TALLINN UNIVERSITY OF TECHNOLOGY

School of Business and Governance

Department of Business Administration

Ahmed Elsherif

Consumer attitude and behaviours towards paid versus organic search results.

Bachelor's thesis

Programme of international business administration, specialisation Marketing

Supervisor: Denitsa Dineva, PhD

Tallinn 2021

I hereby declare that I have compiled the thesis independently

and all works, important standpoints and data by other authors

have been properly referenced and the same paper

has not been previously presented for grading.

The document length is 8037 words from the introduction to the end of the conclusion.

Ahmed Elsherif ……………………………

 (signature, date)

Student code: 186474TVTB

Student email address: sherymadodomy@gmail.com

Supervisor: Denitsa Dineva, PhD

The paper conforms to requirements in force

…………………………………………

(signature, date)

Chairman of the Defence Committee:

Permitted to the defence

………………………………

(name, signature, date)

TABLE OF CONTENTS

ABSTRACT

Search engines have become a major source for people to acquire information about products and services. However, the difference between organic results and paid ad results does not indicate an understanding of why consumers choose one over the other. This has made search engine marketing an important field of research.

This study aims to determine the factors that influence users' behaviour and attitudes when exposed to paid vs organic search results.

The results of this paper illustrate a habitual buying behaviour towards the brands that consumers are familiar with. When the respondents are faced with two identical results in which one of them is an ad and the other is an organic result, the majority choose to click on the organic result. Additionally, the findings support previous research that users form a positive attitude towards ad results when they are highly relevant to the searched term or query, which ad results seemed to lack. Another reason that affected users' attitudes towards ad results was that respondents don't find the product or service that they are looking for once they click on the ad result, which corresponds to previous research models, where the attitude that forming towards the ad result becomes negative due to the lack of information that ad results provide.

Keywords: Online consumer behaviour, Web marketing, Consumer attitudes, Search engines.

INTRODUCTION

The development of the internet has revolutionised the way humans obtain and access information, which in this regard has influenced how we perceive, react and choose certain products or services; consequently, this revolution has played a significant role in the development of advertising techniques and tools used on various online platforms that are mostly seen in search engines, social media networks, interactive websites, etc. (Ghose, Yang 2008). The spendings on digital advertising were calculated at 325 billion U.S dollars in 2019 and are expected to grow to 389 billion U.S dollars by the end of 2021 (Statista, 2021). The current methods of digital advertising typically consist of two primary forms: display ad (banner) advertising and paid search advertising (sponsored ads that appear as a search result to a particular keyword) (Ghose, Yang 2008). Search engine result pages typically consist of two types of results: organic results and sponsored search results (Mizil et al. 2010). Sponsored search results are commonly placed on top of the search page, marked as "Ad", while the organic results are shown afterwards, consisting of titles and short descriptions. Nonetheless, while the paid search results provide accurate information about click-through rates and measurable advertising metrics, marketers have begun looking into search engine optimisation (SEO); according to Ghose, Yang (2009a), SEO refers to the process of customizing a website to optimize its organic (unpaid) rankings for a keyword or a set of phrases. While paid search refers to investing in sponsored (paid) Ad results on search engines. A survey done by the Search Engine Professional Organization illustrates the differences between agency professionals' usage of SEO compared to paid search, which has shown that 95% of the respondents used SEO tactics in 2016, compared to 89% for paid search tactics (Drolet, 2017). Nevertheless, the difference that is shown between SEO which falls under the organic search umbrella, and paid search (ad results) does not indicate an understanding of why these methods differ from each other from the consumer perspective, which remains a knowledge gap when it comes to understanding the effect of the consumer behaviour and attitude towards both results, which requires a better understanding through empirical research. The research problem is that marketers faced with click-through rates (CTR) of paid ad results that are significantly low, small-to-midsize businesses will spend $9000 to $10,000 per month on search Ads (Maake, 2020), compared to businesses that use SEO which

costs an average of 3,000$ to 12,000$ (Brown, 2021), which leaves marketing managers faced with the dilemma of having to choose between investing in paid ad results vs organic results (SEO) (Sen, 2005).

Consequently, the thesis sets out to investigate consumer attitudes towards paid search versus organic search results. The aim is to determine the factors that play out in users' attitudes when displayed paid and organic search results to. Previous studies have mostly circled around the dynamics of search results from the business perspective by measuring certain businesses' performances and ROIs of each method, and only partially examined the factors that influence consumer attitudes towards search ads vs organic results. This leaves a research gap that the author wishes to examine when it comes to the effect of paid and organic results from the consumer behaviour and attitudes perspective, which remains an under-researched field. The purpose is to gather in-depth knowledge on how users behave towards the search results that they receive, and whether the website/brand shown in the organic/paid search result can have either a positive or negative influence on the consumer's attitude depending on whether the website is listed as an ad or organically shown. Moreover, the effectiveness of the current paid advertising techniques against the organic results will be investigated by examining the reasons behind the consumer choices (e.g., trust, scepticism, etc.). As well as to gather a better understanding of the automated behavioural patterns that online users have obtained during their online product search experience. The knowledge gap lies under how paid and organic search results' visual attributes and characteristics influence the online consumer's attitudes formation process (e.g., relevance of meta description, "Ad" mark, result position), which will be examined on the level of both paid and organic results. Moreover, the author wishes to investigate whether users are indifferent to clicking on either result throughout their online shopping.

Finally, this research aims to provide suggestions and improvements to the current search engine marketing strategies for marketing managers, by measuring how consumers perceive and react to both methods. Therefore the main research questions that the author aims to answer are:

- RQ1: What are some of the main considerations for consumers when choosing between paid versus organic search results?

- RQ2: Are consumers' attitudes more favourable towards paid versus organic search results?

- RQ3: How do consumers' behavioural intentions differ towards organic versus paid search results?

The author will achieve the research questions' aim through a questionnaire that focuses on gathering data from the participants regarding their online consumer attitudes, which will be distributed to a random sample of internet users.

The thesis consists of three main parts: theoretical review, research methodology, and the study's results. The structure is as follows: first, the author will discuss and evaluate the theories that concern consumer behaviour and the attitude formation process. consequently, paid vs organic search results will be discussed. In the final part of the theoretical review, the author will discuss previous studies concerning consumer behaviour towards ad and organic results. The second chapter consists of the research methodology where the author discusses the framework and justification of research, which will, later on, be carried out into a quantitative approach where the data collection and analysis methods of the questionnaire will be covered. Through the final part, the study's findings will be presented, where the author reviews the empirical part and answers the research questions based on the analysis.

1. THEORETICAL REVIEW

This chapter will cover the theoretical review, which will be performed by analysing the background of consumer attitude and behaviour towards search results. The author will break it down into three main parts: Consumer behaviour and attitude, which will describe the consumer attitude formation attributes. Next, the author will also introduce paid and organic search results and their general attributes. Finally, in the third part of this chapter, paid vs organic results will further be discussed by comparing paid and organic search results with each other. previous literature will be reviewed based on previous research, to sum up, the theoretical framework of what has been studied previously.

1.1. Consumer behaviour and attitude

According to Wu (2003), the consumer lifestyle involves internal and external elements. External elements of consumer behaviour include demographic, economic, social, situational and technological factors. While, the internal factors of influence are attitudes, beliefs, learning, motives and needs. Wu (2003) adds that research done by Wells, Prensky (1996) divides external and internal elements into two components: consumer background characteristics and behavioural processes. Consumer background characteristics are considered a stable aspect that cannot be changed or affected by the environment, which includes characteristics that revolve around how consumers describe themselves and label others. As an example, demographic characteristics such as age, sex, religion (Wu, 2003). On the other hand, unlike consumer background characteristics, behavioural processes can be affected by the environment because they are applied on specific occasions. Behavioural processes are tools that are formed to complete activities that satisfy peoples' needs. These behavioural processes are acquired from motivational, learning, attitude formation, perceptual, and decision-making tools (Wu, 2003). In this research, the author will focus on the processes of attitude formation and decision making.

Attitudes are defined as mental layers that control an individual's response to a stimulus. The

layers are based on knowledge, emotions, motivations, and intentions, which in the full picture describes the way people feel and react towards things, such as advertisements, products or other stimuli (Udell, 1965). People estimate attitudes towards an object by determining their accessible beliefs about this certain object, where a belief is defined as the probability that the object has a particular attribute (Fishbein, Ajzen 1975). Ajzen, Fishbein (2000) added that the terms "object" and "attribute" are used in the universal sense, and they refer to any diverse aspect of an individual's world. For example, an individual may believe that eating healthy (the attitude object) reduces obesity (the attribute). Ajzen, Fishbein (2000) introduced the expectancy-value model, this model indicates that the higher the subjective probability, the stronger the belief. The expectancy-value model's important implication is that attitudes toward an object are formed automatically as we obtain more information about the object's attributes (Fishbein, 1967). From the perspective of information processing, when consumers are engaged in the decision-making process to a certain object, they are expected to engage in an extensive search of information in order to avoid the "wrong" choice. Thus, this consumer will make strong efforts to evaluate the alternatives before reaching a reasoned decision (Hansen, 2005). This refers to the decision-making process, which is to identify and choose alternatives based on the attitudes and values of the decision-maker. The process implies that there are available alternatives to be considered (Harris, 1998). The time, effort and attention that the consumer spares during their decision-making process mainly depends on the importance of the problem which can be solved by purchasing the product (Mihart, 2012). From the decision making perspective, the buying process begins with consumers engaging in problem-solving tasks that move through several stages. At the primary stage, the consumer has no initial criteria for evaluating a new product category or brand, which requires a large amount of information gathering to establish a set of criteria and be able to evaluate the brand or product (Schiffman, Kanuk, 2009). While in some cases the consumer's choice can be made based on the experimental perspective, since the consumers are greatly involved in a decision. In this case, the experimental perspective describes that sometimes consumers make purchases in order to create emotions, feelings, and experiences towards a product or a brand rather than to solve a problem (Mihart, 2012). When it comes to consumer online purchasing behaviour Peterson et al. (1997) classified products into two types: search products and experience products, search products are products that can be evaluated with only external information searched through the internet, as for the experience products, they are

products that consumers wish to experience before they make the purchase. based on their findings they claimed that search products are more appropriate to advertise through the internet than experience products which are likely to be sold in brick and mortar stores as consumers get to experience them. Additionally, Peterson et al. (1997) added that tangible products are more appropriate than intangible products and shopping products are more appropriate than convenience products for marketing and distributing through the internet when it comes to distribution costs (Peterson et al.,1997).

1.2. Paid versus organic search results research

People tend to search for information to help decrease the feeling of uncertainty when deciding on a destination (Fodness, Murray, 1997). Due to the increasing size of web search engines, it has become a necessary and convenient tool for individuals to find information as well as to shop online (Ma et al. 2010). When a user searches using a keyword on a search engine they are usually presented with two lists of search results, organic and sponsored results. For the organic search, the search engine usually determines the results by finding web pages with similar and relevant keywords to the search query. As for the sponsored results (also referred to as sponsored search or paid search), they are determined by using online auctions that advertisers bid to be placed as a response to a certain query or keyword, and are therefore more commercial (Jerath et al. 2014). Search engines like Google, Yahoo, and MSN discovered that they could position themselves as intermediaries between firms and users. Consequently, this has allowed them to use new forms of advertising methods such as sponsored search results without irritating their users (Ghose, Yang, 2009a).

Paid search advertising represents 40% of online advertising expenditures, according to Ghose, Yang (2009a); that is since users find sponsored search ads relevant to their searched keywords, thus more effective than online banner advertisements. Hence, this has shifted the use of banner ads to sponsored search ads significantly. As a result, sponsored search ads have become the largest revenue source for search engines, which was predicted to have a 37% compound annual

growth rate, to more than 33 billion dollars in 2010. The wide reach of ad results made it a legitimate tool for marketers, allowing them to target their audience directly (Ghose, Yang 2009a). Although paid search advertising has become attractive to advertisers, it is also is a complex and dynamic form of advertising and managing it adequately is a difficult task, which has attracted the attention of researchers from the fields of marketing, information systems, as well as mathematicians, and has been studied through mathematical and technical, to social and behavioural research (Jafarzadeh et al. 2015). In sponsored ad results, firms submit their product information to search engines in the form of a keyword list. Bid values are then assigned to the ad to determine the position on the search engine results page. When a user searches for a certain keyword, the advertised webpage appears as a sponsored link above the organic results. Since each keyword is assigned to a price, the advertisers only pay for displaying the ad result once the user clicks on it. This payment mechanism is known as cost per click (CPC). This mechanism allows advertisers to reach a more targeted audience on a low budget since the listing appears only when a user searches for a certain keyword query (Ghose, Yang 2009b). While marketers recognize the importance of paid search advertising, many others have begun investing in search engine optimization (SEO) by tailoring their websites, in order for them to improve their site ranking between other organic results (Ghose, Yang, 2009a). When users visit a website, they usually expect to find information according to their needs. But if they were unable to find the content needed they become frustrated and immediately leave the website. To draw users' attention and maintain a high ranking on search engine results the website needs to be built with the right target and quality content (Swati et al. 2013). In organic search, marketers are not guaranteed a specific ranking position or the timing for the page ranking to appear or change. To improve their organic ranking they constantly need to update and change their website content and structure (Ghose, Yang, 2009a). Search engines such as Google rely on ranking metrics to determine the quality of the page. The higher the rank the more a website is considered popular. Those ranking metrics are referred to as on-page and off-page. On-page rankings are considered as metrics such as the length of the content, the speed of the page, and the relevancy of the page's content, while the off-page rankings are dependant on factors such as the website's age, the number of domains referring to the page and the sources of traffic that are driven into the page. (Swati et al. 2013).

Both paid and organic search results have their own advantages and disadvantages. Whereas paid search results can ensure that a website can be listed on the first page immediately and additionally be displayed on top of other results while, however, it can be costly. On the other hand, when it comes to organic ranking, the process of search engine optimization (SEO) cannot always guarantee that the result will be displayed on top, in addition to the time that is needed to implement the changes on-page and off-page changes to the website to compete with the top-ranking ones (Zuze, 2011). Mizil et al. (2010) mentioned three fundamental differences for organic vs paid ad results. Firstly, for every search done by the user, the organic results aim to satisfy the query with the most relevant results, while paid results tend to focus on commercial purposes. Secondly, while organic results are primarily ranked based on relevance, ad ranking enhances both relevance and revenue. In addition, Mizil et al. (2010) describe that the short descriptions ("snippets") in organic search results are auto-generated by the search engine using a summarization algorithm, while most sponsored results are manually written by the advertisers. SEO practitioners hold an advantage over paid search ads, which is due to different pricing policies that are implemented by search engines for running ads. Search engines tend to alter their search engine algorithms constantly in order for marketing managers and SEO specialists to switch from improving their organic results using SEO to using paid ad results. Additionally, algorithm improvements that are done by search engines can have a positive effect on both Ads and organic results (SEO), this improvement is likely to increase the number of search users, as more search engine users mean more clicks on both organic and ad results (Li, 2014). A survey conducted by Hotchkiss et al. (2004) of 425 respondents have shown that 77% of the respondents preferred organic results more than paid results, for offering sources of trusted and unbiased information. Another survey conducted by Greenspan (2004) on 1,649 users found that 60% of Google users consider organic search results to be more relevant than paid ones. Despite all of this, Jansen (2007) investigated the relevance of e-commerce queries in sponsored and organic search results and has found that the average relevance rating for both results was nearly the same. Despite the higher success rates that organic results tend to achieve, empirical research shows that most search engine marketing spendings (82%) have gone towards paid results campaigns compared to 12% spent on SEO and another 6% which were spent on other search engine marketing strategies (Sullivan, 2002). However, a question that interests many firms is which keywords will have the best return-on-investment (ROI). For paid search, managers try to

find the keywords that will provide a high click-through rate and consequently higher conversion rates. As for organic search, the goal is set to be the same, but since SEO depends on plenty of metrics including the keyword type (e.g short tail, longtail, product defining, geo-targeting, etc), firms will invest in tailoring their website to focus on searches that return a high rate of conversion (Ghose, Yang 2009a).

1.3. consumer behaviour and attitude towards paid versus organic search results

Ghose, Yang (2008) used real-life click data from a web search engine, the purpose was to investigate the relationship between the usefulness of the ads and their textual similarity to the organic results, and proposed a model that explains this relationship. They later introduced the concept of responsive and incidental ads, which correlate to the narrow and broad explanation of the user's information needs. Based on their research they found that the user acceptance degree of organic to-ad results similarity depends on the type of searched keyword or query. Their findings supported the hypothesis they presented which stated that the clickthrough rates on ads and organic results are negatively correlated, by concluding that in case of navigational queries (searches with the intent of finding a specific website or web page such as "Facebook") they are fully satisfied by the top organic result, while ads are likely to appear as duplicative to this result. Moreover, in the case of informational queries (such as "what is" or "how to"), the ad results are perceived as less beneficial since they are considered too far from the user's searched query. Ma et al. 2010, tested 2 product online vendors: TV and camera vendors. They found that vendors' websites with low customer ratings tend to rely on paid ad results more than organic ones. That is since paid results tend to offer lower average prices. This according to Ma et al. 2010, contributes to the usefulness and popularity of the business model of paid ad results. Consequently, indicating a lower average price is a way for unsatisfactory websites to drive price-driven consumers into buying their products. Kobylanski, Allegheny (2012) found that users mostly do not pay attention to whether the link they click on is organic or sponsored but rather take the informativeness factor as the decision making factor. And as a result, what makes users click on a certain result is rather based on how relevant the content of the result is. Their findings suggest that a sponsored result

could be as attractive as an organic one if it satisfies the user's searched query. This consequently suggests that the keyword category does not depend on increasing the likelihood of the user exploring a certain sponsored link rather than the high relevance of the keyword search by the user to the search result. This supports the expectancy-value model's implication when it comes to the consumer decision-making process when obtaining more information towards an "object" which is the search result in this case. In addition to the theory that people tend to search for information to help decrease the feeling of uncertainty when deciding on a destination (Fodness, Murray, 1997). Gauzente (2010) studied the consumer reaction towards paid ad results and has found that the favorableness towards paid ad results does not differ from users in terms of social class or age, but it does differ in terms of gender. The research has found that male surfers are more favourable to purchase online and that the probability of sponsored ad results to attract male consumers is higher than females showing 60% of favorableness for men compared to 40% for women. However, this research focuses on the effect of prior knowledge of ad results and does not measure the attitudes towards clicking on an ad versus an organic result.

Carrying on from previous research the author aims to examine the factors that are at play when users decide on clicking a certain result, as well as to measure factors such as gender and the choices they make when displaying organic and ad results to. Additionally, The author aims to find out the attributes that form up the expectancy-value model that users look for when deciding to click on an ad vs organic result, as well as to examine the informativeness factor described by Kobylanski, Allegheny (2012) and determine the attributes that users find "informative" when clicking on a certain result. As previous research has mostly circled the dynamics of search results from the business perspective by measuring certain businesses' performances and ROIs, and only partially explained the factors that influence consumer behaviour with respect to attitudes towards search ads vs organic results. This leaves a research gap that the author wishes to examine when it comes to the effect of paid and organic results from the consumer behaviour and attitudes perspective.

2. RESEARCH METHODOLOGY

In this part, the research method and data collection process are explained. The data collected for research is gathered by a questionnaire. Recommendations and proposals will be given based on the results. The quantitative method emphasizes objective measurements and statistical analysis of the questionnaire using scientific techniques. Quantitative research focuses on gathering numerical data. This research will use a descriptive design to establish associations between variables as well as to make comparisons between groups. The reasons to choose the quantitative method in this research is due to the lack of research in the study of attitudes towards search results (Rutberg, Bouikidis, 2018). Additionally, quantitative research presents advantages such as providing estimates from a sample that can be related to the entire population to a certain degree (Sukamolson, 2007). In addition, quantitative research is based on data and solid measurements that can record and reflect the perceptions and behaviours of individuals. And the ability to forecast because the data can be valid and therefore reused in the future. And finally, it allows having control over the validity of the relationship between dependent and independent variables (Queirós et al. 2017).

The questionnaire was made to ask participants to report directly on their judgments and the reasons for their decision-making processes. The questionnaire was conducted over the Internet and included 17 questions with multiple choice answers and input gaps. The reason why the author proceeded with a quantitative approach instead of a qualitative one is that it would help to measure and attain a deep understanding of the search users' attitudes. This approach aims to determine the factors that play out in users' decision-making process and behaviour by testing and adding on existing theories related to users' attitudes when users are displayed paid vs organic search results to. The author will address attitudes as "favour" or "favorableness" in this part of the research, as attitudes are defined as a person's favourable or unfavourable evaluations towards an object (Kolter, 2000).

Since the purpose of collecting data is to address the research problem, primary data is used for the questionnaire. Using Voluntary response sampling, the questionnaire was distributed through

online social platforms such as Facebook and Instagram which were to be answered by all demographic groups over 18 years old. The questionnaire was used in order for the author to allow thorough communication between the respondents and their behavioural patterns, by asking the respondents questions that elevate to answering the sophisticated research questions. The online survey was conducted voluntarily and anonymously. The data was collected in 3 days, with a total of n=93 respondents, 40 Males, and 43 females, and 4 respondents who preferred not to mention their gender. The majority of respondents are from Gen Z (18-24) years old, they represent 35 respondents in total, while the second-highest are from the ages of 45- 54 years representing 20 respondents. Following were the respondents of age groups 35-44 (16 respondents), 25-34 (12 respondents), and the lowest number of participants was from people who were 55 and older with 10 respondents.
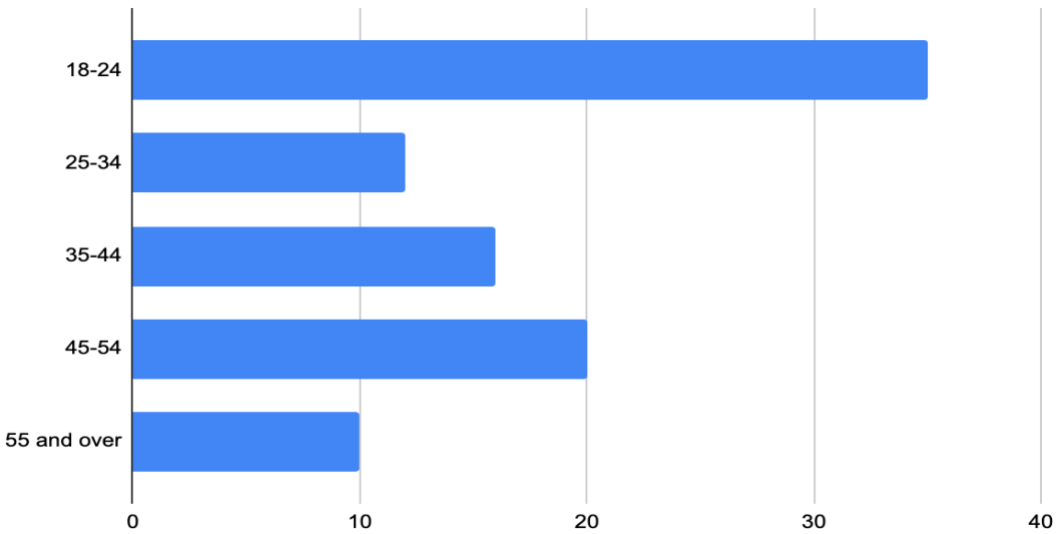

Figure 1. Age of respondents

Source: composed by the author

The survey consisted of 17 questions which took approximately 5 minutes to complete. The survey was available in two languages, English and Arabic to allow respondents from different regions to complete the survey accurately. The number of respondents in Arabic is 50 compared to 43 of English respondents. 78 respondents represented developing countries compared to 15

respondents who were residing in developed countries. The survey was divided into 4 parts, the first part consisted of general questions regarding the users' search engine attitudes, frequency of looking up products and services online, and reasons for choosing a certain search result. The second part focused on Paid search results, and how the users feel and react towards them. The third part on the other hand focused on organic search results, where the participants were asked similar questions to the paid search section but in regards to organic results. The final part consisted of demographic questions such as Age, Gender, and country of residence. A 5 point Likert scale and multiple-choice questions were present, while some questions allowed the participants to insert their additional opinion if needed. The results were collected from the data using descriptive statistical analysis. The results were analyzed using a Google spreadsheet. The data was gathered, translated, and categorized before composing visuals through tables and charts.

3. RESULTS

The questionnaire consisted of questions that relate to the consumer behaviour and attitudes of online users, The first three questions were presented to gain a general idea about consumer attitudes and habits during their online shopping and information seeking experience. On the first question, respondents were asked to determine how often do they search for products and services online, the majority of the respondents answered between "frequently" and "very frequently" which represented 68 responses, while on the other hand, the rest of the respondents answered "rarely" and "occasionally" which represent 25 of the total amount of respondents. However, none of the respondents indicated "never" which gives a clear indication that 100% of the respondents were aware of the information-seeking process in search engines. The next question was What kind of search results attract the users to visit a certain website. This question was aimed to understand the attributes that users look for when deciding on which website to click on.
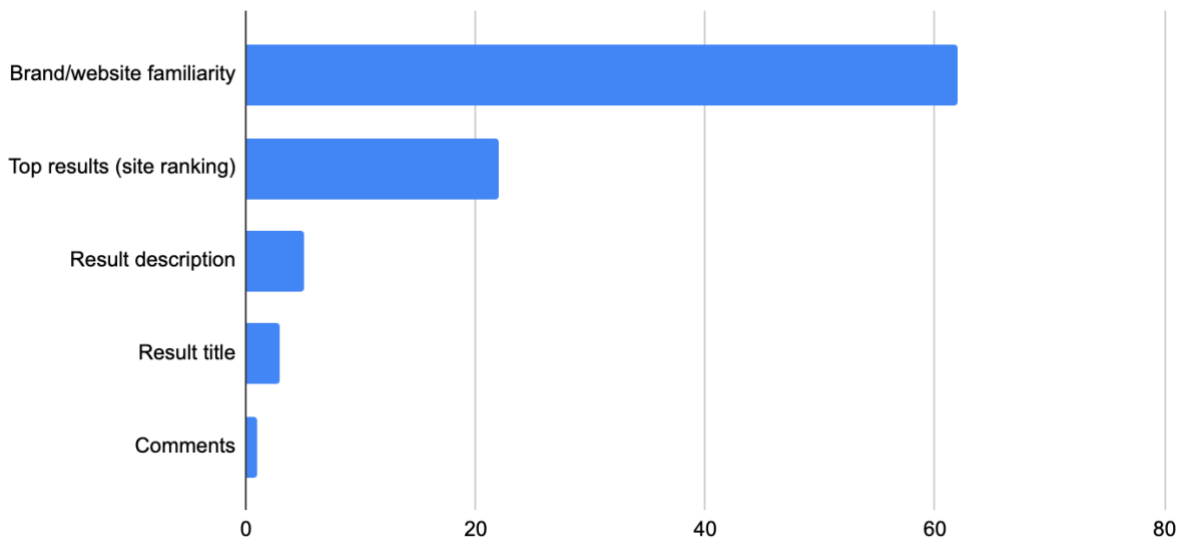

Figure 2. Factors that attract users to click on a search result

Source: composed by the author

In figure 2, 62 respondents chose that the brand and website familiarity are the main reasons for

visiting a search result, meanwhile, the factor that came out second was the site ranking, showing a number of 23 respondents in total. Surprisingly for the result description as well as the title did not account as an important attribute to the users showing 8 responses for both options. The participants were then shown two images of search results, one of them was an organic result (figure 3.1) while the other was an ad (figure 3.2), both from the same website targeting the same keyword. The respondents were asked to choose between these two almost identical results.
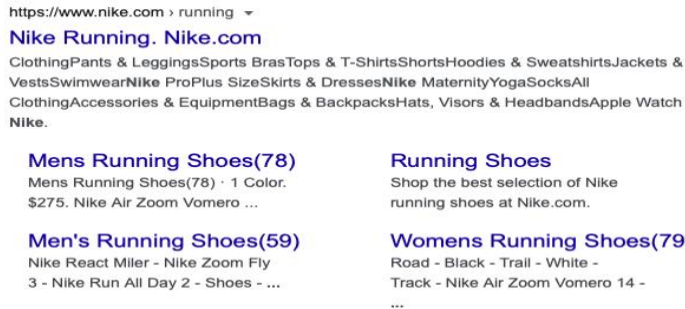

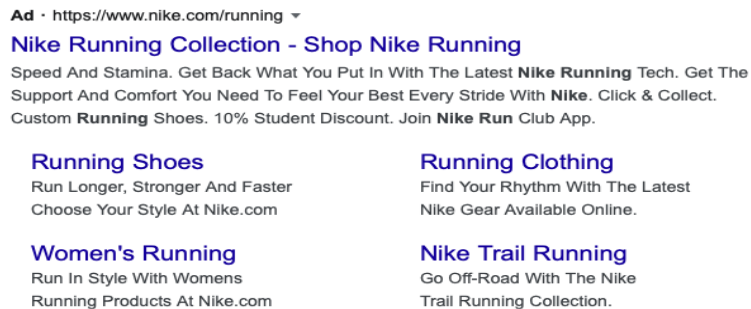Figure 3.1. Organic result

Source: composed by author

Figure 3.2. Sponsored ad result

Source: composed by the author

The results were that 53 respondents favoured the organic result, while only 12 respondents indicated that they would choose the ad, 28 respondents, however, indicated that they are indifferent between both results. Additionally, the relation between gender and choice of the result was tested using chi-square analysis to see and better understand the relationship between the choice and gender variables.

Table 1.1. Case processing summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * If you were shopping for running shoes online, which search result are you more likely to click on?	93	100.0%	0	0.0%	93	100.0%

Source: author's calculations based on data from appendix 1

Table 1.2. Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.676[a]	4	.046
Likelihood Ratio	11.665	4	.020
Linear-by-Linear Association	4.825	1	.028
N of Valid Cases	93		

a. 3 cells (33.3%) have an expected count of less than 5. The minimum expected count is .65.
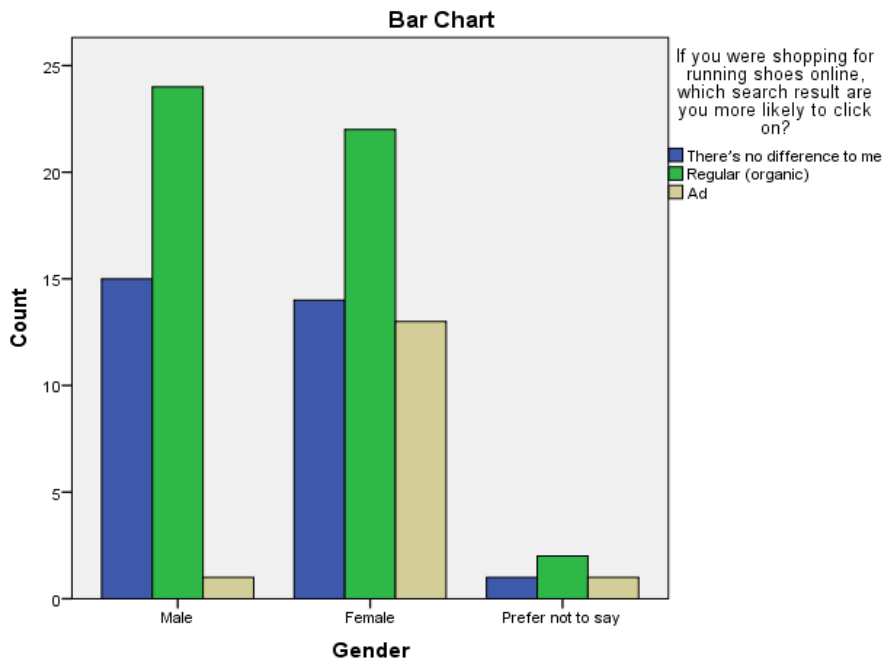
Source: author's calculations

Figure 4. "If you were shopping for running shoes online, which search result are you more likely to click on?"

Source: composed by the author

A chi-square test for independence with α= .05 was used to assess whether gender is related to the choice of people to click the running shoes on online shopping. The chi-square test was statistically significant, χ^2 (4, 93) = 9.68, p <.05, with a Phi (φ) coefficient of .32, indicating a small to a medium relationship. This confirms a relation existing between gender and the choice of people to click on a search result. Figure 4 illustrates a higher tendency towards clicking on the ad result from the female respondents, compared to n= 1 for male respondents. The chart also indicates that the majority of the male and female respondents would more likely choose to click on an organic result.

The respondents were then asked about which search result did they trust more, 18 of them indicated that they trusted ad results more compared to 58 participants who indicated trusting the organic results. However, 17 respondents have shown no that they do not find a difference in the level of trust between both results.

3.1. Paid search results

Throughout the paid search results part of the questionnaire, the respondents were asked three Likert scaled questions about their opinion towards search ad results. The questions and the results are shown in figure 5.
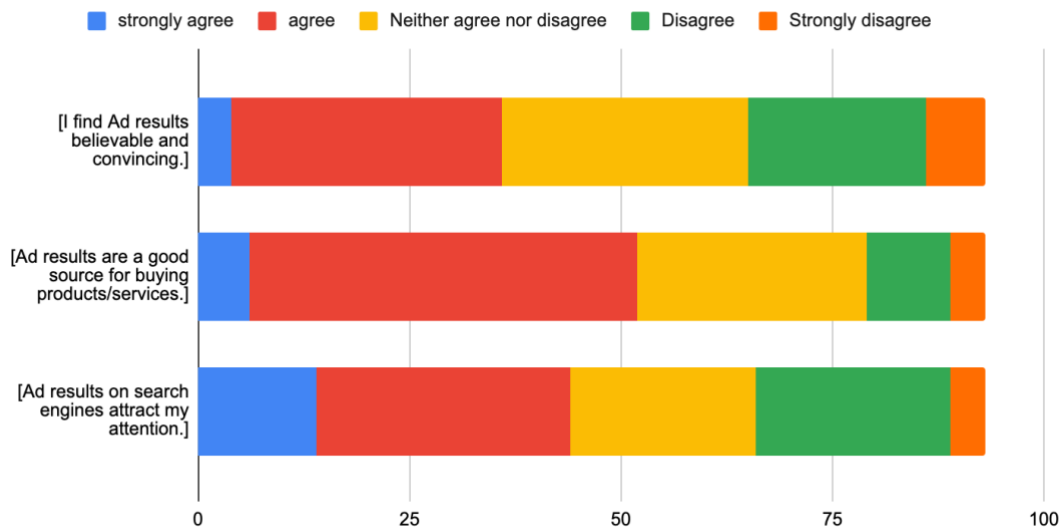

Figure 5. "To what extent do you agree with the following statement"
Source: composed by the author

The results in figure 5 have shown an average of 44 of respondents' favourableness towards ad results for being believable and convincing, a good source for buying products and services, and that they attract their attention. On the other hand, an average of 26 of the respondents neither agree nor disagree with the statements shown in the figure, while an average of 23 respondents indicated disagree or strongly disagree with the statements.

A question was asked related to how often do the respondents click on paid search results when they look for a certain product/service, the results have shown that the majority of respondents (36) indicated that they rarely click on paid ad results, compared to 11 respondents who never do, while 15 respondents indicated that they either frequently or very frequently click on them, and

31 indicated that they occasionally do.

The respondents were later asked how often they consider looking at ad results when they look for a certain product or a service. The results have indicated that 19 respondents consider looking at the ad results either "frequently" or "very frequently", while 28 indicated "occasionally", 35 respondents indicated "rarely". While 11 indicated that they never consider looking at the ad results. The respondents who chose either "never" or "rarely" which were 39 in total were exceptionally redirected to a conditional question that asked about the reasons why they choose to ignore the ad results. Figure 6 shows the responses related to this question.
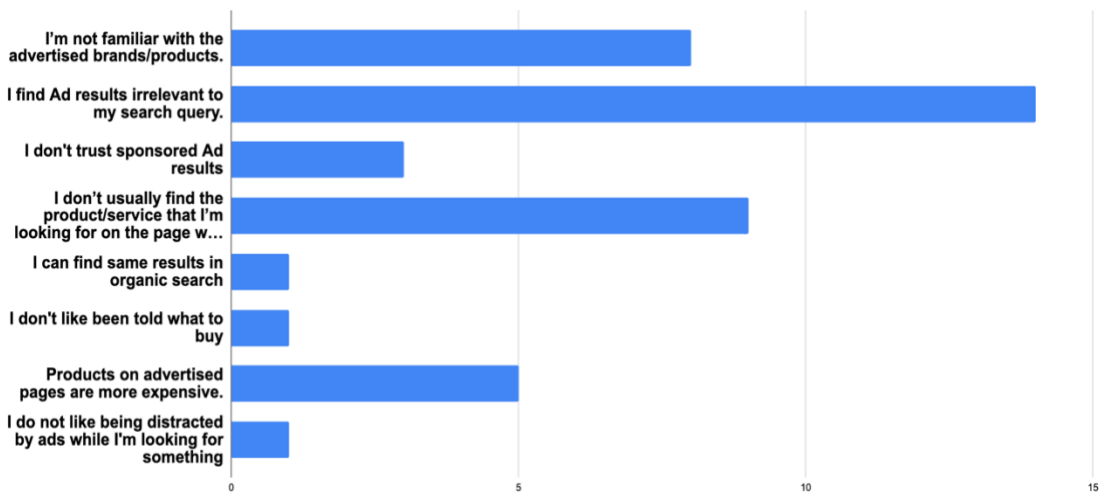

Figure 6. Reasons why users choose to ignore ad results

Source: composed by the author

The majority of those respondents indicated that ad results were found irrelevant to their searched query while the reason that came second was that those respondents do not usually find what they are looking for when they click on an ad result. 3 respondents added an answer manually, arguing that they do not have trust towards ad results in general.

3.2. Organic search results

In the third part of the questionnaire, the respondents were asked questions related to organic search results, the questions were mostly asked as opposed to the questions asked in the second part of the questionnaire. On the first question of the organic search part, the respondents were asked a contradicting question to one of the questions in part two, they were asked if they consider organic results to be better than ad results to find information about the product or service that they need. As shown in figure 7, the responses for the same question towards ads vs organic results indicate that the majority of respondents are in favour of organic results showing that 68 of them either strongly agree or agree with the statement. While for ad results the respondents indicated higher rates towards disagreeing with the statement with 25 respondents disagreeing that ad results are considered better and the majority (38 respondents) reported that they neither agree nor disagree that ad results are considered a better source than organic results.
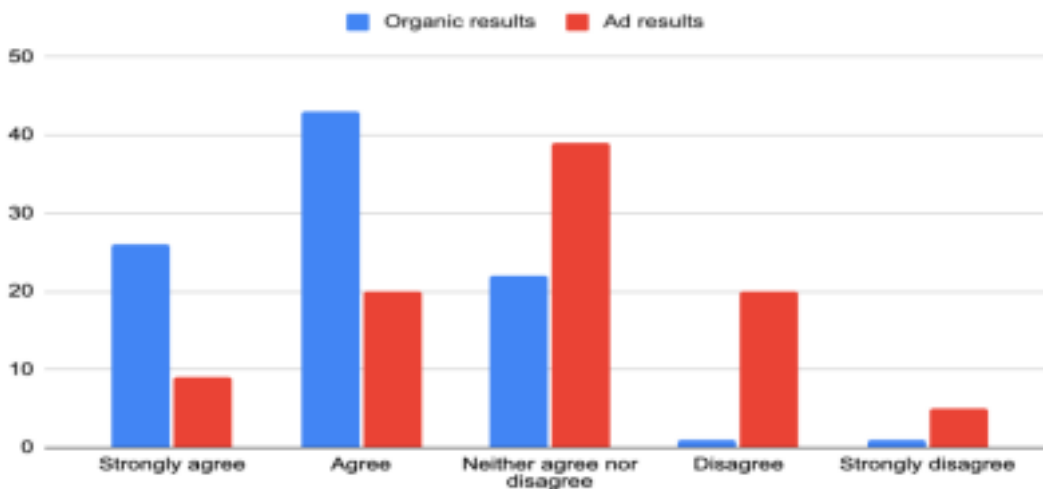

Figure 7. "Do you consider organic /ad results to be better to find information about the product or service that you need?"
Source: composed by the author

Following was a question asked to determine how often do the respondents consider purchasing products/services from an organic result compared to an ad. 15 respondents indicated frequently or very frequently, while 31 respondents indicated occasionally. The majority of the respondents (36) indicated that they rarely do, while 11 respondents indicated never.

Two questions were asked to the respondents to compare if they found their organic and search results relevant to their search query, the questions were asked in separate parts of the questionnaire using the same aim which is to find which type of result is more relevant to the respondents, figure 8 shows the results.
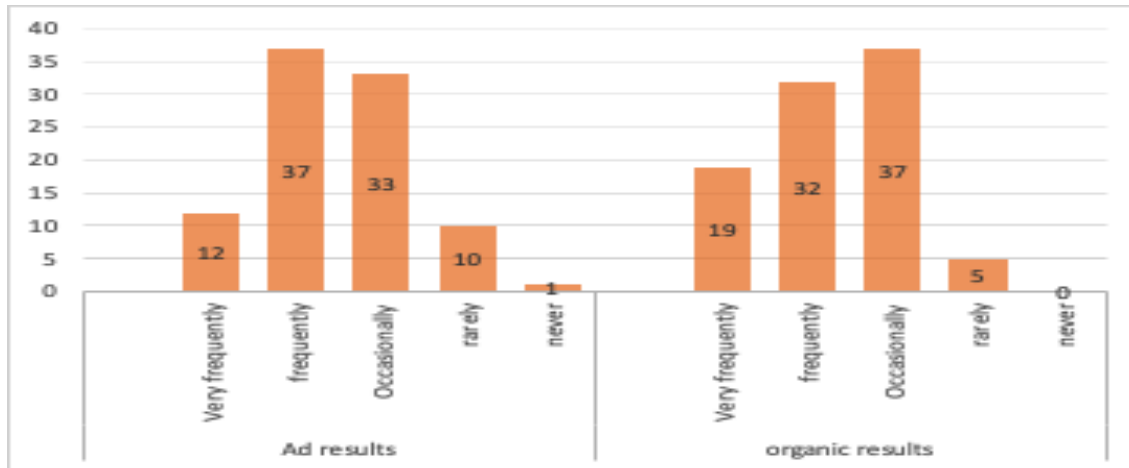

Figure 8. "To what extent do you think your search engine's ad/organic results are relevant to your search query?"
Source: composed by the author

The results indicate no significant difference between the relevance of both results to the respondents. Showing that 49 of the total number of respondents frequently or very frequently find ad results relevant to their search query, compared to 51 respondents who indicated that they find organic results frequently or very frequently relevant to their search query.

Throughout the questionnaire, the respondents were faced with a list of products and services and were asked to select the result that they would choose when it comes to buying this certain product or service online, the respondents had to choose between either one or both results types. Figure 9 illustrates the respondents' attitudes towards ad and organic results based on each product or service.
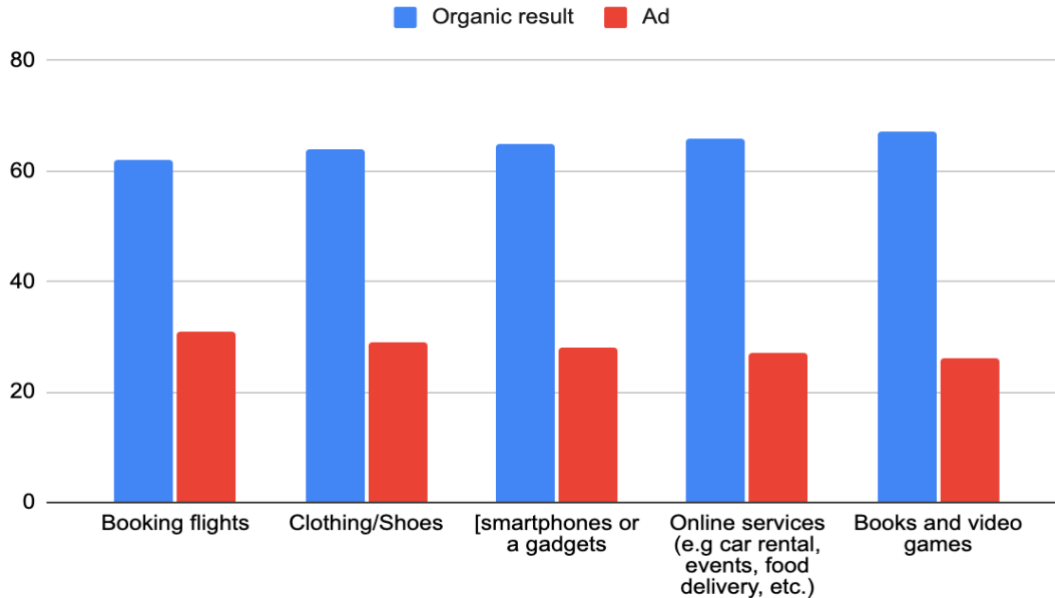
Figure 9. Consumer attitude towards ad and organic results in different products and services. Source: composed by the author

The results illustrate that the searched products and services approximately show the same amount of attitude between both results, indicating that 63 respondents would favour selecting an organic result, compared to approximately 30 respondents who would consider choosing ad results to look for these products and services.

3.3. Discussion

The results have indicated that the majority of the respondents are in favour of clicking on a certain result due to the website and brand familiarity which shows a habitual buying behaviour towards the brands that they are familiar with. This behaviour was also reflected by illustrating that even when they are faced with two identical results in which one of them is an ad and the other is an organic result, the majority of users will be in favour of the organic result, compared to a smaller amount of users who would favour the ad, and 30.4% indicating that they do not find differences in clicking on either of them. The results have shown that consumers' attitudes are

biased to choosing organic results, this has been shown from the questions that were proposed to them regarding levels of trust, convenience, and favorableness towards each type of result. This may also refer to Mizil et al.'s (2010) theory that when ads are too similar to the organic results the user can perceive them as redundant information. Additionally, the major difference between the users' choice of organic over ad results points out that the marketers and businesses are likely to receive more traffic and user conversions if they were to invest in improving their organic ranking, since users are more likely to find their results favourable to their search needs. The findings suggest that placing an ad where the same website's result is on top of the organic results is redundant.

Using the chi-square test, an association between gender and the choice to click on an ad vs organic result was found to be statistically significant. The results show that females are more in favour of clicking on the ad result compared to males who were more in favour of clicking on the organic result. The count of males and females who were indifferent between both results was found to be almost identical. This result has shown a difference compared to Gauzente's (2010) study on the effect of prior knowledge when clicking on the ad results which showed that males were more favourable to click on the ad result compared to females. One explanation for this could be due to males and females' attitudes differing while looking for products, as females prefer using engagement approaches which is the Ad result in this case, while males on the other hand prefer straightforward, information-driven approaches (Li, 2006).

When it comes to the level of trust towards ad results, the majority of the respondents have indicated trusting organic results more, this shows that ad results still lack the factor of trustworthiness in the eyes of the users, this could be since Hotchkiss et al.'s (2004) research findings that users are can be favourable towards results since that offer sources of trusted and unbiased information. Moreover, When the respondents were asked to what extent do they think their search engine's ad/organic results are relevant to their search query, the results have shown no significant difference between both results. However, one of the major reasons that the responders who do not look at the ad results indicated in the reasons why users choose to ignore ad results question, was that they found ad results irrelevant to their search term. This is due to the conclusion made by Kobylanski, Allegheny (2012) that users form a positive attitude towards

ad results only when they are highly relevant to the searched term or query. This is what ad results seem to lack in that matter. As for the reason that came out second for the respondents who tend to skip ad results is that they don't usually find the product or service that they are looking for once they land on the ad page result, this corresponds to Fishbein and Ajzen's (2000) expectancy-value model. Where the object in our case is the ad result and the attitude that is formed towards the ad result, in this case, becomes negative due to the unavailability of information obtained once the user clicks on a paid result. This directly explains why some users choose to ignore ad results when they look for products or services. Additionally, when the respondents were asked to indicate their attitude towards ad and organic results in their search for different products and services (booking flights, shoes/clothing, gadgets, online services, and books or video games). The results have shown approximately the same attitude between both results for all the products and services that were listed. Indicating a higher degree of favorableness towards organic results. This was used to gather an understanding of the decision-making process of consumers towards different types of products. In addition to assessing further Ma et al. 2010 research about the 2 product variances, which were addressed from the perspective of the product vendors.

The author recommends that future research could compare the results used in this paper with data of other search engines since the findings are relevant to Google which may differ for other users using search engines that operate under different search algorithms. Future studies could additionally examine more into the behavioural process of users towards more product and service types and examine the reasons behind their choices based on the material worth of each product/service or other attitude influential factors.

Finally, as previous research has solely focused on comparing paid vs organic search results using user conversion metrics by estimating the amount of traffic and ROI that websites are likely to achieve on each, this research aimed to fill the research gap when it comes to understanding what lies behind the behaviour and attitudes of users to choose to click on a certain result. As a result, the author recommends that business and marketing managers should take into account the biased behaviours of search users towards organic results, and lean towards search engine optimization. While practitioners should also consider improving the relevance of their targeted ads by

targeting their ad search results using more precise keywords that can satisfy the users' search query. In addition to avoiding placing ads in search results where their website is ranking on the first position. While paid ad results are considered costly despite that most search engines use a CPC (cost per click) model, managers should look into investing more in SEO specialists as improving their rankings will guarantee more users to find their website a reliable source of information or e-commerce. As for the chi-square results showing a higher tendency for females to click on ad results, marketing managers should consider using Ad results that can target female consumers (e.g. women running shoes), while focusing on improving their SEO strategy to target their male consumers using organic results.

CONCLUSIONS

The internet has become one of the most accessible sources for obtaining information related to products and services. This has led consumers to depend on online sources for obtaining information such as search engines. Consequently, this has led search engines to rely on paid ad results as their main source of income. While on the other hand, from the consumer perspective, the ad results are perceived differently from the organic ones. The purpose of this thesis was to find out the factors that play out in users' attitudes and decision-making processes when displayed paid vs organic search results to. As well as to determine the key elements that influence the consumers' behaviour and decision-making process to click on paid versus organic results.

Previous research has indicated that the consumer lifestyle involves external and internal elements. Those elements were further divided into two components which are consumer background characteristics and behavioural processes. While consumer background characteristics are considered as to how consumers perceive themselves, which is an aspect that cannot be changed. On the other hand, behavioural processes are affected by the environment which is acquired through motivational, learning, attitude formation, perceptual, and decision-making tools. The research focused on the attitude formation and decision making processes to help determine the factors influencing the decision-making process of the information-seeking consumers. To find out those factors, a questionnaire was conducted using Voluntary response sampling, the questionnaire was distributed throughout online social media platforms targeting all demographic groups of 18 years old and older. The questionnaire was used in order for the author to allow thorough communication between the respondents and their behavioural patterns, by asking the respondents questions that elevate to answering the research questions. The online survey was conducted voluntarily and anonymously. The results have shown that the majority of the respondents choose to click on a certain result due to the website and brand familiarity. This has shown a habitual buying behaviour towards the brands that they are familiar with. This behaviour was also visible when the respondents were faced with two identical results, in which one of them is an ad and the other is an organic result, the majority of the respondents chose that

they would click on the organic result, compared to only 13% who indicated that they would choose the ad. The results have shown that consumers are biased to choosing organic results, this has been shown from the questions that were proposed to them regarding levels of trust, convenience, and favorableness towards each type of result. This can be due to Mizil et al. 's (2010) theory that when ads are too similar to the organic results the user can perceive them as redundant information. Additionally, one of the main reasons that the responders who chose to ignore the ad results indicated was that they found ad results irrelevant to their search term. This can be seen based on the conclusion made by Kobylanski, Allegheny (2012) that users form a positive attitude towards ad results only when they are highly relevant to the searched term or query, which ad results seemed to lack in that matter. Another reason that affected users' decision making process for clicking on an ad result was that respondents reported that they don't find the product or service that they are looking for once they click on the ad result, which corresponded to Fishbein and Ajzen's (2000) expectancy-value model, where the attitude that is formed towards the ad result becomes negative due to the lack of information that ad results provide for the user. The author recommends that business and marketing managers should take into account the biased behaviours of search users towards organic results, and lean towards search engine optimization. While paid ad results are considered costly despite that most search engines use a CPC (cost per click) model, managers should look into investing more in SEO specialists as improving their rankings will guarantee more users to find their website a reliable source of information. As the results showed a higher tendency for females to click on ad results, marketing managers should consider using Ad results that can target female consumers, while focusing on improving their SEO to target their male consumers with organic results.

This thesis has several limitations. These limitations arise from the lack of information collected from the questionnaire participants. For example, the author does not have precise data on the click-through rates of users towards each search result. That is, the author cannot determine precisely how often each participant reacts to certain results or measure the ratio of paid to organic clicks. Further, the results were purely based on Google users' search behaviour. Future work could compare the results used in this paper with users of other search engines. Future work could also examine more into the behaviour of users towards different product and service types and justify the reasons behind their choices based on the material worth of each product/service.

LIST OF REFERENCES

Ajzen, I., Fishbein, M. (2000). Attitudes and the Attitude-Behavior

Relation: Reasoned and Automatic Processes, European Review of Social Psychology, 11:1, 1-33.

Brown, N. (2021). How much does SEO cost? The true price of SEO services in 2021.

Retrieved from: https://accelerateagency.ai/how-much-does-seo-cost-pricing, 10 December 2021.

Digital advertising spending worldwide 2018-2024. Statista. Retrieved from: https://www.statista.com/statistics/237974/online-advertising-spending-worldwide/,19 April 2021.

Drolet, D. (2017). Search a Favored Tactic for Marketers Worldwide. Retrieved from: https://www.emarketer.com/Article/Search-Favored-Tactic-Marketers Worldwide/1015704, 19 April 2021.

Fishbein, M., Ajzen, I. (1975). Belief, attitude, intention and behaviour: An introduction to theory and research, (27).

Fishbein, M. (1967). Attitude and the prediction of behaviour. In M. Fishbein (Ed.), Readings in attitude theory and measurement (pp. 477-492).

Fodness, D., & Murray, B. (1997). Tourist information search. Annals of Tourism Research, 24(3), 503-523.

Ghose, A., Yang, S. (2008). Comparing performance metrics in organic search with sponsored

search advertising. In Proceedings of the 2nd International Workshop on Data Mining and Audience Intelligence for Advertising (ADKDD '08). Association for Computing Machinery, 18–26.

Ghose, A., Yang, S. (2009a). An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets. Management Science, 55 (10), 1605-1622.

Ghose, A., Yang, S. (2009b). Management Science, Oct., 2009, Vol. 55, No. 10 (Oct., 2009), pp. 1605-1622

Greenspan, R. (2004). Searching for balance. vol. ClickZ stats.

Gauzente, C. (2010). The intention to click on sponsored ads—A study of the role of

prior knowledge and of consumer profile, Journal of Retailing and Consumer Services, Volume 17, Issue 6, Pages 457-463.

Hansen, T. (2005). Perspectives on consumer decision making: an integrated approach. Journal of Consumer Behaviour, 4: 420-437.

Harris, R. (1998). Introduction to decision making. Retrieved from: http://www.virtualsalt.com/introduction-to-decision-making-part-1/, 1 December 2021.

Hotchkiss, G. (2004). Into the mind of the searcher. Retrieved from: https://www.manningmarketing.com/dvi/wp-content/uploads/2019/07/Inside-the-Mind-of-the-Searcher-2004.pdf, 1 December 2021.

Jafarzadeh, H., Aurum, A., D'Ambra, J., Ghapanchi, A. (2015). A Systematic Review on Search

Engine Advertising, Pacific Asia Journal of the Association for Information Systems: Vol. 7: Iss. 3, Article 2.

Jansen, J. (2007). The Comparative Effectiveness of Sponsored and Nonsponsored Links for Web E-commerce Queries. TWEB. 1. 10.1145/1232722.1232725.

Jerath, K., Ma, L., Park, Y. (2014). Consumer Click Behavior at a Search Engine: The Role of Keyword Popularity, Journal of Marketing Research, 51(4), pp. 480–486.

Kobylanski, A., Allegheny, P. (2012). Search engine advertising (SEA) or organic links: do customers see the difference?. Journal of Business & Economics Research (JBER), 10(3), 179-190.

Kolter, P. (2000). Marketing management. Perntice-Hall, New Jersey.

Li, K., Lin, M., Lin, Z., Xing, B. (2014). Running and Chasing - The Competition between Paid Search Marketing and Search Engine Optimization. Proceedings of the Annual Hawaii International Conference on System Sciences. 3110-3119.

Li, Q. (2006), Computer-Mediated Communication: A Meta-Analysis of Male and Female Attitudes and Behaviors, International Journal on E-Learning, 5 (4), 525- 570.

Ma, Z., Pant, G., Sheng, O. (2010) Examining Organic and Sponsored Search Results: A Vendor Reliability Perspective, Journal of Computer Information Systems, 50:4, 30-38.

Maake, R. (2020). How Much Does Google Ads Cost? Retrieved from: https://www.webfx.com/blog/marketing/much-cost-advertise-google-adwords/, 10 November 2021.

Mihart, C. (2012). Impact of Integrated Marketing Communication on Consumer Behaviour: Effects on Consumer Decision-Making Process. International Journal of Marketing

Studies Vol. 4, No. 2.

Mizil, C., Broder, A., Gabrilovich, E., Josifovski, V., Pang, B. (2010). Competing for users' attention: on the interplay between organic and sponsored search results. In Proceedings of the 19th international conference on World wide web (WWW '10). Association for Computing Machinery.

Peterson, R.A., Balasurbramanian, S. and Bronnenberg. B.J. (1997). 'Exploring the implications of the internet for consumer marketing', Journal of the Academy of Marketing Science, Vol. 4, Fall, pp.329–46.

Queirós, A., Daniel, F., Fernando, A. (2017). Strengths and limitations of qualitative and quantitative research methods. European Journal of Education Studies.

Rutberg, S., Bouikidis, C.D. (2018). Focusing on the fundamentals: A simplistic differentiation between qualitative and quantitative research. Nephrology Nursing Journal, 45(2), pp.209-213.

Schiffman, L., Kanuk, L. (2009). Consumer Behaviour (10th ed.). Prentice Hall, (Chapter 8, 9).

Sen, R. (2005). Optimal Search Engine Marketing Strategy. International Journal of Electronic Commerce, 10:1, 9-25.

Swati, P., Pawar, B., Ajay, S. (2013). Research Journal of Computer and Information Technology Sciences 1 (1), 10-13.

Sukamolson, S. (2007). Fundamentals of quantitative research. Language Institute Chulalongkorn University, 1, pp.2-3.

Sullivan, D. (2002). LookSmart Changes to Cost-Per-Click Listings. Retrieved from:

https://www.clickz.com/looksmart-changes-to-cost-per-click-listings/84656/, 1 December 2021.

Udell, J. (1965). Can Attitude Measurement Predict Consumer Behavior? Journal of Marketing, Vol. 29, No. 4, pp. 46-50.

Wu, S. (2003). The relationship between consumer characteristics and attitude toward online shopping, Marketing Intelligence & Planning, 21(1), 37-44.

Wells, W., Prensky, D. (1996). Consumer behavior, John Willey & Sons, pp.44-6.

Zuze, H. (2011). The crossover point between keyword rich website text and Spamdexing. The Cape Peninsula University of Technology, Cape Town, South Africa.

APPENDICES

Appendix 1. Questionnaire

Q1. Language [descriptive]	- English (50) - Arabic (43)
Q2. How often do you search for products/services online? [descriptive]	- Never (0) - Rarely (8) - Occasionally (17) - Frequently (29) - Very frequently (39)
Q3. Which search engine do you prefer to use [descriptive]	- Microsoft Bing (0) - Google (93) - Yahoo (0) - DuckDuckGo (0) - Other (open-ended) (0)
Q4. What kind of search results attract you to visit a website? (you can select one or multiple options) [attitudes]	- Brand/website familiarity (62) - Top results (site ranking) (22) - Result title (3) - Result description (5) - Other (open-ended) (1)
Q5. If you were shopping for running shoes online, which search result are you more likely to click on? [behaviour]	- Ad (12) - Regular (organic) (53) - There's no difference to me (28)

Q6. Which search results do you trust more? [attitudes]	- Organic results (58) - Sponsored results (Ads) (18) - There's no difference to me (17)
Q7. How often do you click on paid search results (marked as "Ad") when you look for a certain product/service? [behaviour towards ad results]	- Never (11) - Rarely (36) - Occasionally (31) - Frequently (10) - Very frequently (5)

Q8. To what extent do you agree with each of the following statements? [attitudes towards ad results]	
8.1. I find Ad results believable and convincing.	- Strongly agree (4) - Agree (32) - Neither agree nor disagree (29) - Disagree (21) - Strongly disagree (7)
8.2. Ad results are a good source for buying products/services.	- Strongly agree (6) - Agree (46) - Neither agree nor disagree (27) - Disagree (10) - Strongly disagree (4)

8.3. Ad results on search engines attract my attention.	- Strongly agree (14) - Agree (30) - Neither agree nor disagree (22) - Disagree (23) - Strongly disagree (4)
Q9. To what extent do you think your search engine's Ad results are relevant to your search query? [attitude towards ad results]	- Never (1) - Rarely (10) - Occasionally (33) - Frequently (37) - Very frequently (12)
Q10. Do you look at the Ad results on google when you're searching for a product/service? [attitude towards ad results]	- Never (11) - Rarely (28) - Occasionally (35) - Frequently (12) - Very frequently (7)
Q11. Why do you choose to skip the Ad results? (select one or multiple) [behaviour towards ad results]	- I'm not familiar with the advertised brands/products. (8) - Products on advertised pages are more expensive. (5) - I don't usually find the product/service that I'm looking for on the page when I click on an Ad result. (9) - I find Ad results irrelevant to my search query. (14) - Other (6)

Q12. How much do you agree with the	- Strongly agree (26)

following statement? - "organic results are better than Ad results to find information about the product/service that I need when I click on them." [attitudes towards organic results]	- Agree (43) - Neither agree nor disagree (22) - Disagree (1) - Strongly disagree (1)
Q13. How often do you consider purchasing products/services from an organic result compared to an Ad one? [behaviour towards organic results]	- Never (4) - Rarely (9) - Occasionally (37) - Frequently (19) - Very frequently (24)
Q14. Do you find organic results relevant to your search query? [attitudes towards organic results]	- Never (0) - Rarely (5) - Occasionally (37) - Frequently (32) - Very frequently (19)
Q15. Which results would you consider checking when you're buying the following products/services (you can select one or both) [behaviour towards organic and ad results]	- Booking flights (organic: 62, Ad: 31) - Clothing/Shoes (organic: 64, Ad: 29) - smartphones/gadgets (organic: 65, Ad: 28) - Online services (e.g car rental, events, food delivery, etc.) (organic: 66, Ad: 27) - Books and video games (organic: 67, Ad: 26)

Q16. Age [descriptive]	- 18-24 (35) - 25-34 (12) - 35-44 (16) - 45-54 (20) - 55 and over (10)
Q17. Gender [descriptive]	- Female (49) - Male (40) - Prefer not to say (4)
Q18. Country of residence [descriptive]	Open-ended answer Developed countries: (15) Developing countries: (78)

Source: Prepared by the author.

Appendix 2. Non-exclusive licence

A non-exclusive licence for reproduction and publication of a graduation thesis[11]

I Ahmed Elsherif (*author's name*)

    1. Grant Tallinn University of Technology free licence (non-exclusive licence) for my thesis.

Consumer attitude and behaviours towards paid versus organic search results.

(*title of the graduation thesis*)

supervised by: Denitsa Dineva, PhD

(*supervisor's name*)

1.1 to be reproduced for the purposes of preservation and electronic publication of the graduation thesis, incl. to be entered in the digital collection of the library of Tallinn University of Technology until expiry of the term of copyright;

1.2 to be published via the web of Tallinn University of Technology, incl. to be entered in the digital collection of the library of Tallinn University of Technology until expiry of the term of copyright.

2. I am aware that the author also retains the rights specified in clause 1 of the non-exclusive licence.

3. I confirm that granting the non-exclusive licence does not infringe other persons' intellectual property rights, the rights arising from the Personal Data Protection Act or rights arising from other legislation.

_____13.12.2021_____ (date)

---

[1] *The non-exclusive licence is not valid during the validity of access restriction indicated in the student's application for restriction on access to the graduation thesis that has been signed by the school's dean, except in case of the university's right to reproduce the thesis for preservation purposes only. If a graduation thesis is based on the joint creative activity of two or more persons and the co-author(s) has/have not granted, by the set deadline, the student defending his/her graduation thesis consent to reproduce and publish the graduation thesis in compliance with clauses 1.1 and 1.2 of the non-exclusive licence, the non-exclusive license shall not be valid for the period.*