

AVAILABILITY OF LITERATURE ON *MAQASID* AND ISLAMIC FINANCE IN THE INTERNET

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Received: 6 July 2020, Processed: 27 April 2020, Diterbitkan: 30 September 2020

Abstract: Maqasid al-Shari'a and Islamic Finance have attracted discussions for the last few decades. This paper examines relative availability of materials related to Maqasid and select institutions in Islamic Finance. Specifically, the main objective of this study was to examine the relative frequency of Maqasid, and select institutions related to Islamic Finance that are available in the Internet search engines (ISEs). The study attempted to assess the availability of materials by accessing the four popular ISEs, i.e., AOL.com, Bing, Google and Yahoo. The Internet was accessed on 04 February 2020 from 9.05 a.m. – 10.05 a.m. [Time at Gombak, Selangor, Malaysia] with duration of 60 minutes. The study computed the ratios on the select terms and then compared among them across the four ISEs. Results show that the productivity of the ISEs for the select terms are ranked as follows: Google, AOL.com, Yahoo and Bing. The paper also highlights the limitations of use of ISEs in using information on the related concepts.

Keywords: Internet Search Engines, Islamic Finance, Maqasid al-Shari'a, Objectives of Islamic Law

INTRODUCTION

This paper examines relative availability of materials related to *Maqasid al-Shari'a* (called *Maqasid* for short) and Islamic Finance. Related terms are also searched for comparative purposes, i.e. based on the premise that rich databases of literature could imply that the concepts are progressing rapidly (Jim, Gao and Wang, 2010).

The main objective of this study is to discover the relative frequency of *Maqasid* and Islamic Finance and other related concepts that are available in the Internet search engines (ISEs). The study does not investigate the quality of the contents of the Web-based materials available in the ISE's. Rather, it collects and analyzes the relative frequencies of related concepts. Results of the study will be able to answer this question: How many hits or results are produced by different search engines when these terms are searched: such as *Zakat*, *Zakah*, *Wakaf*, *Waqf*, *Sukuk*, *Muamalat*, *Muamalah*, *Maqasid*, *Maqasid Syariah*, *Maqasid al Syariah*, and *Maqasid al-Shariah*.

LITERATURE REVIEW

The literature review section discusses two important points: types of Internet search engines and extent of usefulness of different Internet search engines.

HOW INTERNET SEARCH ENGINES WORK

A search engine works by sending out a spider to fetch as many documents as possible. Another program, called an indexer, then reads these documents and creates an index based on the words contained in each document. Each search engine uses a proprietary algorithm to create its indices such that, ideally, only meaningful results are returned for each query (Webopedia, 2012).

Each ISE uses an algorithm to hierarchically rank the relevant pages into a set of results. Since each ISE uses different ranking criteria, it produces results different from other ISEs. What is ranked highly in an ISE may not rank highly for the same query in another ISE (Marsden, 2018).

Types of Internet Search Engines

A number of Internet Search Engines (ISEs) have been used widely in searching for information for the quantity as well as quality of some subject matters (Chau, Wong, Zhou & Chen, 2010; Xiang & Gretzel, 2010; Wang et al, 2012; Giomelakis & Veglis, 2019; Gao & Shah, 2020). Fluctuations of results or complications of algorithm characterize the performance of the Internet search engines (Thelwall, 2008; Uyar, 2009). The fluctuations in the search results do affect the efficiency of Internet search as a publication/communication medium (Chau et al., 2010; Prabowo & Thelwall, 1997; Pirkola, 2009).

Extent of Usefulness of Different Internet Search Engines

Dreilinger and Howe (1997) found that large data obtained from the ISE's might pose difficulties in the selection process. It is also time consuming to filter them, which eventually may not render the results useful (Dreilinger & Howe, 1997; Prabowo & Thelwall, 1997). Prior to the preceding study, Tomaiuolo & Parker (1996) found that similar results produced in one ISE also appeared in the other ISEs. Despite this deficiency, the repetition can be used as checker against the accuracy of the information within and among the ISE's (Dreilinger & Howe, 1997; Prabowo & Thelwall, 1997). Leighton & Srivastava (2010) argue that these rich results give more confidence in terms of information accuracy but not so much of effectiveness of information retrieval.

Wang, Xie & Goh, (1999) contend that search engines are widely used as tools to find useful information from the Internet. However, most search engines were developed based on the technical requirements and without much consideration of the customer's perspective (Ismail & Sarif, 2011). Ideally, ISE's should be very helpful not only to the designers, but also to the users.

In terms of market share commanded among search engines, Google's share topped the list. Market shares of Yahoo, Baidu (Chinese search engine) and Ask search engines remain relatively constant throughout 2011-2019 time horizon. One of the reasons for Google's highest market share (See Table 1) in recent years is its use as a default search engine for Android, while Bing is a default search provider for Windows Mobiles (Tajane, 2011; Statista, 2020).

Most Used Search Engines										
Month	Google	Yahoo	Bing	Baidu	Ask	Other				
March, 2010	85.75%	5.38%	3.11%	3.52%	0.63%	1.61%				
April, 2010	86.30%	5.30%	3.13%	3.02%	0.67%	1.58%				
May, 2010	84.80%	6.19%	3.24%	3.16%	0.75%	1.86%				
June, 2010	84.96%	6.24%	3.39%	3.06%	0.76%	1.60%				
July, 2010	84.97%	5.99%	3.34%	3.34%	0.75%	1.61%				
August, 2010	84.73%	6.35%	3.30%	3.31%	0.71%	1.60%				
September, 2010	83.34%	6.32%	3.25%	4.96%	0.73%	1.40%				
October, 2010	85.15%	6.33%	3.22%	3.34%	0.65%	1.31%				
November, 2010	84.72%	6.42%	3.14%	3.67%	0.56%	1.50%				
December, 2010	84.65%	6.69%	3.29%	3.39%	0.56%	1.44%				
January, 2011	85.37%	6.14%	3.68%	2.92%	0.58%	1.32%				
February, 2011	84.77%	5.69%	3.89%	3.80%	0.54%	1.31%				
Jan, 2012	90.28%	3.39%	3.10%	1.30%	0.65%	1.58%				
Jan, 2013	90.17%	3.36%	3.10%	1.20%	0.62%	1.48%				
Jan, 2014	88.73%	4.29%	2.99%	1.19%	0.59%	1.49%				
Jan, 2015	89.26%	4.53%	2.98%	1.18%	0.58%	1.47%				
Jan, 2016	89.26%	4.07%	2.88%	1.17%	0.59%	1.44%				
Jan, 2017	89.06%	4.20%	2.89%	1.12%	0.57%	1.45%				
Jan, 2018	87.16%	4.59%	2.97%	1.10%	0.55%	1.48%				
Jan, 2019	88.47%	4.85%	2.98%	1.11%	0.55%	1.44%				

 Table 1. Most Used Search Engines And Total Market Share Trend (2011-2019)

Source: Tajane (2011) & Statista (2020)

METHODOLOGY

The study is carried out to ascertain comparative availability of the materials on *Maqasid* and Islamic Finance's terms in five top Internet Search Engines (ISE's): Google, Yahoo, AOL Search, and Bing from Sullivan's top choices only (Sullivan, 2010). Application Programming Interface's (API) ranking supports four of Sullivan's top choices, i.e., Google, Bing, Yahoo and Baidu (RapidAPI, 2019a). API is an interface that allows an application to interact with an external service using a simple set of commands. it can communicate with the service and access all the functions and data that the service is willingto share (RapidAPI, 2019b).

The Internet was accessed on 04 February 2020 from 9.05 a.m. – 10.05 a.m. with duration of 60 minutes [Gombak Time, Selangor, Malaysia) using a combination of selected search terms: *Zakat, Zakah, Wakaf, Waqf, Sukuk, Muamalat, Muamalah, Maqasid, Maqasid Syariah, Maqasid al Syariah,* and *Maqasid al-Shariah*. A tabular format was created to capture the data of interest for each search engine. The ratio of hits for each term within each ISE is computed by dividing the hits into the total hits for the search engine.

However, the study limits itself to five "top choices" of Internet search engines, namely, Google (www.google.com), Yahoo (www.yahoo.com), AOL Search (www.aol.com), and Bing (www.bing.com). The researchers recorded the hits shown for all the search terms, i.e., *Zakat, Zakah, Wakaf, Waqf, Sukuk, Muamalat, Muamalah, Maqasid, Maqasid Syariah, Maqasid al Syariah, and Maqasid al-Shariah*.

The use of ratios to compute hits produced by the Internet search engines provides a means to assess impacts (Bharat & Broder, 1998). Moreover, it is more appropriate to make inference from the use of ratios (Lawrence & Giles, 1998), although such approach can be less reliable statistically (Chu & Rosenthal, 2010). Given time constraints, it is still economical to use ratio approach (Lawrence & Giles, 1998).

FINDINGS

The findings section presents the results in terms of the number of hits of the terms related to *Maqasid* and Islamic Finance produced by the four Internet search engines (ISE's), see Table 2. The terms searched include *Zakat*, *Zakah*, *Wakaf*, *Waqf*, *Sukuk*, *Muamalat*, *Muamalah*, *Maqasid*, *Maqasid Syariah*, *Maqasid al Syariah*, and *Maqasid al-Shariah*.

Search Terms	Google	Bing	Yahoo	AOL.com	Total
Zakat	87,700,000	3,390,000	3,390,000	6,920,000	101,400,000
Zakah	2,940,000	168,000	168,000	3,090,000	6,366,000
Wakaf	9,030,000	564,000	563,000	1,150,000	11,307,000
Waqf	3,780,000	789,000	789,000	1,150,000	6,508,000
Sukuk	2,530,000	789,000	1,080,000	2,350,000	6,749,000
Muamalat	3,800,000	488,000	488,000	1,000,000	5,776,000
Muamalah	7,280,000	104,000	104,000	225,000	7,713,000
Maqasid	771,000	68,000	68,000	147,000	1,054,000
Maqasid Syariah	323,000	33,000	33,000	55,800	389,000
Maqasid al Syariah	250,000	28,000	28,000	48,200	306,000
Maqasid al-Shariah	159,000	16,300	853,000	686,000	1,714,300
Total	118,563,000	6,437,300	7,564,000	16,718,000	149,282,300
Percentage	79.42%	4.40%	5.07%	11.11%	100.00%
Rank	1	4	3	2	

Table 2. Hits for search terms for *Maqasid* and Islamic finance and others

Note: 04 February 2020 from 9.05 a.m. – 10.05 a.m. [Gombak Time]

The ISEs show the total hits for the terms Zakat, Zakah, Wakaf, Waqf, Sukuk, Muamalat, Muamalah, Maqasid, Maqasid Syariah, Maqasid al Syariah, and Maqasid al-Shariah. Google produced the highest hits for "zakat" (87,700,000 hits) compared to Bing and Yahoo with 3,390,000 and AOL with 6,920,000 hits. The term "zakah" produced gathered some hits in Google (2,940,000 hits), Bing and Yahoo (168,000 hits each) and AOL (3,090,000 hits). The terms "zakat" and "zakah" are commonly used in the write ups, thus both spellings were included in the search. Likewise, the terms "wakaf" generated 9,030,000 hits in Google and 1,150,000 hits in AOL. But Bing and Yahoo produced 564,000 hits and 563,000 hits, respectively. "Waqf" is also used to refer to 'wakaf" with 3,780,000 hits in Google, and 1,150,000 hits in AOL. Bing and Yahoo produced 789,000 hits for "waqf" terms. Other terms being used interchangeably are "Muamalat" and "muamalah". Google produced 3,800,000 hits

for "Muamalat" but 7,280,000 hits for "Muamalah." Other Internet Search Engines produced fewer hits. As for "Maqasid," "Maqasid Syariah," "Maqasid al Syariah," and "Maqasid al-Shariah" all search engines produced low hits.

DISCUSSION

Google stands out among the four ISE's for both single and combined search terms. The eleven search terms used in this study are *Zakat*, *Zakah*, *Wakaf*, *Waqf*, *Sukuk*, *Muamalat*, *Muamalah*, *Maqasid*, *Maqasid Syariah*, *Maqasid al Syariah*, and *Maqasid al-Shariah*. Google produced the highest hits for all search terms, except for "Maqasid al Syariah" and "Maqasid al-Shariah". This suggests that it is highly probable that Google's materials for combined hits, which are more specific, also included in the generic and single search terms hits.

CONCLUSION

Based on the results of the specific search terms generated by the four ISE's, we can say that the amount of materials on *Maqasid* series is relatively meager. *Maqasid* gives broad perspective or guiding principles, whereas other search terms (such as *zakah*) are specific. While the ISEs captured materials related to other search terms, they were deficient in capturing *Maqasid*. Researchers will have to resort to other sources of information to learn about *maqasid*.

LIMITATIONS OF THE STUDY

The study attempted to assess the availability of materials on *Maqasid* and select concepts of Islamic Finance on the Internet. The relative ratios represent comparable measures among the search engines to afford analysis. Due to a big gap among the results between Google and other search engines, some corrective measures may have to be introduced to make more refined comparisons among the search engines.

Another limitation of the study is its use of cross-sectional data (hits) at a point in time. Stretching the study over time, for example quarterly, over a few years should be able to provide a meaningful pattern of coverage of the search terms across search engines.

SIGNIFICANCE OF THE STUDY

The study is very significant in assessing the breadth of coverage of materials on *maqasid* and Islamic Finance. The Internet search engine provides quick information on availability of such materials. Generating comparative hits regularly will give an indication of the amount of additions to the literature. Clearly, the Moreover, *maqasid* and Islamic Finance is still in its early stages.

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