Optimal Search Engine Marketing Strategy Customer Behaviour

(Case studies from Saudi Arabia)

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Abstract: In the era of the information age, it is normal for a business to have an online attendance on the Internet. However, existence alone is insufficient; the business has to be obviously visible on the search engine whenever a user searches for a product or service provided by that type of business in order to survive and thrive in a competitive market. Thus, the significance of an optimal search engine marketing strategy is extremely important for marketers in particular and for businesses.

This study, two case studies from Saudi Arabia were selected to explore this subject. The essay considered how the two selected case studies use Search Engine Optimization (SEO) and paid listings such as Pay Per Click (PPC). Data was gathered from secondary data such as that provided by government departments and business reports.

The objective of this study is to understand and explore the massive contribution of paid listings and SEO as search engine tools, to examine how both can serve to raise the number of user/potential customer visits to business websites and to determine what the major challenges are with respect to when and why marketers should use paid listings and/or SEO.

This Study found that both case studies invest a low budget in their SEO. In contrast, they both devoted a larger part of their search engine marketing budgets to PPC. However, it was found that SEO brings a higher number of clicks compared to PPC, suggesting that more visitors/users that business could be converted into actual customers.

The recommendations of this study can be used to guide the marketers to correct their choice of an optimal search engine marketing strategy, in turn allowing businesses to more accurately determine their online marketing budget.

Keywords: search engine; ppc; seo; digital marketing.

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استراتيجية التسويق الأمثل عبر محرك البحث: فهم سلوك العملاء

(دراسات حالة من المملكة العربية السعودية)

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المستخلص: في عصر المعلومات، من الطبيعي أن يكون لشركة ما حضور عبر الإنترنت على الإنترنت. ومع ذلك، فإن الوجود وحده لا يكفي؛ يجب أن يكون النشاط التجاري مرئيًا بشكل واضح على محرك البحث عندما يبحث المستخدم عن منتج أو خدمة يقدمها هذا

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النوع من النشاط التجاري من أجل البقاء والازدهار في سوق تنافسية. وبالتالي، فإن أهمية استراتيجية التسويق الأمثل عبر محرك البحث مهمة للغاية للمسوقين على وجه الخصوص الشركات.

في هذه الدراسة تم اختيار حالتين دراسيتين من المملكة العربية السعودية لاستكشاف هذا الموضوع. قام الباحثان في دراسة كيفية استخدام الحالتين الدراسيتين تحسين محرك البحث (SEO) والقوائم المدفوعة مثل الدفع مقابل النقر (PPC). تم جمع البيانات من البيانات الثانوية مثل تلك التي قدمتها الدوائر الحكومية وتقارير الأعمال.

الهدف من هذه الدراسة هو فهم واستكشاف المساهمة الهائلة للقوائم المدفوعة وتحسين محركات البحث كأدوات لمحركات البحث، لفحص كيف يمكن أن يعمل كل منهما على زيادة عدد زيارات المستخدمين/ العملاء المحتملين إلى مواقع الويب التجارية وتحديد التحديات الرئيسية فيما يتعلق بالتوقيت ولماذا يجب على المسوقين استخدام القوائم المدفوعة و/ أو تحسين محركات البحث.

وجدت هذه الدراسة أن كلا الحالتين الدراسيتين تستثمران ميزانية منخفضة في تحسين محركات البحث. في المقابل، خصص كلاهما جزءًا أكبر من ميزانيات التسويق عبر محركات البحث الخاصة بهما لـ PPC. ومع ذلك، فقد وجدا أن مُحسّنات محرّكات البحث تجلب عددًا أكبر من النقرات مقارنةً بـPPC ، مما يشير إلى إمكانية تحويل المزيد من الزوار/ المستخدمين إلى عملاء فعليين.

يمكن استخدام توصيات هذه الدراسة لتوجيه المسوقين لتصحيح اختيارهم لاستراتيجية التسويق الأمثل عبر محرك البحث، مما يسمح بدوره للشركات بتحديد ميزانية التسويق عبر الإنترنت بدقة أكبر.

الكلمات المفتاحية: محرك بحث؛ تدفع عن كل نقرة؛ تحسين محرك البحث؛ التسويق الرقمي.

Introduction.

This study aims to explore and comprehend the enormous contribution of SEO and paid placements as an aspect of search engine tools in order to determine how each of them might raise the number of potential consumer visits to company websites.

This study will investigate optimal search engine marketing strategy and how it relates to customer behaviour. It will outline which of optimal search engine marketing strategy is optimal for companies — Search Engine Optimization (SEO) or paid placements such as Pay Per Click (PPC) — looking at two case studies from Saudi Arabia.

Searching the internet has become part of the daily lives of millions of people around the world (Johnsen, 2017). For example, many people look for information about getting directions to their intended destination (Johnsen, 2017). Beyond such mundane applications, search engines are increasingly becoming the sole or primary source directing people to search out more essential information (Sen, 2005). For this reason, search engines engage an eminent position in the online world, making it easier for people to find what they are looking for among the vast number of web pages now available (Johnsen, 2017). They are successful because they undertake the complex work of classifying the huge number of pages and list them in terms of how appropriate they are for the user's search (SERP) (Croft, et al., 2010).

With the continued rise of online life and the growing significance of websites, it has become increasingly difficult for sites trying to reach visitors/potential customer to achieve visibility (Croft, et al., 2010, P. 132). According to Kovalenko and Kuzmenko (2020), around 4 million new websites appear online every month. As a result of this astonishing rise, it has become more difficult for websites to remain visible among the competing sites without using the best available search engine tools (Kovalenko and Kuzmenko, 2020).

This, in turn, makes online marketing a 'hot' topic, and with the outbreak of the coronavirus making online shopping for products and services even more intensive, online marketing has become a highly topical way to explore current trends and make future predictions about the further use of the Internet (Kovalenko and Kuzmenko, 2020). Since it broke out in early 2020, the coronavirus has caused incredible damage to physical businesses. In contrast, online marketing consumption has reportedly risen because of the limited interaction permitted in public places (Statista, 2020).

For this reason, the aim of search engines to appear higher in a search engine listing as a result of a user's search query has never been more important to fulfil (Kharat, et al., 2020, P. 620). Thus, the aim of search engine engineers is to confirm that the essential pages are indexed and, if feasible, to get the page links listed onto the first page of the search results (Kharat, et al., 2020, P. 620). Most of the well- known search engines give 10 results on the first page (Kharat, et al., 2020, P. 620). A relatively small number of users go past the first page when they search for something, so if a website is not in the top 10 results, it is effectively 'invisible' (Kharat, et al., 2020, P. 620).

The objective of this study is to understand and explore the massive contribution of paid listings and SEO as search engine tools, to examine how both can serve to raise the number of user/potential customer visits to business websites and to determine what the major challenges are with respect to when and why marketers should use paid listings and/or SEO.

The recommendations of this study can be used to guide the marketers to correct their choice of an optimal search engine marketing strategy, in turn allowing businesses to more accurately determine their online marketing budget.

This study draws on two case studies from Saudi Arabia. The reason for choosing Saudi Arabia is that most current theories and models were devised in the western world. However, as Zhu and Kraemer (2005) have pointed out, theories and frameworks that have been developed in the context of western countries should be re- examined for use in other nations and cultures, including the Arab world. This is because certain issues that might appear insignificant for western countries may actually be of great significance in other cultures. Hence the Saudi Arabian context was chosen because it represents a culture that might yield illuminating insights into an understudied area for the development of new theories and practices (Zhu and Kraemer, 2005).

Key Definitions:

The following are important definitions that will be helpful to the reader in order to understand the concepts presented in this extended essay:

- **Search Engine Optimization (SEO)** is the skill of customizing components of a website to accomplish the best feasible search engine ranking when a web user/potential customer searches for a keyword (Tsuei, et al., 2020, P. 5).

- **Google Search** is a search engine belonging to Google Inc. Google Search is the most frequently used search engine in the world, receiving approximately 50,000 searches every second. Its main objective is to provide people with appropriate web pages based on the search query used (see Figure 1) (Tsuei, et al., 2020, P. 3).

Figure (1) Google Search (Source: Google, 2020)

- **Search Engine Results Page (SERP)** is the page that brings a list of webpages on the basis of the user's/potential customer's search query. The results page normally incorporates a list of web pages with a link to the page and titles and a highlight showing where the keywords have matched content within the title (Tsuei, et al., 2020, P. 9).

- **Organic Search Results** are listings that are created from the search engine's ranking algorithm on the basis of the search query relevancy, and for which the owner of the webpages does not pay a fee to Google (see Figure 2) (Tsuei, et al., 2020, P. 9).
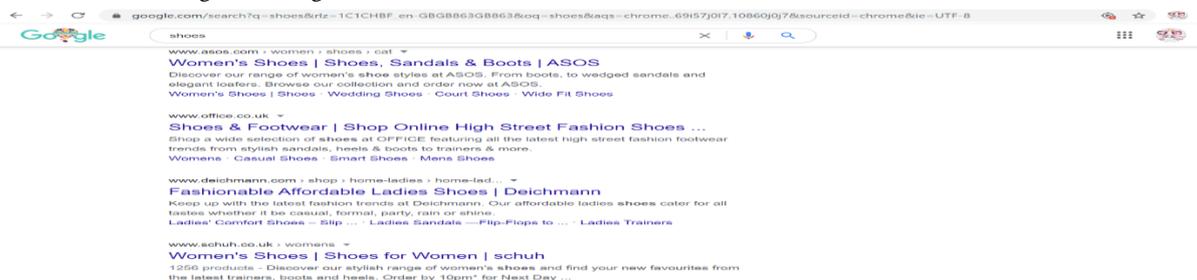
Figure (2) Organic Search (Source: Google, 2020)

- **Paid Listings (also known as sponsored listings)** are advertisements that are displayed above the organic search results whenever a user's keyword query matches an advertiser's service/product. For example, **Pay- Per- Click Advertising** is an online advertisement for which advertisers pay fees each time a user/potential customer clicks on one of their online ads (see Figure 3) (Tsuei, et al., 2020).
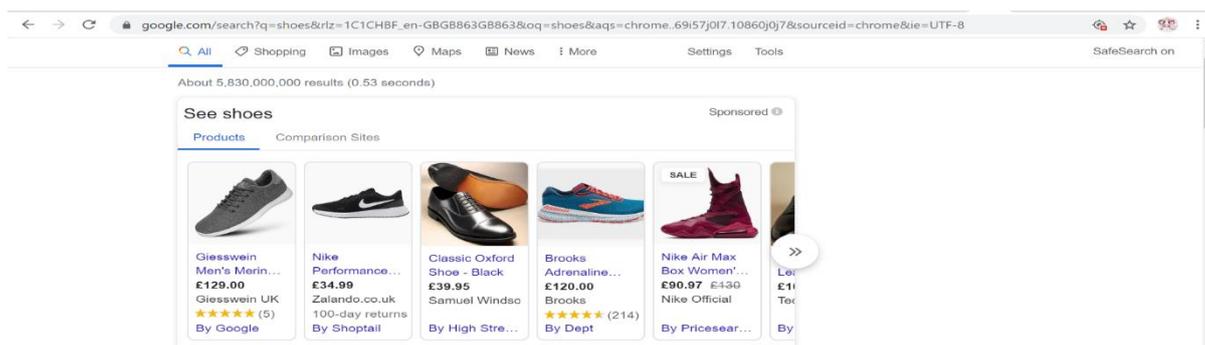
Figure (3) Paid listings (Source: Google, 2020)

- **Crawling and indexing** are two important tools in the SEO industry. **Crawling** occurs when Googlebot examines the content on the page and analyzes it. **Indexing** is when a page is qualified to appear in Google's search results (Tsuei, et al., 2020, P. 5).

- **Keyword(s)** is the (set of) word(s) that a user writes into the search engine text box when searching in Google's search engine (Tsuei, et al., 2020, P. 2).

Background.

- Search Engines

The Internet began to have an influence on the business world in the mid- 1990s and has since gone on to make having an online presence critical for almost any business venture (Binkhorst et al., 2015, P. 214). Between 2005 and 2018, the number of Internet users grew from one billion to 4.5 billion. Initially a developed world phenomenon, this is no longer the case. For example, Africa alone saw an increase of around 2500% in 2011 alone (Kavitha and Balaji, 2020, P. 1556).

The Internet has become a place where users try to find appropriate pages while Business webpages competitive to be visible on the first page (Binkhorst et al., 2015, P. 220). In this process, search engines act as intermediaries, linking (hopefully) users/potential customers with the business web pages containing relevant and useful information, products or services they are looking for (Kavitha and Balaji, 2020, P. 1556).

According to Kavitha and Balaji (2020), more than 28 billion searches were completed on average each month as of April 2019, around 700 daily million web searches. Google search engine brings up two types of results to a search: organic and paid (Kritzinger and Weideman, 2013). This distinction raises the important question of which strategy a business should use- SEO or paid results- in order to match the business's website with users/potential customers keywords (Binkhorst et al., 2015, P. 219).

- Search Engine Optimization

SEO officially began in 2000, and its relentless rise start to take place in 2005, when Google began updating their algorithm, which they continue to annually (Kasilingam and Thanuja, 2020). Thus,

marketer try to make changes to their site in order to improve their website ranking (Kavitha and Balaji, 2020, P. 1557).

The main goal of SEO is to improve a website's ranking in the search engine results' pages (Kasilingam and Thanuja, 2020). Thus, it is important for marketers working in this field to have an essential understanding of search engine- related concepts such as 'crawling' and 'indexing' (Kavitha and Balaji, 2020) (see above in definition of key terms).

SEO is a procedure to ensure that a business's website is at – or near to the- the top of search engine results' pages when users/potential customers search for a particular keyword(s) such as products or services provided by that business (Kasilingam and Thanuja, 2020). Thus, it is important for any business website to aim to place their website on the first page in order to be visible to as many visitors who have sought out that company's products and services and are thus potential consumers (Kavitha and Balaji, 2020, P. 1558).

- Paid Listings

Over the last 15 years, paid listings such as PPC have become a way to generate revenue for search engines (Kasilingam and Thanuja, 2020). PPC is one of the most common advertising methods accessible in digital marketing (Kasilingam and Thanuja, 2020). In 2017, $78.46 billion of Google's income came from its PPC advertising service (Kritzinger and Weideman, 2013).

However, PPC can quite easily become costly when advertisers find themselves locked in a continuing competition for the most common keywords, which are, by definition, limited, or 'key' (Sen et al., 2008). Thus, it is critical for marketers to research the feasible keywords that may be used by users/potential customers searching for a specific product or service (Kritzinger and Weideman, 2013). Herein lies the significance of understanding how target audiences interact with search engines (Kritzinger and Weideman, 2013).

- Understanding How People Interact with Search Engines

Customer behavior can be defined as the study of customers and the procedures they utilize to choose products and services, comprising consumers' mental, emotional, and behavioral responses (Huang, et al., 2011, P. 1225). Consumer behavior incorporates concepts from several sciences, such as biology, chemistry, economics and psychology (Huang, et al., 2011, P. 1225).

In search engines, the key for businesses is not only to target phrases or terms in SEO, but also to learn more about their customers. Businesses' target customers play an important role in the SEO procedure (Huang, et al., 2011, P. 1227) and are something that marketers must take into account before building their SEO strategy as it enables them to create an awareness of the psychology of their target customers as well as identify how they use words and phrases to acquire information about the products or services that businesses provide (Huang, et al., 2011). Thus, the more effectively businesses

comprehend how their target audience uses search engines, the more effectively they will be able to reach and hold on to those users (Huang, et al., 2011, P. 1228).

Research Problem

Research indicates that marketers invest far more in PPC than in SEO. Marketers explain this by the fact that SEO is more expensive to implement than PPC and does not consistently result in high rankings (Rayappa, 2020). Indeed, one study illustrates that 86% of SEM campaigns is spent on PPC versus only 12% on SEO (Mala et al., 2020). This suggests that marketers perceive PPC as the more effective means of achieving increased click- throughs. This claim is supported by a recent study indicating that even if the cost and ranking of SEO and PPC were equal, PPC would still be the more effective marketing strategy because it leads to a higher Return on Investment (ROI) (Kharat et al., 2020).

However, empirical evidence shows that PPC may not be the best SEM strategy for online marketers. Some studies have claimed that SEO might lead to more click- throughs than PPC (Puthussery 2020; Rayappa 2020; Das 2021). For example, research conducted at Puthussery (2020), has conferred that search engine users tend to ignore PPC results. Another study found that marketers who have not yet invested in SEO could be missing out on over 65% of potential customers. In the same study it was also stated that over three times as many search engine marketers generate a higher ROI from SEO than from PPC (Rayappa 2020). This finding was confirmed by Das (2021), who noted that organic results (and hence SEO) are more relevant to e- commerce searches than PPC results. The authors stated that online marketers should more carefully refine their marketing campaign to potential customers and should not ignore SEO. This suggests that SEO can generate more traffic than PPC.

Despite these findings, the literature has shown that online marketers invest more in PPC than in SEO. The reason for this is that SEO is more costly to implement than PPC and does not consistently result in a top- ranking listing. PPC is perceived as a more effective means of achieving ultimately more traffic and increased visibility. This is despite the fact that empirical evidence from the studies sketched above purports to show that PPC might not be the optimal SEM strategy for online marketers. This creates a dilemma as to which form of SEM is more effective. Hence, the research problem can be reformulated as the following Table 1:

Table (1) Research problem and questions

Problem Statement	It is not clear whether marketers must spend more resources such as budget on SEO or on PPC to raise their exposure to potential customers.	
Research Question	What criteria might be made available to marketers to assist them to make the correct choice when investing in SEO or PPC?	
Research sub- question	Research method(s)	Aims

Problem Statement	It is not clear whether marketers must spend more resources such as budget on SEO or on PPC to raise their exposure to potential customers.	
What is the optimal search engine marketing strategy for companies: SEO or paid placements	Case Study Findings	To produce statement on what is the optimal search engine marketing strategy for companies: SEO or paid placements.
When and why are SEO or paid placements a better option for marketers?	Case Study Findings	To produce when and why are SEO or paid placements a better option for marketers?

This section has covered the set out this study's research problem, the significance of online marketing and having an online presence for a business, and the choices facing businesses' regarding their online marketing strategies. The rest of the study contains five sections. Section Two provides the background to the research problem. Section Three is a review of the relevant and recent literature on the subject. Section four sets out the study's methodology/approach. Section five analyzes and discusses the findings of the research. The final section discusses a number of conclusions and offers a recommendation for businesses.

Literature Review.

Search Engine Marketing

According to Tiwari (2020), search engine marketing aims to improve the page ranking of a website to make it visible at the top of search engine results, thereby attracting new users/potential customers and increasing the visits to the webpage (Tiwari, 2020). There is no doubt that the online environment has transformed business, something noted as early as the late 1990s (Kavitha and Balaji, 2020, P. 1559). Confirming this, Duggal (2020) pointed out that whereas it took telephone technology four decades to achieve a 29% market share, the Internet has been able to do this in just six years.

Rayappa (2020) noted that searches in search engines have become more significant nowadays. Additionally, he found that the majority of all users come from search engines to the business websites. Thus, search engines play an essential role among companies looking for their webpages to be more visible for their target users. Tiwari's (2020) research confirmed that search engines could be beneficial instruments for e- commerce firms to reach their potential customers. As Ohol (2020) notes, search engine marketing is highly competitive, meaning there are many firms that are competing to get a high ranking, preferably on the first page of results. This competitive environment leads to costs potentially being much higher than the return on investment (ROI), in particular for small firms.

In addition to reaching a vast number of potential customers, another advantage of having an online presence is that it makes it feasible for businesses to measure everything about what their customers do before, during, and even after they shop/purchase (Ohol, 2020, P. 198). This is a service provided by Google Analytics, which has made it possible to interpret and record everything that users/potential customers do while they are on your website (Ohol, 2020). Now, marketers are able to understand and use to their commercial advantage the steps that lead to actual online sale, allowing them to expand opportunities to transform visitors into paying customers (Ohol, 2020, P. 198).

Ohol (2020) pointed out that search engine marketing spending of $40.6 billion in 2018 was expected to increase by 35.4% in 2020, to $68.8 billion. A study by Duggal (2020) found that in 2017, 46% of worldwide online advertising spending was dedicated to search engine marketing, with UK advertisers spending $17 billion on search engine marketing. Among the kinds of online advertising, SEM is becoming the predominant one (Rayappa, 2020). It is the fastest growing kind of online advertising. Online business has to ensure a strong presence in search engine indices in order to maximize exposure to potential customers (Rayappa, 2020).

Search Engine Optimization:

According to Malaga (2010), SEO can influence the visibility and the ranking of a business website between search results. He also found SEO to be a tool that can capture users/potential customers actively looking to find information about a product or service that a company offers (Malaga, 2010, P. 5).

For Ohol (2020), one of the main disadvantages of SEO is that Google update their algorithms annually in order to help consumers to get more accurate results. But these changes in algorithms can move a business website's ranking from, say, the first page to the third page. This is problematic because as one recent study on user behaviour pointed out that 89% of users only clicks on results in the first three pages and, moreover, 66% of users view only the entries on the first page (Kavitha and Balaji, 2020). Thus, if a website is not on the first three pages of the search engine results, it has almost no chance of being clicked on by users (Kavitha and Balaji, 2020, P. 1560).

In addition, research conducted by Rayappa (2020) in India pointed out that users are more likely to click on links that are ranked in the organic section (i.e., the results that have filtered out paid listings) of a search- results page. Another study, by Johnsen (2017), confirmed that in Germany 61% of people prefer to click on organic results.

However, most business do not invest in SEO but instead invest in paid listings (such as PPC) in order to ensure a higher ranking in the search- results (Rayappa, 2020). Kavitha and Balaji (2020) confirmed that business owners think that SEO is more expensive than paid listings because income from SEO does not cover costs.

In addition, it takes far longer for SEO to obtain sufficient information in order to update a search engine marketing plan (Rayappa, 2020). In contrast, paid listings can provide very important data in a short time, making it possible to determine changes in customer search engine behaviour, which in turn allows adjustments to SEO plans (Rayappa, 2020).

Paid Listings:

Paid listings allow firms the opportunity to list their business websites on the first page of the search results (Tiwari, 2020). According to Tiwari (2020), PPC is one of the popular forms of paid listings as it allows firms to determine which keywords will make PPC advertisements appear on the page. However, firms will be charged each time a user/potential customer clicks on the advertised link (Kavitha and Balaji, 2020, P. 1561). According to Kavitha and Balaji (2020), Google Ads can offer to companies the ability to determine how much per click their company is spending for the purpose of traffic directly to their website.

According to Huang et al (2011), Google Ads might increase brand awareness by around 80%, which can make users remember your brand. Thus, 40% of brands try to raise their budget in PPC (Huang, et al., 2011, P. 1229). As a result, PPC is deemed an effective and profitable tool for marketers (Huang, et al., 2011, P. 1225). For example, according to a recent study by Rayappa (2020), for every $1 spent on Google Ads, businesses gain an average income of $2 in the USA. In addition, 65% of all clicks made by customers who plan to make a purchase come from Google Ads (Rayappa, 2020).

However, a downside of PPC is that it requires hourly or daily checks the PPC campaign such as clicks and to determine how many people have searched for the target keywords. This can take a great deal of time for marketers, in addition to the fixed costs of PPC (Tiwari, 2020).

Tiwari (2020) indicated that paid listings is one of the fastest ways to obtain data on customer behavior towards search engines, which can help SEO to discover the trend keywords that will lead SEO marketers to make the necessary adjustments to their SEO campaign (Tiwari, 2020).

However, as noted above, Google Ads is less trusted than organic results among users; some 70-80% of searchers actually ignore paid advertisements. Tiwari (2020) suggested that firms should not use the paid listings service because websites will be visible only as long as the firm is willing to pay for it.

Understanding How People interact with Search Engines:

According to Mala, et al. (2020), the first and most significant step that businesses should take when conducting a keyword research procedure is to determine the segment market. The segment market is a group of potential customers who have one or more common characteristic, such as needs, demographic, geographic location, psychological behavior, social and religious belief, interests and hobbies (Freytag and Clarke, 2001, P. 473). A segment market is grouped together for marketing purposes (Freytag and Clarke, 2001, P. 474).

Hence, Suneetha and Krishnamoorthi (2009) confirmed that identifying the segment market can help online businesses to gain more customers by creating a list of keywords that the target segment might use when they search for products or service provided by businesses, as well as excluding unnecessary and unpromising keywords.

What Do Customers See When the Search Engine Listings Appear?

The literature mostly finds that customers mainly look at the links listed at the top of a search engine results' page. This attitude is sometimes called 'ranking effect' by marketing experts (Mala, et al., 2020). In addition, for the purpose of understanding where and why users look when presented with a list of search engine results, researchers have carried out experiments utilizing an eye- tracking device to assess the eye movements when looking at search engine results. The finding of these studies show that customers' eyes are mostly focused on the first three links, simply because they are the first (Mala, et al., 2020). Thus, customers are far more likely to click on results at the top not because they are the most relevant, but simply because they are at the top (Mala, et al., 2020).

Factors Influencing Consumer Behavior towards Online Shopping in Saudi Arabia:

A study by Jawa and Chaichi (2015) discovered the elements that influence the decisions of Saudi Arabian consumers to purchase from online (Saudi) retailers. They found that marketers should be aware in particular of the online payment system because credit cards are one of the most common payment methods in Saudi Arabia (Jawa and Chaichi, 2015, P. 1). Online payment systems influence online consumer decision making due to customers' feras about confidentiality issues regarding their credit card information. Thus, the seller's reputation is closely bound up with the online payment system they use (Jawa and Chaichi, 2015, P. 2).

Among the other elements noted by Jawa and Chaichi (2015) as important for buyers are the perception of consumers about the business and website design (Jawa and Chaichi, 2015, P. 4). Similarly, Eid (2011) found that website design plays a significant role in e- customer behavior in Saudi Arabia, including website content such as product/services information and ease of interface use.

Methodology/Approach.

Study Method:

The method selected for this study is case studies. A case study can be defined as an intensive study of individuals and organizations or groups of individuals and organizations. The results of a case study generalize data to allow marketers to understand complicated phenomena (Binkhorst et al., 2015). Researchers describe how case studies review complicated phenomena in a natural setting to increase understanding of them (Binkhorst et al., 2015, P. 215).

According Johnston et al., (1999), utilizing case studies in research makes it possible to gain access to valuable and sometimes novel information that may be of benefit to a company and which may not be obtainable in other ways. The case study method allows in- depth, multi- faceted exploration of complicated problems in their real- life setting (Cowton, 1998, P. 424). The accessibility of the case study method is widely accepted in the fields of business (Cowton, 1998). Thus, it was deemed that might generate answers to the research problem of this extended essay (Binkhorst et al., 2015). The data generated by the case studies in this research is secondary data, or data that has been gathered in the past and can be accessed by researchers such as government public service departments, business reports, and journal articles (Cowton, 1998, P. 425).

Case Studies

The two case studies in this study are two private businesses in Saudi Arabia, an Arab- Muslim country in western Asia. The current population of Saudi Arabia is 34,787,354 (Worldometers, 2020), 70% of which has a median age of 31 year (Statista, 2019). The latest report by Statista (2019) provides data that show 91.39% of the Saudi population are internet users (see Figure 4).
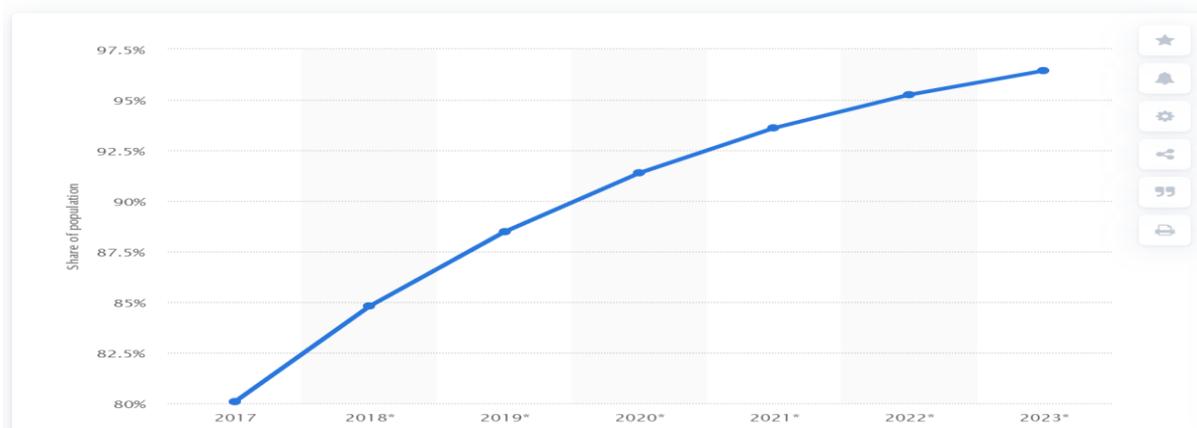

Figure (4) Internet user penetration in Saudi Arabia, 2017 to 2023 (Source: Statista, 2019)

The case studies are from the two real- life websites where both PPC and SEO are used as marketing methods. The two websites are from businesses competing in the same industry: Supermarkets & Grocery Stores. The names of the companies have been changed to company A and B for preserve the confidentiality of the companies. two mid- sized Saudi Arabian supermarket chains.

A Stores is a well- known supermarkets & grocery store in the capital city of Saudi Arabia, Riyadh. A Stores reached profits of Saudi Riyals 25 million (approximately Great British Pounds 5,000,000) in 2018. A Stores have seven branches in different Saudi Arabia cities and launched their first website in 2010 (Saudi Arabian Monetary Authority, 2020).

B Markets are ranked eighth in the list of the 50 most powerful firms in Saudi Arabia. B Markets income in 2019 was around SR420,000,000 (approximately GBP85,000,000) B markets have 29 branches in Saudi Arabia's biggest cities and launched their first website in 2009 (Saudi Arabian Monetary Authority, 2020).

Data about each company's performance in SEO and PPC was gathered for the period 2018 to 2019 and was based on the Saudi Arabian Monetary Authority's Reports for Supermarkets and Grocery Stores (Saudi Arabian Monetary Authority, 2020). The Saudi Arabian Monetary Authority is the Central bank of Saudi Arabia, and has all annual financial statements for companies based in the country (Saudi Arabian Monetary Authority, 2020).

Both company's annual reports indicated that their websites run at the same time SEO and PPC campaigns (Saudi Arabian Monetary Authority, 2020). For each site, data was gathered on:

- the number of clicks received by users in both SEO and PPC
- the total income for both PPC and SEO
- the number of visitors/users sessions recorded
- the number of transactions recorded
- the e- commerce conversion rate

The number of visitors/user's sessions recorded is the number of times a potential customer/user enters a website in a given timespan (McDowell et al., 2015). This can be done by using website cookies, which help the website owner to track the users for the time they have spent on a website (McDowell, et al., 2015).

The e- commerce conversion rate is the proportion of sessions that lead to trade transactions (McDowell et al., 2015). For instance, if a website had 16 252 sessions in one month and these sessions lead to 166 trade transactions, the resulting e- commerce conversion rate would be (166/16 252) × 100 = 1.02% (McDowell et al., 2015).

The conversion rate is useful because it is a clear statement as to whether the business website is success or not at guiding users through the sales funnel (Di, et al., 2018). A high conversion rate means that business websites are successfully convincing users to become actual customers (Di, et al., 2018). Conversely, a low rate demonstrates that there is scope for improvement (Di, et al., 2018). According to reports by the Saudi Arabian Monetary Authority (2019), the average conversion rate across all industries in Saudi Arabia is 2.70% for organic searches and 0.89 for paid listing searches.

Case Study Findings.

A Stores:

According to a study conducted by Jindal and Upadhyaya (2020) on A stores website, the numbers of clicks on organic search results between 2018 and 2019 was 676,008 (see Figure 6) (Jindal and Upadhyaya, 2020, P. 894), leading to 689,484 organic sessions. From the 689,484 organic sessions, A Stores' website completed 2628 e- commerce transactions, generating a total revenue of SR3,768,936 (around GBP765,980.42) (Jindal and Upadhyaya, 2020).

The same study revealed that A stores received 347,112 PPC clicks, leading to 357,540 PPC sessions (see Figure 6) (Jindal and Upadhyaya, 2020, P, 895). A total of 2136 transactions came through PPC, generating a revenue of SR2,867,100 (approximately GBP582,695.61) (Jindal and Upadhyaya, 2020).

According to the 2018 annual report for A Stores, A Stores spent SR2,019,016 (GBP410,335.10) on both SEO and PPC from 2018 to 2019. The budget was divided 70% to PPC and 30% to SEO (Saudi Arabian Monetary Authority, 2020).

According to the 2018 annual report for A Stores, the total number of clicks received was 1,023,120, of which 66% were SEO clicks and 34% were PPC clicks (Saudi Arabian Monetary Authority, 2020).

B Markets:

According to a study by Junaidi and Mira (2020), B Markets received 38,725,060 clicks from organic search results between 2018 and 2019, leading to 40,871,536 organic sessions. From the 40,871,536 organic sessions, B Markets' website received 2,645,563 e- commerce transactions, generating a total income of SR20,963,008 (around GBP 4,260,420.91) (Junaidi and Mira 2020).

The same study showed that B Markets' PPC campaign received 3,890,796 clicks, leading to 4,567,247 PPC sessions (Junaidi and Mira 2020). The 4,567,247 PPC sessions lead to a total number of 94,428 transactions between 2018 and 2019, generating a PPC revenue of SR2,456,237 SR (GBP499,193.79) (Junaidi and Mira 2020).

According to the 2018 annual report for B Markets, the company spent SR12,456,432 SR (GBP2,531,585.32) on both SEO and PPC from 2018 to 2019. The budget was divided 89% for PPC and 11% for SEO (see Figure 7). The total number of clicks on both organic and paid searches was 42,615,856, with SEO taking the highest share at 92%, while PPC had 8% (Saudi Arabian Monetary Authority, 2020).

According to a 2020 Saudi Arabian Monetary Authority report, the total income from both PPC and SEO in 2018 to 2019 was SR23,419,245 (GBP 4,771,925.18), with SEO taking 84% of that figure and PPC accounting for 16%.

Analysis of Findings and Discussion.

This section will provide responses to the two of the research sub- questions (What is the optimal search engine marketing strategy for companies: SEO or paid placements) and (When and why are SEO or paid placements a better option for marketers?):

Analysis and Discussion of the Findings of a Stores' Website

According to the findings given in the previous section, for A Stores the e- commerce conversion rate for SEO, at 0.29, is lower than for PPC, at 0.59, meaning that users/potential customer were more likely to convert to actual customers through PPC than through SEO.

This means it is necessary for A Stores to improve the e- commerce conversion rate to reach an average e- commerce transaction for both SEO and PPC. However, according to the figures given above, PPC brings more actual customers willing to purchase the company's products or services than SEO does. Although SEO converts fewer users to actual customers, this does not mean that it is not worth continuing investing in SEO because the revenue it generates is higher than for PPC by around SR1,000,000. Additionally, SEO brings more visitors, something which could increase awareness of the brand.

However, as Kasilingam and Thanuja (2020) pointed out, for the top 25% of companies in the world the e- commerce conversion rate is 5.31% and for the top 10% it is 11.45%. Kasilingam and Thanuja (2020) suggested that most companies focus on bringing a higher number of clicks and visitors, ending up with a low the e- commerce conversion rate. Some of the reasons that might lead to a low e- commerce conversion rate is that businesses do not know their market segment correctly. If marketers do not market to the right segment, then the website will end up with a low conversion rate and a low the number of transactions (Kasilingam and Thanuja, 2020).

The main step to address e- Commerce conversion rate problems is to discover what a business's customers want or are searching for on a business's website (Kasilingam and Thanuja, 2020). Marketers could use Google Analytics tools in order to understand how users behave on the business's site and social analytics to ascertain what customers are sharing with their friends and relatives that might bring more customers to the website (Kasilingam and Thanuja, 2020)

In addition, as noted above (see Factors Influencing Consumer Behavior Towards Online Shopping in Saudi Arabia), Saudi customers are looking for confidentiality and security in online payment systems as well as the seller's reputation, decisive factors driving purchase decisions. Thus, marketers need to be aware of what the target audience is expecting from the website.

On the other hand, the number of clicks received from SEO and PPC is almost the opposite of the cost division between them. A Stores is devoting a high proportion of their marketing budget on PPC, yet this results in lower clicks than for SEO. However, SEO brings a higher number of clicks, meaning that a larger number of potential customers which A Stores must, somehow, convert into to real customers.

Analysis of Findings and Discussion of B Website:

According to the findings in the previous chapter, B Markets' website e- commerce conversion rate is higher for SEO, at 6.4, than for PPC, at 2.0. The SEO figure of 6.4 is actually higher than the average e- commerce conversion rate in most industries in Saudi Arabia. Moreover, the PPC figure of 2.0 is also a higher e- commerce conversion rate than the average for most industries in Saudi Arabia.

According to the numbers given in (in Case Study Findings section), B Markets spent most of the search engine budget on PPC. But the PPC campaign returned lower numbers of clicks and a lower e-commerce conversion rate, meaning a lower income. However, according to Tiwari (2020), PPC could help the SEO to increase the number of clicks in the long- term by identifying more valuable organic SEO keywords. Because of the lengthy time period for SEO to demonstrate results, it is not straightforward to measure the effectiveness of the keyword(s) businesses use to target the right market segment.

In contrast, PPC could provide keyword(s) data that could improve SEO performance. For example. PPC could help marketers to understand customer behavior when they search for related products or services. Instead of waiting for SEO keyword(s) data results, which might take months or even years, PPC data allows customer behaviour to be understood faster, which could lead marketers to make the necessary adjustments to their SEO campaigns (Tiwari, 2020).

According to a study by Mala et al (2020), users tend to trust and click on links listed in the organic search, while only 50% notice the paid listings (see Table 2).

Table (2) The proportion of customers looking at links for organic and paid listings (Source: Mala, et al (2020)

Link Ranking	Proportion of customers looking at organic links	Proportion of customers looking at sponsored links
1	100%	50%
2	100%	40%
3	100%	30%
4	85%	20%
5	60%	10%
6	50%	10%
7	50%	10%
8	30%	10%
9	30%	N/A
10	20%	N/A

Marketers can understand why PPC campaigns will always get fewer clicks than SEO in general. The numbers/finding (in Case Study Findings section) support Mala et al's (2020) contention 61% of

marketers mention improving SEO and growing their organic attendance is their top inbound marketing priority.

Conclusions and Recommendation.

This study has set out the background to the subject and reviewed the relevant and recent literature on SEM marketing, SEO and PPC, and customer behaviour. Two case studies from Saudi Arabia were used and discussed to explore these topics.

The results of the study found out that the two case studies invested more of their budget in their PPC campaign than in their SEO campaign even though in each case the findings were that SEO brought more clicks and income overall.

However, despite this finding, SEO is still not the optimal SEM strategy for e- Commerce marketers. As Rayappa (2020) found, search engine marketers rarely use SEO as part of their SEM campaign, noting that out of 300 business marketers, 40 confirmed that they utilize SEO only, while 99 confirmed that they utilize only PPC. The remaining 161 confirmed that they utilize both SEO and PPC.

The results of this study also concur with Duggal (2020) by finding that one of the significant reasons for the rapid adoption of a PPC campaign strategy is that it is very similar to conventional paid advertising campaign strategies and marketers can manage paid campaigns on their own.

This study has also argued that an optimal SEM strategy should take into consideration customer behavior and has outlined what the optimal search engine marketing strategy for companies- SEO or paid placements — in Saudi Arabia should be based on the results from the two case studies in that country. The recommendation is that marketers in Saudi Arabia should give particular consideration to SEO as it can increase overall visitors and clicks on the business's website. Marketers should take into consideration the use of a long- term SEO to gather valuable data about keyword(s) and what works well with business target segment and what they are missing. A PPC campaign can be used by marketers to determine how changes in customer behaviour are related to search engine keyword(s) in order to adjust their SEO campaign.

The findings of this study hopefully enhance our understanding of the effects of SEO and PPC on e- commerce marketing, and they can be utilized to support marketers in developing an appropriate and effective SEM strategy. Further research could be undertaken on the disadvantages of using PPC as a marketing campaign tool for search engines.

References.

- Binkhorst, F., Handelzalts, A., Poortman, C.L. and Van Joolingen, W.R. (2015), Understanding teacher design teams—A mixed methods approach to developing a descriptive framework. *Teaching and teacher education*, 51, pp.213- 224.

- Cowton, C.J. (1998), 'The use of secondary data in business ethics research', *Journal of Business Ethics*, 17(4), pp.423- 434.

- Croft, W.B., Metzler, D. and Strohman, T. (2010), *Search engines: Information retrieval in practice* (Vol. 520, pp. 131- 141). Reading: Addison- Wesley.

- Di Fatta, D., Patton, D. and Viglia, G. (2018). 'The determinants of conversion rates in SME e- commerce websites'. *Journal of Retailing and Consumer Services, 41*, pp.161- 168.

- Duggal, M.P., 2020. 'A STUDY ON GROWTH OF DIGITAL MARKETING IN ELECTRONIC AGE'. *Studies in Indian Place Names, 40*(4), pp.197- 203.

- Eid, M.I. (2011), 'Determinants of e- commerce customer satisfaction, trust, and loyalty in Saudi Arabia', *Journal of electronic commerce research, 12*(1), p.78.

- Freytag, P.V. and Clarke, A.H. (2001), 'Business to business market segmentation', *Industrial marketing management, 30*(6), pp.473- 486.

- Google, 2020, Home page, Google, available at https://www.google.com/ webhp?hl=en&sa=X&ved=0ahUKEwjViNWI3JrqAhVGShUIHa6eCC8QPAgH (accessed 14 July 2020)

- Huang, J., White, R.W. and Dumais, S. (2011), 'No clicks, no problem: using cursor movements to understand and improve search' *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 1225- 1234).

- Jawa, H.A. and Chaichi, K. (2015), 'Factors Influencing Consumer Behavior towards Online Shopping in Saudi Arabia', *International Journal of Multicultural and Multireligious Understanding*, 2(4), pp.1- 10.

- Jindal, S. and Upadhyaya, A. (2020), 'ASSESSMENT OF FACTORS AFFECTING ONLINE SHOPPING', *Studies in Indian Place Names*, 40(56), pp.894- 906.

- Johnsen, M. (2017), Multilingual Digital Marketing: *Managing for Excellence in Online Marketing*. Maria Johnsen: London.

- Johnston, W.J., Leach, M.P. and Liu, A.H. (1999), 'Theory testing using case studies in business- to- business research', *Industrial Marketing Management*, 28(3), pp.201- 213.

- Junaidi, M.H. and Mira Lam, M.S. (2020), 'Online Buying Behavior among University Students: A Cross Cultural Empirical Analysis', *Journal of Information Technology Management*, 12(2), pp.26- 39.

- Kasilingam, R. and Thanuja, V. (2020), 'RECENT TRENDS IN DIGITAL MARKETING', *Studies in Indian Place Names, 40*(3), pp.4215- 4224.

- Kavitha, C. and Balaji, V. (2020), 'Online Marketing in the Business Atmosphere', *Studies in Indian Place Names, 40*(70), pp.1556- 1562.

- Kharat, A.M., Tibe, M.S.V. and Chitnis, M.R.L. (2020), 'Importance of Online Marketing on Integrated Marketing Communication', *Studies in Indian Place Names, 40*(27), pp.620- 626.

- Kovalenko, A. and Kuzmenko, Y. (2020), 'Online Marketing Impact on Micro- Enterprises: An Insight through Visibility in Search Engines', *Management & Marketing. Challenges for the Knowledge Society*, *15*(1), pp.38- 58.

- Kritzinger, W.T. and Weideman, M. (2013), 'Search engine optimization and pay- per- click marketing strategies', *Journal of Organizational Computing and Electronic Commerce*, *23*(3), pp.273- 286.

- Mala, G., Akash, G. and Jewel, S. (2020), 'A Study on Influence of Digital Marketing on Buying Behaviour of Youth', *Studies in Indian Place Names*, *40*(68), pp.313- 320.

- Malaga, R.A. (2010), 'Search engine optimization——black and white hat approaches', *Advances in Computers,* Vol. 78, pp. 1- 39.

- McDowell, W.C., Wilson, R.C. and Kile Jr, C.O. (2016), 'An examination of retail website design and conversion rate', *Journal of Business Research*, *69*(11), pp.4837- 4842.

- Ohol, S.B. (2020), 'Online Marketing—New Trend', Marketing. *Studies in Indian Place Names*, *40*(73), pp.198- 204.

- Rayappa, J.J. (2020), 'A STUDY ON DIFFERENT ASPECTS OF DIGITAL MARKETING', *Studies in Indian Place Names*, *40*(16), pp.579- 590.

- Saudi Arabian Monetary Authority, (2018), *Annual Reports for Supermarkets and Grocery Stores category*, Saudi Arabian Monetary Authority, available at http://www.sama.gov.sa/ar-sa/economicreports/pages/annualreport.aspx (accessed 13 July 2020)

- Saudi Arabian Monetary Authority, (2018), *The average of the conversion rate across all industries in Saudi Arabia*, Saudi Arabian Monetary Authority, available at http://www.sama.gov.sa/ar-sa/EconomicResearch/Pages/WorkingPapers.aspx (accessed 11 July 2020)

- Saudi Arabian Monetary Authority, (2019), *Annual Reports for Supermarkets and Grocery Stores category,* Saudi Arabian Monetary Authority, available at http://www.sama.gov.sa/ar-sa/economicreports/pages/annualreport.aspx (accessed 13 July 2020)

- Sen, R. (2005), 'Optimal search engine marketing strategy', *International Journal of Electronic Commerce*, *10*(1), pp.9- 25.

- Sen, R., Hess, J.D., Bandyopadhyay, S. and Jaisingh, J. (2008), 'Pricing paid placements on search engines', *Journal of electronic commerce research*, *9*(1).

- Statista (2020), *Saudi Arabia: internet user penetration 2017- 2023*, Statista, available at https://www.statista.com/statistics/484930/internet- user- reach- saudi- arabia/ (accessed 19 July 2020)

- Statista (2020), *Weekly trend in year- on- year growth of online retail revenue in home and leisure category in the United Kingdom from January to March 2020*, Statista, available at https://www.statista.com/statistics/1110606/home- and- leisure- weekly- online- revenue- growth-in- the- uk/ (accessed 9 July 2020)

- Suneetha, K.R. and Krishnamoorthi, R. (2009), 'Identifying user behavior by analyzing web server access log file' *International Journal of Computer Science and Network Security*, *9*(4), pp.327- 332.

- Tiwari, M.P.A. (2020), 'A Study on Digital Marketing and its Impact Traditional Marketing', *Studies in Indian Place Names*, *40*(61), pp.248- 252.

- Tsuei, H.J., Tsai, W.H., Pan, F.T. and Tzeng, G.H. (2020), 'Improving search engine optimization (SEO) by using hybrid modified MCDM models', *Artificial Intelligence Review*, *53*(1), pp.1- 16.

- Worldometers (2020), *Saudi Arabia Population (LIVE)*, Worldometers , available at https://www.worldometers.info/world- population/saudi- arabia- population/#:~:text=The%20current%20population%20of%20Saudi,year%20according%20to%20UN%20data (accessed 27 July 2020)

- Zhu, K. and Kraemer, K.L. (2005), 'Post- adoption variations in usage and value of e- business by organizations: cross- country evidence from the retail industry', *Information systems research*, *16*(1), pp.61- 84.