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A STUDY ON ONLINE SEARCH BY PEOPLE USING SEARCH ENGINE

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Abstract

Purpose– The purpose of this study is to understand how users search for online information from search engine through their own experience using the Internet.

Design/methodology/approach– In all, the data collection applied here is the qualitative method in which eleven (11) respondents were interviewed based on the questions prepared by the group. There were fifteen questions constructed in collecting data from respondents. In other words, this case study is using an open-ended type of questions. By interviewing respondents, primary data could be obtained.

Findings - The study provides a new understanding of online users' information search behavior based on. It also raises various questions within the context of user studies. All findings from interviews were discussed and then summarised to see the trend and how their search for information from the Internet.

Originality/value – The case study is based on the online search category in which it should understand the behavior of online users. The method was adopted from other study has done previously.

Keywords Online search, Search engine, Internet, Information search, Information management

Paper type Case study

1.0 Introduction

Online search is the process of searching for and retrieving requested information via a computer or any other networked devices from databases that are available on the Internet. This kind of searches became possible in the 1980s with the advent of faster databases and smart terminals. It also used widely by the emerging of the Internet as the powerful tool. Currently, most of the Internet users are using Google as the primary search engine. The search engine founded in 1998 became popular among Internet users for its capability in doing searching and gathering information from various sources. The purpose of a search engine is to extract requested information from the large database of multi-resources available on the internet. Search engines become a vital in day-to-day tool for finding the required information without knowing where exactly it is stored. Referring to Editorial Staff (2016) in WebNots, there are three types of search engines available on the Internet:

- Crawler based search engine - All crawler based search engines use a crawler or bot or spider for crawling and indexing the new content to the search database
- Human powered directories – Depends on human based activities for listings.

- Hybrid search engine–Using both crawler based and manual indexing for listings the sites in search results.

The Internet has been designed as a vital and useful tool which provides instant access to various information resources. The impact has become so noticeable that its existence can be felt everywhere (Dayang, Wan & Norazlina, 2015). In current trending in using mobile devices such as smartphone and tablet, the information searching process would much more easily than before. The information is at our fingertips.

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Figure 1 List of search engines

Figure 1 showing list of search engines available on the Internet that could be used by people in getting information. These search engines store millions of pages in their database. Sites are automatically included into database without any human interference. Whatever keywords that people search from their engine will be automatically kept in the list. The list of taxonomy on every keyword will be created for future searching purpose.

In the article by Richter (2013), Google has been the top of the list for search engines available on the Internet. This is shown in Figure 2 below. This statistic was done in 2012 where 1.17 billion of people has using Google search engine as the searching tool to search for information. The indicator shows how Google could attract people by its strength of searching things on the Internet. Google have the capability to crawl over the Internet for any kind of keyword been triggered via their engine.

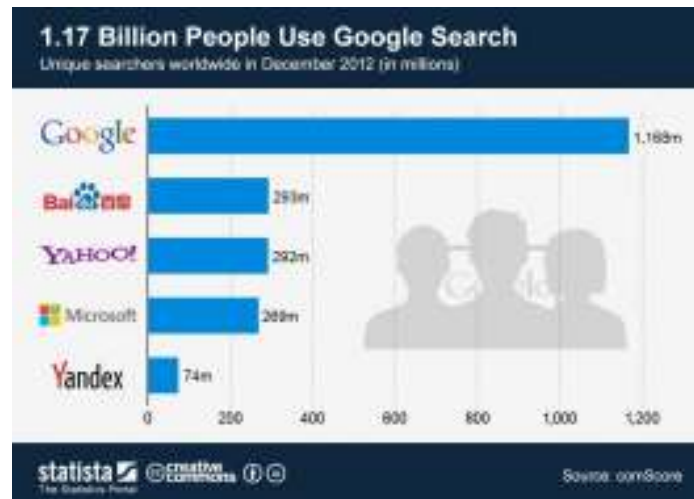


Figure 2 Search engines

In article by Chris (2017), the top 10 list of search engine in 2017 are Google, Bing, Yahoo, Ask.com, AOL.com, Baidu, Wolframalpha, DuckDuckGo, Internet Archive and ChaCha.com. The list is by definitely not means complete and most possibly new search engine will be created in the future but as far as the first places are concerned, Google and Bing will strongly hold the positions and remain as the main search engine used by people.

2.0 Review of Literature

With the rapid development and updates of the Web and search engines, online searching has become a common method for obtaining information. From this statement, the question arises as to how much time people consumed by using search engines for their information needs, and how the online search affects search experiences and outcomes for their needs (Chen, Young & Yong, 2013). According to Fallows (2008), people are using the Internet to search for information daily. In other case study by McGee (2013), he pointed out that 77 percent of people searching for online health information are using search engine on the Internet.

Young (2011) agreed with the trend of people searching using search engine as the online searching mechanism. By the increasing number and trending in using mobile devices, the online searching activity became easier and convenience. In Google Data Report (2016), the analysis found out that more than 1 in 4 users only use a smartphone in an average day. This indicated that almost two times higher compared as those who only use a computer. It shows that our daily lives are spent on mobile device in getting information etc. The searching process through Google also increases by the use of mobile devices. Some of information subjects being captured through the online searching are automobile, media and entertainment, apparel, travel, food, finance, house, electronic gadget etc.

We could agree with the using of online searching method as our daily task in fulfilling our job task and what so ever. This was agreed by Dayang, Wan &Norazlina (2015) in which searching via online using mobile devices become habit among today's community whereby people search for interest information through their devices. Sterling (2016) in his article found that nearly 60 percent of internet searching by people is using mobile devices. This is a good indicator for Internet users in getting the right information at the right platform. In other article written by Southern (2016) which source out from Reuters, in 2017, they predict that should be 75% of Internet users' searches information using mobile devices. Particularly, most of the users are using smartphones as preferred device in getting information.

3.0 Methodology

This study examined the online searching behaviour among several respondents. The targeted population of the study consists of the member of the public that using Internet as the main platform for information searching. In getting data for this study, an interview session were performed by interviewing eleven (11) respondents altogether. A set of open-ended questions were constructed to get feedback from the group. There were fifteen (15) questions has been answered by respondents. McNamara (1999) has depicted that interview is particularly useful for getting the story behind of respondent experience in something. By applying this method, the study is able to collect primary data from respondents. Kothari (1985) define primary data as the original and pure data collected from respondents for the first time. It is the information that been collected purposely for the study. For this study, all answers and feedbacks were written down in forms of table before being discussed in later part of this study.

4.0 Findings/Discussions

After interview sessions being carried out, we could see the behaviors and perceptions towards questions being asked to them. From total number of eleven respondents, there were four females and seven males agreed to be interviewed sharing their experiences in using online search engine to get information. We could conclude that most of male respondents are willing to share their experience and behavior comparing to female. In the second question that touched on the range of age, seven out of eleven respondents were in the range of 31 to 40 years old. This category of age could be from Gen-X and Gen-Y. These indicated that most of respondents were engaged with the Internet to find for information. There is also one respondent who from the age range of more than 50. This could be categorized under "Baby boomer" generation.

Move on to the third question, in which touch on the education background. Five respondents have bachelor's degree and three of them having master's degree. The study also interviewed a clerical level which having *Sijil Pelajaran Malaysia* or Malaysian Certificate of Education level in using online search in their daily works. There is one PhD holder that been interviewed during the session. This showed that all level of education are free to use online information searching via the Internet.

For the next question which enquire whether these respondents having their own Internet access or depend on other source. From the feedback received, the study can concluded that all of them are having their own Internet connection. As we can see the current trend and availability of Internet access by individual. This indicates that Internet access is compulsory for each and every people nowadays.

On the next question, they were being asked about the platform that they are using to access for information. From the interview, we could find that majority of respondents comfortable by using mobile devices and laptop during information access activities. This is because of mobility feature of those devices. It could be used anytime at any place. The study also touches on the frequency of using Internet in searching for information via online search. Looking at the responses from respondents, they are doing several times in a day for it. This indicated that information searching is becoming part of their daily task other than daily routines. This was resulted from Internet access and devices that are using.

Later in the interview session, respondents being asked about the number of search engines available on the Internet. As the Internet users, they give feedback that they know how to used more than one search engine in getting information required. From feedbacks given, all of them agreed that used Google as the preferred search engine in getting information. Gil (2017) discovered that Google is among the best search engine in 2017. He added most people want a single search engine that delivers three key features:

- Relevant results
- Organized, easy to read interface
- Helpful options to broaden or narrowing a search

From the interview, the study found that respondents are relying on the Internet for their information searching process. This could be current trending in which people are depending on the Internet as the source of information. Reuters report (2009) reported The Internet is definitely the most popular source of information and the preferred platform for news ahead of television, newspapers and radio. On the question of how much information that is needed in fulfilling their tasks and requirements, they have replied that Internet has given them accurate results. Some of them need to dig out more information that related to what they searching for. According to Shashi, Neelam & Sahoo (2007), they have identified that Internet has been the force that

transforming the lives of people and provides a wide variety of service in searching for knowledge.

The next question is on the how much information that they wouldn't bother looking up if they didn't have access to the Internet search engine. This question is fraction tricky to respondents to answer. But, the feedback received was informative. One respondent will look up for the information through other channels for example, colleagues. The other said only 60% of information that will be accurate and could be found. Other feedback is the respondent will keep finding the related information until he/she satisfied with the given answer. This finding gave some type of behavior of people in searching for information.

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The respondents were asked whether they think the Internet search engine are a fair and unbiased or not fair and unbiased source of information. One of them has come out with her personal opinion in which some search engines are hosted by certain companies. The search terms used by user will be captured and sometimes advertisement related to what has been search for will display at the side panel of their email. Other respondent felt the search engine is reliable and convenient to search for any kind of information.

Then the respondents being asked the correct result will be displayed when they use the Internet search engine to look up for information. Most of them replied that they always get correct information from the search engine at all times. But, one respondent replied that she will most of the time will get the correct answer for at least one result. Other respondent give his opinion that not all all the time he could get the correct information from the search engine. At the end, he will look into the traditional way in finding information.

The final question being asked to the respondents is the level of confident in using Internet search engine in the process of finding for information. Three out of eleven respondents felt that they confident with the results came out from the search engine. But, one respondent indicated that search for information through online without further guidance. This means that she found that searching using Internet need no further guidance or instructions.

From the interview session, the study can concluded that most of respondents are familiar with search engines available and there are heavy users of the particular engine with using several types of devices. The seeking behavior could be obtained through the data collection for primary data. Primary data is beneficial in describing people thoughts from their own experiences.

5.0 Conclusion

In the digital age, the searching for information is becoming more universal with more available choices and greater control on the part of the individual looking up for information and knowledge (Case & Given, 2016). This statement has cognitive significance by the rapid development of the technology of World Wide Web that contribute to the concept and practices on how people retrieve for information. A study by Nadjla, Maryam & Yazdan (2014) agreed that the Internet has become the most important information retrieval systems for many users since it contains various types of information in different formats. People could access documents, videos, research papers, movies, financial reports, paintings, artefacts and many more just doing some searching using search engine. The emerging of social media phenomena also plays important roles in providing and dissemination of information to people. In current trending, some people are doing business promotion using this medium because of its flexibility and easy to navigate. In Internet Users Survey 2016 by Malaysian Communication and Multimedia Commission, they have found that Malaysians are practicality in multitasking with several devices by accessing the Internet is commonly used in administration, communication, business and security. Business activities are no longer done at premises.

Perhaps in future time by the implementation of Internet of Things (IoT), the search for information might be easier and instant by just doing a request at our mobile devices. In a review conducted by Carlton (2016), search engine evolution is absolutely keeping good step with all the other parallel innovation going on in the worlds of 5G and IoT. This is a positive indicator where searching information would be more exciting by the vast amount of information easily accessed. Another finding by Proffitt (2013) in his article saying that the rise of the Internet of Things means billions of physical objects will rapidly generate huge amounts of data available 24 hours a day. Not only this probably make traditional search methods nearly impossible to use, but it will also create an environment where instead of looking for things in the Internet, but those things will be seeking people itself to give out all varieties of information that will help us in doing daily tasks.

For conclusion, the study list out several benefits of using online search engine. According to an article written by Papiewski (n.d), by using online search engines, people could obtain:

- Time Saving - Without a search engine, Internet users would have to look at sites one by one and opening over the contents of each results carefully. This will consume more time in the searching process.
- Relevance – By using search engine as the medium of searching, Internet users would find the search engine will list out the most relevance information according to the needs of users.

- Free access – Most of search engines provide free access to large amount of information. It will benefits for students, job seekers and other people that needed for an information.
- Comprehensive–Search engine is holding complete information on everything from the Internet. The engine also will trigger any other sites that could be useful for users.
- Advance search – This is an extra value or feature that search engine provide for their users other than keyword search. The purpose of this function to refine searches to be more flexible and sophisticated.

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