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FACTORS CONTRIBUTE TO EFFECTIVENESS OF SEARCH ENGINE
OPTIMIZATION (SEO) TOWARDS CONSUMER ONLINE BUYING DECISION

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DECLARATION OF ORIGINAL WORK

“I hereby declare that this report is the result of my own and quotes that for everything I have explained the sources.”

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DEDICATION

I would like to dedicate my beloved family, friends, and supervisor who have provided motivation and guidance for me all the way in completing this research.

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ABSTRACT

This research paper focused on study the factors contribute to effectiveness of search engine optimization (SEO) towards consumer online buying decision. As Google continues to unhone marketing models everywhere, companies increased their spending on digital marketing services which is search engine optimization. Companies aim to convert web visitors into their customers through be on the top of search engine which will further creates their businesses' brand. Thus, this research will determine the most important factor of search engine optimization towards consumer online buying decisions, and identify the relationship between search engine optimization and consumer online buying decisions. Meanwhile, this research used quantitative method. Quantitative data had been collected from 300 respondents who are online shoppers that live in Melaka through convenience sampling method. Software for Social Science (SPSS) was used to analyse the collected data. The regression results showed that there was a significant relationship between technical components in search engines, users' trust of search engines, and users' experience of search engines towards consumer online buying decisions. Furthermore, technical components of search engines is the most significant factor that influence consumer online buying decisions based on the result. The findings also showed that motivation to use search engines, technical components of search engines, users' trust of search engines, and users' experience of search engines were positively associated with consumer online buying decisions. Through this research, it is not only brings the insightful knowledge in the academic perspective, but also in managerial perspective which can benefit to marketers and ecommerce companies.

Keywords: Search Engine Optimization (SEO), Consumer Online Buying Decision, SERP, Search Engines

ABSTRAK

Kajian ini berfokus pada pengajian tentang faktor-faktor yang menyumbang kepada keberkesanan pengoptimuman enjin carian (SEO) dengan keputusan pembelian pengguna secara atas talian. Dalam kebelakangan ini, memandangkan berkeluasa Google sebagai model pemasaran di merata tempat, banyak syarikat telah meningkatkan bajet mereka bagi servis pemasaran digital melalui pengoptimuman enjin carian. Syarikat-syarikat bertujuan untuk menukarkan pengunjung web kepada pelanggan mereka dengan berada di atas sekali dalam laman web enjin carian, supaya dapat membina imej perniagaan. Oleh itu, kajian ini akan mengenal pasti faktor pengoptimuman enjin carian yang paling ketara mempengaruhi keputusan pembelian pengguna secara atas talian dan mengkaji hubungan antara pengoptimuman enjin carian dengan keputusan pembelian pengguna secara atas talian. Pada masa yang sama, kajian ini menggunakan kaedah kuantitatif. Data kuantitatif telah dikumpulkan dari 300 responden yang merupakan pembeli secara atas talian dan tinggal di Melaka melalui kaedah pensampelan mudah. "Software for Social Science" (SPSS) telah digunakan untuk menganalisis data yang dikumpulkan. Keputusan regresi menunjukkan bahawa hubungan yang signifikan terdapat antara faktor-faktor seperti teknikal komponen dalam enjin carian, kepercayaan pengguna pada enjin carian, dan pengalaman pengguna enjin carian dengan keputusan pembelian pengguna secara atas talian. Selain itu, berdasarkan hasil kajian, teknikal komponen dalam enjin carian merupakan faktor yang paling ketara yang mempengaruhi keputusan pembelian pengguna secara atas talian. Kajian ini juga mendapati bahawa motivasi untuk menggunakan enjin carian, teknikal komponen dalam enjin carian, kepercayaan pengguna pada enjin carian, dan pengalaman pengguna enjin carian mempunyai kaitan positif dengan keputusan pembelian pengguna secara atas talian. Akhir sekali, kajian ini bukan sahaja dapat memberi pengetahuan yang lebih mendalam dari perspektif akademik, tetapi juga boleh memberi manfaat kepada pemasar dan syarikat e-dagang dari perspektif pengurusan.

Kata Kunci: Pengoptimuman Enjin Carian (SEO), Keputusan Pembelian Pengguna Secara Atas Talian, SERP, Enjin Carian

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LIST OF ABBREVIATION

SEM	=	Search Engine Marketing
SEO	=	Search Engine Optimization
PPC	=	Pay Per Click
SERPs	=	Search Engine Result Pages
SPSS	=	Statistical Package for the Social Sciences

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

There is a 33% increase of internet users across the world during the last decade (Ison, 2015). Internet is very useful as a tool that facilitate in searching information. Thus, people tend to accept the use of internet, and make any product or service purchase through internet. In this technological environment, there's an increase acceptance towards electronic commerce, and it also changed people's buying behavior or habits. According to Turban et al. (2009), commerce of products or services through internet called as e-commerce. Thus, many small businesses forced to attract attention within the global marketplace, and to improve their existed traditional business by creating a visibility online websites (Chen, Chiang, & Storey, 2012). E-marketing is emphasizing to develop and create marketing strategies for different countries through internet in case that all the consumer behavior is same (Eouzan, 2013). E-marketing involves all website working phrases like conception, projects, content adaption, development, maintenance, analytic evaluating and promotion or advertising (Strauss, Frost, & Ansary, 2009). Furthermore, e-marketing also can gather information about consumers' preferences through websites on internet (Teo, & Choo, 2001).

In 2005 Pew Internet study, there was an increasing of searchers who give positive feedback about the search results that they found even though some of them were not familiar with the operation of search engines and searches. Usually, there are 50% of people who use internet will doing information search via search engines every day in 2008 Pew Internet study. Web users will be straight bring to the particular webpage for the websites by enter the specific search keywords via NYTimes.com, but not to the main page (Pérez-Peña, 2007). Thus, people can search for any information that they are looking for within a short time, and relevant advertisements will also pop-up on the same search results page at the same time. According to Jansen, Booth, & Spink (2007), there are approximately 81% of the searches are informational, while navigational, and transactional are 10% and 9% respectively. ComScore investigated consumers' queries and their buying habits from 1 November to 31 December in 2005 during the previous research. The unique characteristic for this previous research was it can identify the panelists' buying types whether it was online or offline. Additionally, there are 25% of people will purchase their desired product during their searches, while 37% from them will buy online, and the rest of them will purchase offline. This way shows that offline buying decision also will be influenced by searches of information via internet.

Besides that, a study on B2B buyers shows that consumer purchase decisions significantly affected by the searches on search engine optimization. For instance, searches were more powerful in influencing technical buyers in the whole buying process if compared with trade shows. Even though the online medium represents a small portion of total media budget which was only 7.4%, it still grows rapidly. Furthermore, strategic consequences of search are far more important than media allocation. For example, search engines able to directly strengthen the relationship between customers with manufacturers or service providers by removing the intermediaries. Not only this, the business in this market will become more transparent, and consumers' behavior will also adapt to it with the presence of search engines. Everyone can explore everything within this technological environment. Thus, this resulted in two types of consumers' habits which are search process, and buying process

via search engines. For instance, there are 67.5% of prospective car buyers will search information online before making any buying decisions offline based on the J.D. Power 2006 autosshopper.com study. The search process and buying process will be conduct at the same time in the traditional physical store before the introduction of internet. However, the split of search process and buying process will influence consumer behavior. For example, number of products or services that consumer take into account before they make any buying decisions, time that consumer use in order to buy a more complex product, and many more.

Internet users increased dramatically from less than half a billion to 1.9 billion during 2000 to 2010. Based on Global Nielsen Consumer Report in 2008, there are around 85% of people who use internet will buy at least one product from web, and 37% of their purchase decisions are supported by the search engines. Therefore, it can be concluded that search engines play important roles as online marketing tools in this global marketplace (Ghose, & Yang, 2009). This is because search engine marketing (SEM) consists 46% of total advertising spending across the world through online platform in 2010. The unique characteristic for the successful of search engine marketing is marketer able to customize the specific search keywords for consumers which is more user-friendly. Furthermore, marketers also can get attraction from more potential consumers through the customization of search keywords (Ghose, & Yang, 2009). There is approximately 9% of worldwide retail sales comprised from the increasing number of consumers who engage in web purchasing (Euromonitor, 2017). In the other hand, there are only 3% of web users who visit to commercial website made purchases in 2016 (Monetate, 2017). Meanwhile, web users who don't complete their purchases and just leave the shopping cart are 80% (Kukar-Kinney, & Close, 2010; Listrak, 2017).

Due to technological development, internet had become an useful tool around the world for people to search information, and make any decisions about consumer goods (Darley, Blankson, & Luethge, 2010; Johnson et al., 2004; Peterson, & Merino, 2003), health (Cline, & Haynes, 2001; Koehler, & Eysenbach, 2002; Kammerer et al., 2013),

news and politics (Althaus, & Tewksbury, 2000; Kruikemeier et al., 2014), and many other subjects (Chevalier, Dommes, & Marquie, 2015). People widely use internet for online search as they think that it can easily get information in a short time which so called high effective in accessing data needed (Peterson, & Merino, 2003). However, it is not essential for advertisers of neutral site to show all the information of product attributes in the websites as it would affect consumers' behavior. Additionally, people who show with many websites via the naturalistic search will have different opinions towards the products or services (Barzilai, Tzadok, & Eshet-Alkalai, 2015; Bhatnagar, & Ghose, 2004; Cline, & Haynes, 2001; Johnson, 2004). Thus, the holistic stance of a search for products or services are different which includes positive, negative or neutral due to the overlapping function or websites attributes when people looking for information from the particular webpage.

In another studies, the number of computer users increases as people will use internet to collect information, learning from video in the internet, watch movie online, make decision, and many more other activities in their daily life. However, the most important thing that every internet users must bear in their mind is that the topics they seek for from online resources are not neutral all the time in stance. Websites will deliver positive, negative or mixture of information for products, services or ideas through advertising (Goldfarb, 2014) and framing (Tewksbury, & Scheufele, 2007). Internet users are likely to use less effective strategies in searching information, categorized online resources, and analyzed gathered information in order to make it more complex (Walraven, Brand-Gruwel, & Boshuizen, 2008; van Deursen, & Van Diepen, 2013).

1.2 PROBLEM STATEMENT

E-business is a new economic mode which changed the way people doing business nowadays due to the rapid grow of information technology, and network

expansion. It also play an vital role as online shopping tends to be widely known and used in people's daily life which can bring convenience to their life in searching for any kinds of information or ordering a variety of goods online. Moreover, people like to use internet as they can find anything about people, places or things through internet as internet is function well for information carrier. Most people don't know how vital the role of search engines as it can facilitate in web environment nowadays during fifteen years ago (Rangaswamy, Giles, & Seres, 2009). Search engines are very useful, and helpful in assisting people to gather all needed information within a short period of time. Furthermore, it also used for learning of new things, entertainment like music or movie, and enjoyment such as games. Most of the searches are conducted with certain purpose, and many of the search results will influence consumers' behavior which related to their daily life, health care, major purchase or entrepreneur who used it to achieve their goal based on Rangaswamy, Giles, & Seres (2009).

In previous research, there are more than 80% of people who use internet will search information via search engines, but they will only focused on the highest rank search results due to the huge information (Yang, Shi, & Wang, 2015). Thus, the websites should always rank at the top so it can increase the visibility of content, and people can easily find for it through search engine optimization (SEO) or Pay Per Click (PPC). SEO will function according to consumer online behaviors, whereas PPC will base on number of clicks by web users, and duration that web users surfing on the webpages (Fiorini, & Lipsky, 2012). Both of the optimization techniques are able to enhance web users' satisfaction, and increase the efficiency of web advertising. Additionally, the sales of a company will increase through search engine marketing (SEM) as it will improve the visibility of particular search keywords. According to Yalcin, & Kose (2010), search engine is a type of technological tool which allow users to gather websites related information or data. High exposure of specific search keywords and attractive webpage allows a webpage to be rank at the highest of the search results pages. The keywords' positions will also affect its profitability based on the web users' page hits or conversion rates like the center keywords position is the best if compared to others (Ghose, & Yang, 2009).

In the past decades, people start to buy goods through internet, and they tend to search relevance information online via search engines. Besides that, they prefer to use internet for their own purposes such as entertainment, education, information seeking, pay bills, and so on which is not only for online shopping. Typically, they like to do information searching online before buying any things through online or offline (Konus et al., 2008; Sands et al., 2016; Verhoef, Neslin, & Vroomen, 2007). In fact, there are estimated 70% of consumers will gather product information from its particular webpage before they place any orders according to an industry report which named as PriceWaterhouse Coopers in 2015. A webpage which provides information about product details, product attributes, product functions or product prices without any online buying services also can increase the revenue of a company (Pauwels et al., 2011). According to Sands et al., 2010; Verhoef, Neslin, & Vroomen, 2007, those consumers who spend more in their shopping during the visit to the traditional physical store had searched information on the commercial website through internet before. Moreover, people will also fully utilize the commercial websites in order to facilitate their buying process in the physical store (Close, & Kukar-Kinney, 2010). It can be concluded that all the behaviors of web users has evolved due to the change of time, and the development of e-business or traditional business.

In this way, all companies are encouraged to put more efforts to their online marketing such as online tools, advertising budgets, and many more due to the increasing number of internet users will search information through different online medium. Based on eMarketer in 2013, the total digital advertising amount around this world in 2012 was \$103 billion which was 20% from the total of advertising amount, and it is estimated that it will be \$163 billion at the end of 2016 which comprised of 25% from the total amount of advertising. Meanwhile, paid search consists of around 50% of total amount of digital advertising in this world, and display advertising consists of 38% from it according to ZenithOptimedia, 2012. In this technological world, the speed of technology and adoption presents tough challenges for businesses. Some of the online marketing tools are free, while some of them are more complex, and high cost. However,

it is very difficult for the advertisers to make the best decision, because each of the online marketing tools has pros, and cons. In addition, advertisers also need to consider the influences towards consumers behaviors either they focused on one online marketing tools or multi-tools for their online advertising. Roberts, & Foehr (2008) stated that using multi types of online marketing tools in adverting is general as people nowadays are using computer in their daily life based on a statistics.

In fact, there are so many alternatives available for online advertising such as search engine marketing, display advertising, social media marketing, email marketing or mobile advertising. However, it is hard for the marketer to decide the marketing tools that they going to use it to promote their products or services as they haven't experience with it before, and they don't even know the characteristics of each one. As Google continues to unhinge marketing models everywhere, companies increased their spending on digital marketing services which is search engine optimization (SEO). Companies aim to convert visitor into their customers through be on the top of search engine which will further creates their businesses' brand. Thus, the purpose of this research paper is to study the factors contribute to effectiveness of search engine optimization marketing towards consumer buying decision. Marketer in a company can maximize the effectiveness of search engine optimization marketing in order to convince visitors to make a purchase so that it can increase the sales, and create brand recognition globally.

1.3 RESEARCH QUESTIONS

The research questions of this study show as below:

- I. What are the factors contribute to the effectiveness of search engine optimization towards consumer online buying decisions?
- II. What is the most effective factor of search engine optimization towards consumer online buying decisions?
- III. What is the relationship between search engine optimization and consumer online buying decisions?

1.4 RESEARCH OBJECTIVES

The aim of this study state as below:

- I. To study the factors contribute to the effectiveness of search engine optimization towards consumer online buying decisions.
- II. To determine the most effective factor of search engine optimization towards consumer online buying decisions.
- III. To identify the relationship between search engine optimization and consumer online buying decisions.