpiresByType image/jpeg "access plus 6 hours"
ExpiresByType image/gif "access plus 6 hours"
ExpiresByType image/png "access plus 6 hours"
ExpiresByType text/css "access plus 6 hours"
ExpiresByType application/pdf "access plus 1 week"
ExpiresByType text/javascript "access plus 6 hours"
ExpiresByType text/html "access plus 5 minutes"
ExpiresByType image/x-icon "access plus 1 year"
ExpiresDefault "access plus 3 hours"
```

### APPENDIX 5: Google analytics performance from May 2020 to October 2020



### APPENDIX 6: Google analytics behavior flow from January 2020 to September 2020

