

Trend Analysis on 13 Years of Halal Research; Investigation on Halal Food Research

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Abstract - Despite all the attention halal received from the economic point of view, the academic exploration of the subject has yet to be analyzed. Research on the different aspects of halal has begun, but due to the broad scope of the subject, no one has yet studied the overall approach and trend of research on halal. While the subject area is becoming popular with stakeholders, it is interesting to see whether the academic community is keeping up with the booming growth of the industry. Published articles from 2005 to the beginning of 2019 were used in this study. In this study, 13 years of 'halal' publications in the fields of social sciences, art & humanities and business & management were extracted, analyzed and interpreted in two major databases in order to understand the actual situation of halal research carried out since the year 2005. Findings showed that most halal research conducted over the last 13 years focuses more on halal product and halal food, and focuses mainly on consumer behavior and outlook, halal slaughter, halal meat and food production, to name a few. Such results indicated that there are still numerous halal sub-topics that researchers need to investigate, and that the body of knowledge itself needs rigorous research in the future.

Keywords: *halal food, trend analysis, halal*

1.0 Introduction

Halal has become a global phenomenon and is seen as a new driver of the economy, regardless of its Muslim population density. Non-Muslim countries like Australia, the United States of America, Argentina and others have made good profits through their halal economy activities. Australia for instance, is one of the largest exporters of halal meat while Argentina is one of the largest producers of halal poultry. This shows that 'halal' relate economic activities will continue to thrive well in the future and generate more interest from the various

stakeholders. In relation with the increasing number of Muslim populations, demand for halal products will only continue to thrive and expand.

Halal in Islam is defined as anything that is permitted where there is no limitation and is permitted to do so by Allah [1]. General Quranic has managed to ensure that all food is halal apart from those specifically referred to as haram in the Quran [11]. Saying in the Quran, all Muslims are not allowed to feed on flesh, spattering blood, pork or food that has been blessed to any being other than God himself [6].

Islam is one of the largest and fastest-growing religions in the world, with 25 per cent of the world's population or 1.8 billion Muslims [12]. Halal is now a globally recognized issue and is receiving massive global attention. Halal means "permissible" or "lawful" in Arabic words. It refers to anything that is permissible under Islam and in accordance with Sharia law [8]. Halal is also known as 'pure food' in respect of meat by following Islamic rulings and practices such as slaughtering and avoiding pigs [5]. Alqudsi [2] has added Toyyiban, which is halal and Toyyiban, which means hygiene, health, safety, nutrition and quality. According to [9][4] and [10] Halal means permitted or lawful under Islamic law (Syara) and refers to Al-Quran and Sunnah. They also define as designated any object or action that is permitted to be used or engaged under Islamic law. Haram is the inverse of halal, which means that it is denied and unlawful, as indicated by Al-Quran and Sunnah. Islam is a characteristic lifestyle and incorporates the idea of a financial framework for human collaboration and fraternity, which depends on the laws of interview and diet for all mankind. Halal consists of anything that is free from any part that Muslims are not allowed to spend. It may be referred to as 'pork free' in its physical presence, including by-products such as gelatine, compounds,

lecithin and glycerine to added substances such as flavorings and shading of [14] and [7].

2.0 Background to the study

As the halal industry grows rapidly, the need for new policies, regulations and the expansion of its knowledge base is becoming more critical. Due to this growing demand, the need for researchers to contribute their ideas and research into the halal ecosystem is becoming more crucial [3].

The source of the foundation for a strategic approach and content in the development of the halal industry is the research and study of the halal ecosystem by various researchers around the world. Through these studies, the published outputs have become the main and most critical sources of information and knowledge for halal industry stakeholders, including the governing bodies. It is therefore crucial that the growth of the body of knowledge is at the same time as the growth of the industry itself.

This study attempted to investigate whether the width and depth of the halal body of knowledge were as scaled up as the halal industry was burgeoning. The aim of this study was to meet the following objectives:

- a. To investigate the current trends in halal research in the fields of social sciences, humanities, business and management from 2005 to the present.
- b. Investigate potential research gaps for future halal research in the fields of social sciences, humanities, business and management.

In order to meet these objectives, two of the main publication databases used by academics and postgraduate students to publish the results of their research, in particular in Malaysia. These two databases are Scopus and Web of Science, which have been used as data sources for this study.

3.0 Problem Statement

Over the last 20 years, halal research has slowly gained a global foothold, but until today, due to the vastness of halal related issues, it is difficult to see the overall landscape of the research niche. As a result, it is challenging for researchers involved in this field to commonly conclude the outcome of any halal area of research and even to find ambiguous information on the direction of the field itself. Any sound conclusion could not be reached without a thorough and systematic review of the content of previous research. Decisions on the usefulness of an intervention or the validity of a hypothesis could not

be based on the results of a single study, as the results usually vary from one study to another. Instead, a mechanism is needed to synthesize data across studies. Narrative reviews have been used for this purpose, but the narrative review is largely subjective (different experts can come to different conclusions) and becomes impossibly difficult when more than a few studies are involved.

4.0 Methodology

This research was started off as using the meta-analysis approach, where data from several databases including SCOPUS and Web of Science. The extraction was done manually using the databases search engines. Keywords such as 'halal', 'toyib', 'halalan toyibban' were used during the search to capture the content of any publication that might be related to halal study. In the initial, all found articles (that were accessible) were downloaded and read individually one by one and information from the articles were recorded in table form in Microsoft Excel file. This exercise proved to be tedious and manual recording took a long time to finish. Apart from that, meta analyses could not be conducted as the extracted data failed to provide adequate clustering due to lack of density on particular theme within any sub-topics on halal studies. The second approach was then carried out in a similar manner but this time around only two data bases were used i.e. Scopus and Web of Science. Extracted data was then analysed using Vosviewer software. VOSviewer is a computer program for creating, visualizing, and exploring bibliometric maps of sciences [13].

Data was collected as described below:

Step 1 – Log in into e-resource via university online library

Step 2 - Key in the following keywords into different data bases
Step 3 – limit the result from year 2005 till early 2019 (13 years)

Step 4- limit the result to only include publication from the area of Social Sciences, Humanities, Business & Management.

Step 5- Start downloading accessible resources, save file as csv comma- delimited file before exporting to VOSviewer. Comma-delimited is a type of data format in which each piece of data is separated by a comma. This is a popular format for transferring data from one application to another, because most

database systems are able to import and export comma-delimited data. VOSviewer is a software tool for analysing and visualizing scientific literature introduced by Dr. Nees Jan van Eck from Centre for Science and Technology Studies (CWTS), in 2017. Even though relatively new this software has paved the way to scientifically perform Systematic Literature Review (SLR) and graphically explain the output through visualization (bibliometric) networks, with text mining functionality and using layout and clustering techniques.

Through advanced visualization features, smart labelling algorithm, overlay visualizations and density visualizations ('heat map'), this software allows researcher to obtain quality output from literature review with the hassles that usually came with manual operation.

Step 6- repeat step 1 to 5 with other pre-determined data base

Extraction was then done and filed into a csv format and later imported into VOSviewer for complete analysis. For data extracted from Web of Science, a special conversion needs to be done to enable the data set to be analysed by VOSviewer.

Upon extraction the data was saved as Plain Text and then converted to "ANSI".

5.0 Results and Discussion

The first output showed that out of 841 articles produced between 2000 and early 2019 and published by Scopus, 444 are in the social sciences, humanities, business and management fields. More than half of that was written by authors affiliated with Universities in Malaysia.

Until recently most of the articles were produced between 2010 and 2019. This was to show that as the momentum of the halal industry picks up, academic researchers from the related fields followed suit. Based on Figure 3, it is also fair to assume that most of the work that was performed was closely related to the industry's business aspects, and less so in the halal industry's technical portion such as halal science and technology. Malaysia continues to lead not only as one of the main players in the halal industry but also as the industry-related producers of academic work. This finding indicated that researchers based in Malaysia are well-aware of the latest trend in the industry and are in line with the market growth associated with the halal ecosystem.

The first visualization (Figure 1.0) showed that most of the Scopus published research was done on halal product study and related parameters such as consumer perspectives, consumer behaviour and challenges.

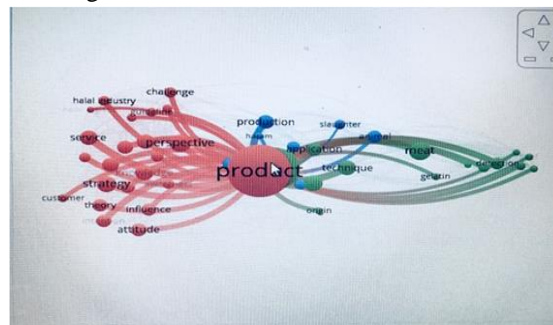


Figure 1.0- VOSviewer Network Visualization (Product)

These are the main scope of halal study that was attempted by halal researchers for the past 13 years since 2005. Again, these are the researches that are related to the field of social sciences, humanities, business and management.

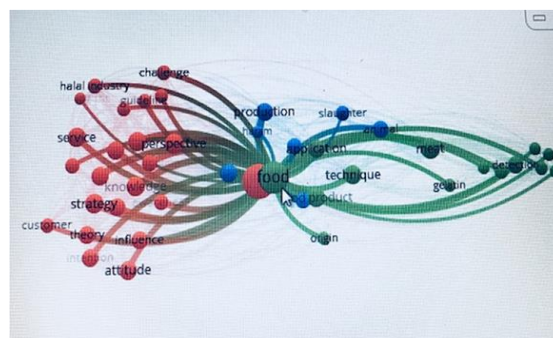
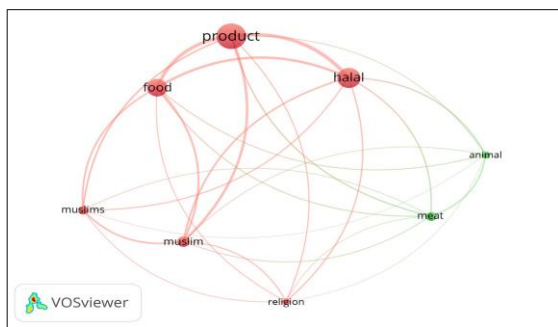


Figure 2.0 VOSviewer Network Visualization (Food)

Another output (Figure 2.0) also indicated that most of the halal researches in these three fields focused on food and its adjoining issues such as slaughtering, meat, animal, gelatine and detection method.

Combining these two factors, it is safe to summarize that researchers in these fields have focused most of their halal research on food and products and other related issues related to these two research variables. These findings basically indicated the scarcity and lack of research in the halal ecosystem, and there is a serious need to increase the coverage and depth of the subject matter.

Similar analysis was done using the Web of Science database. The outputs are as follows:



As for Web of Science (WoS), the number of publications on halal research was even more scant. The number of total published article from the same research fields are less than 100. Visualization on the extracted data indicated similar pattern whereby most of the researches were done on food and halal product. Results from both data bases suggested the same manifestation. Halal research in the field of Social Sciences, Art & Humanities and Business & Management is severely inadequate.

6.0 Conclusion

Based on the research findings, it is safe to conclude that the amount of halal research that was done in the field of Social Science, Humanities & Arts and Business and Management is critically inadequate.

Most of the researches done are related to halal food, from various perspective. As the growth of the halal industry is getting higher, the body of knowledge concerning halal related study should too. The inability of academics to keep up with the industry's growth rate will cause a lot of issues especially in relation to sustaining the sector.

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Academic and their scholarly works pay a crucial role in ensuring strong supports towards the economic and social development of any industry. Various strategies and policies stemmed from the work of academics well versed in their own fields, thus lagging of the scholarly in any niche area will without any doubt will impedes the expansion and growth of the sector.

Future research in the field of halal study should consider the width of the industry. The clustering of halal ecosystem needs a look into, in order to ensure that it will align with the growth in the body of halal study knowledge that it is supposed to cover. It is also crucial to do so, as any significant gaps in it can easily be visible thus creating interest among future halal researchers to explore and conduct further study on it.

7.0 Limitation of Study

In this study, the data was extracted from the two main data bases thus it does not capture other halal related publications that were published in other databases. Future study should include more publications data bases and a wider subject scope including studies in the area of science as well.

Acknowledgement:

This paper is partly based on a research funded by UUM University Grant (SO Code:13622). The author expresses her appreciation to the RIMC Universiti Utara Malaysia for their continuous support.

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