



IMPEDIMENT FACTORS TO SUCCESSFUL USAGE OF ONLINE HALAL CERTIFICATION

Sazelin Arif^{1*}, Nurdinah Abu Bakar², Safiah Sidek³

¹Centre for Languages and Human Development, UniversitiTeknikal Malaysia Melaka,
Durian Tunggal, 76100 Melaka Malaysia

^{2,3}Institute of Technology Management and Entrepreneurship, UniversitiTeknikal Malaysia Melaka,
Durian Tunggal, 76100 Melaka Malaysia

*sazelin@utem.edu.my

Article History: Received on 07th January, Revised on 19th February, Published on 19th March 2019

Abstract

Purpose of the study: The purpose of this paper is to identify the impediment factors that hinder the successful usage of online halal certification.

Methodology: Semi-structured interviews were conducted with 14 representatives from 14 halal food companies in Melaka, Malaysia. The respondents had used the system either to apply for new halal certificates or to renew the existing ones. The identification of the impediment factor was a part of the fulfillment of the translation process by Actor-Network Theory (ANT) during the process of problematization, interessement, enrollment, and mobilization. Identifying the impediment factors was conducted during the first translation stage of problematization.

Main Findings: The findings indicate that there are three impediment factors that hinder the successful usage of MYeHalal system. The factors were categorized into three categories, namely, applicants' problem, technical problem, and operational problem. The applicants' problems were caused by the applicants themselves, while the technical problems were caused by the non-performing dysfunctions of the technology, and lastly, the operational problems were caused by the inefficiency of the certifier in fulfilling the tasks and providing the services to applicants.

Applications of this study: The identification of these impediment factors will help halal applicants to be aware of the important elements before submitting their application via MYeHalal system. Further, this study will help to enlighten the ways to improve the performance of the system and make it convenient to be used and managed by both halal applicants and JAKIM as the certifier body.

Originality: This paper is the first to discuss the inefficiency issues in the usage of online halal certification, since it was first introduced in Malaysia.

Keywords: Halal Certification, MYeHalal system, Actor-Network Theory

INTRODUCTION

The online system was adopted for numerous reasons and benefits, such as to achieve easier and faster process, to get wider coverage of users, and to ensure equal distribution of information (Thompson et al., 2005; Pedersen, 2017). These benefits have attracted almost all traditional processes and practices to integrate into a new and advanced approach to engagement. The integration has crossed different types of industries and services, such as education, banking services, marketing, governance of the country, and many others (Gregory et al, 2016; Szopiński, 2016; Pedersen, 2017; Dziuban et al., 2018).

This phenomenon has taken place in Malaysia as e-government was introduced as one of the seven flagships of the Malaysia Super Corridor (MSC) in 1996 (Shafie, 2007). The application of e-government in Malaysia has evolved since then and it was eventually enforced as a halal certification application after the launching of the third Industrial Master Plan (IMP3), 2006-2020 (Chapter 21) and 11th Malaysia Plan (RMK-11) (Chapter 8 and 18). The effort was spearheaded by Jabatan Kemajuan Islam Malaysia (JAKIM) to realize the objective of making Malaysia as the global halal hub by building up a credible, reliable, and efficient system of halal certification.

JAKIM has launched its first online halal certification application in 2007, named e-halal system. This system was rebranded into the MYeHalal system in 2014 and was completed by restructuring halal certification schemes application (JAKIM, 2014). The introduced certification schemes were related to food and beverages products, applied products, food premises, slaughterhouse, logistics, pharmaceuticals, and cosmetics/toiletries. Besides, JAKIM (2014) has enforced



that all halal applications must be sufficed only through the MYeHalal system. This enforcement has led to the full involvement by the Halal Management Division (HMD) of the State Islamic Department in providing the service of online applications. Thus, the HMD was trained by the technical officer of JAKIM on the processes and procedures involved in online halal certification application to prepare them in providing efficient service to the online halal application.

The integration from the normal practice to the new practice is not an easy feat, and it is sometimes underestimated. Mariscal et al. (2008) emphasized that the preparation of ICT adoption must start with sturdy organizational tools, such as proper infrastructure, solid source of financing, assessment programs/procedures for the instructors, and few other elements. In this case, JAKIM – as the main administrator for MYeHalal system – has conducted a series of training with the HMD staffs to equip them with proper knowledge and skills on how to use the newly upgraded MYeHalal system. The training includes the basic troubleshooting measures to tackle any technical issue occurred while using the MYeHalal system.

Despite the successful usage of the system and the positive response, there were some applicants who refused to use the system and were instead willing to spend thousands of ringgits of additional charges in hiring external consultants to apply the halal certificate for them. Although their companies can afford to pay the services, this practice is not encouraged as any issues or problems aroused from the application will be referred directly to the company and not to the consultants. This will lead to misunderstandings and miscommunications that can affect the certification process and threaten the stability and performance of Malaysia's halal certification industry.

Therefore, this research is motivated to identify the impediment factors that caused the unpleasant usage of the MYeHalal system and will lead to a clearer picture of why some applicants have refused and felt reluctant to use the system. Thus, this research aims to answer the following research questions:

- What are the difficulties faced by users in the online halal certification?
- What are the impediment factors that threaten the successful usage of the MYeHalal system?

This paper is divided into five sections. The first section is the introduction, followed by the literature review in the second section. The third section discusses the method used in this paper. The fourth section will present the discussion of the findings, and the last section will focus on the conclusion of the analysis.

LITERATURE REVIEW

The existence of food consumption guidelines in Islam is to protect human health and sanity by consuming only permitted (halal) and good (thayyib) food. For Muslims, this guideline must be practiced throughout their lives. However, the practice of consuming only halalan thayyiban food could be currently challenging, as some of the food is prepared by non-Muslims and the status of its halalan thayyiban can be uncertain. In Malaysia, the responsibility of determining halal food is handled by JAKIM and consumers can easily recognize halal food in the market by checking the halal logo used by JAKIM (Ismail et al., 2016). The halal logo symbolizes that the product is certified with halal by JAKIM and it has fulfilled all halal procedures and requirements. The halal certification can be applied to any food, drink, products, and services that manufacturers or providers wish to earn Muslim consumers' market, and in fact in Malaysia, some non-Muslims also tend to choose halal-labeled products more than the unlabeled halal products and this urges product manufacturers and service providers to acquire the halal certificate (Haque et al., 2015).

In Malaysia, the halal certificate can be earned by fulfilling all requirements set by JAKIM and the application starts by filling the online application form via the MYeHalal system. In the last five years of commercialization of the MYeHalal system, the response from users has been varied. This is because the applicants have a different background in ability and experience in using online technology, where some people could understand faster while some people could not, and this influences the acceptance and usage of MYeHalal system. When looking to similar studies that study humans interactions, acceptance, perceptions, and performance with online technology, there are many relatable studies, especially in online learning (Dalhan and Akkoyunlu, 2016; Almaghaslah et al., 2018). As the online system is a technology used by many, studies pertaining its interaction with human being's different abilities, needs, preferences, and outcomes are important to measure the efficiency of technology in meeting users' expectations.

Various measures can be taken to investigate the mechanisms of online technology. The use of Actor-Network Theory (ANT) is common in past studies that involved online technology usage, especially those related to e-government and e-health (Greenhalgh & Stones, 2010; Ranerup, 2012; Troshani & Wickramasinghe, 2014). Developed by Michael Callon



on 1980s, ANT is a study of the sociology of translation that emerged in social and technology research (Callon, 1986). It uses the interpretative actor-network lens to integrate technology into social processes (Shim and Shin, 2016). This enables the technology elements in research to be equally treated as human elements and both go through the same interpretative lens of the translation process. The translation process consists of four processes, namely, problematization, interessement, enrollment, and mobilization.

The problematization is the stage where the focal actors define the problem, the main actors are identified, and the obligatory passage point or the solution is determined (Xuan, 2014; Shin, 2016). The actors can be a combination of human and non-human elements that are engaged in the subject being studied (Rivera, 2013). The identification and definition of the problem is important for suggesting proper solutions. The roles of actors and alliances are highlighted later in the interessement stage and more alliances are recruited and enrolled in the enrollment stage. The actors and the alliances or the so-called networks are formed and deformed to become sturdy or weak, and everything is defined and understood. Eventually, the last stage of mobilization will show the mobilized network of association considered as suitable and sturdy to reach the OPP.

This study focuses only on a part of the problematization stage where the impediment factors or specifically the problems that hinder the successful usage of the MYeHalal system are identified and discussed. After that, the actors identified from the impediment factors are shortlisted as the conclusion of this research. Thus, this research is expected to fulfill the gap in online halal certification studies that is currently insufficient to identify the difficulties in using online halal certification in social and technical spectrums.

METHODOLOGY

This research adopts a qualitative approach. As argued by Maxwell (2009), the qualitative research must have interactive synergy between the goals of conducting a study with the creation of the conceptual framework, the designation of the research question, methods used in conducting the study, and validity of the research. Maxwell (2009) also stressed that the goals, conceptual framework, and the research questions should be integrated well, which means that the research questions must be designed according to the research goals and the theoretical concepts or model applied in the research must be confirmed to be suitable with the subject being studied as well as the goals and research questions.

As this study aims to identify the impediment factors or the difficulties that hinder the successful usage of MYeHalal system, the investigation must be conducted by exploring one's real experience in using MYeHalal system. Besides, both main elements that exist in the usage of the system are a combination of user (social) element and MYeHalal system (technical) element and both were analyzed and judged through the same approach. Therefore, it is important to use a suitable theory or approach that can give equal treatment to both elements and ANT has made it possible. In most ANT studies, interview and ethnographic approaches are the most preferable methods to be applied (Minas et al., 2016; Shim & Shin, 2016). Thus, a semi-structured interview was used to collect the main data from the users of MYeHalal system, also referred to as applicants. A total of 14 system users were selected for this research and they comprised of:

- a) Halal Executive or Halal Executive cum Administration Executive
- b) Company owner or co-owner
- c) Halal Department Manager or Halal Committee Member

In this research, the population is gathered from the first segment of the halal certification scheme, which is referred to as the manufacturing companies of halal foods or beverages or food supplements. This scheme is chosen because it is the largest scheme within the halal certified companies and in Melaka itself, a total of 151 companies belonged to this certification segment and were identified from JAKIM's halal directory database, www.halal.gov.my. The sampling strategy used is purposive sampling. The main reason to use this sampling technique is to focus on the population area mentioned earlier besides enabling the enrichment of data collection, despite the small number of respondents and usually, the data collection was stopped when the information derived from data collection saturated (Patton, 2002; Guest et al., 2006).

Besides semi-structured interviews, the data was also supported by the log report gained from the Halal Certification Workshop, organized by JAKIM for the halal applicants. Other than that, the data was also supported by interviews with Jabatan Agama Islam Melaka (JAIM) administrative officers and JAKIM technical officers to get insights from the certifiers' perspectives regarding applicants' problems. Thus, by widening and varying the sources of data collection,



finding solutions to difficulties in MYeHalal application was more diverse and reliable. The data gathered pertaining to difficulties in using MYeHalal system is assigned into few categories, which will be presented in the next section.

FINDINGS

This section is framed by the problematization stage of ANT that involves the identification of problems in using the MYeHalal system. The analysis of ANT will help to describe the what, why, and how of the problems, and this will contribute to the deep understanding of issues related to the use of MYeHalal system. Figure 1 presents the overall structure of problems found in the usage of MYeHalal system. The identified problems were assigned into three categories, namely, technical problems, applicants' problems, and operational problems. The categorization is determined on the basis of the role and importance of the distinctive elements of online halal certification application and is visualized in the figure below:

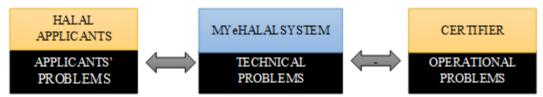


Figure 1. Categories of problems in the MYeHalal system

Technical Problem

Though the interview with MYeHalal system users was pertaining to the system usage, several technical problems were highlighted on the basis of inefficient performance of the MYeHalal system itself. The problems are (1) Probable usage of limited browser for efficient system performance, (2) Slow performing system, (3) Frequent maintenance works, and (4) System failure to perform the assigned functions.

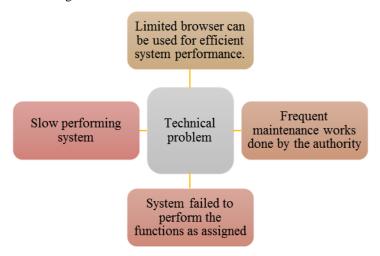


Figure 2. Technical problems

Several respondents agreed that slow performing systems distracted the process of halal application:

System User B, Halal Executive cum Administration Executive: "it just that sometimes the system is very slow...error...and I just straightaway call JAKIM."

By phone call, respondents usually refer to JAKIM or JAIM to look for a solution. However, in some cases, the problem cannot be solved over the phone call and instead, the respondent needs to go to the JAIM's office:

System User J, Company Owner: "The system always loading, I waited for a long time. That was the problem for me. At first, I thought the problem was caused by me."

"Did you access it from your own office?"

"Yes, I failed two times at that time. Thus, the third time I did it at JAIM's office. But it was the same. The system keeps loading until I call the office, she told it was a common problem, I just need to wait."

The slow performing system unexpectedly caused a long period of application, triggering unpleasant response from the system user. However, the causes of slow performing system could be varied. In some cases, it was caused by the slow



internet connection or small bandwidth, and in some other cases, it was caused by huge traffic of users making it into the system and the overwhelming numbers pose difficulty for the hosting server to serve each visitor (Aminu & Ismail, 2015).

Besides, the MyeHalal system users felt troubled with the frequent maintenance works done by the authorities. Some of the users who need to meet the deadline of their works were positively disturbed by these circumstances as they had no choice but to wait until the system is working:

System User F, Halal Executive: "The problem caused by the administrator of the system. The system is not working...it could not open. I called (the authority) and asked why the system could not open; they said the system is not working this morning, please try again at noon."

System User K, Halal Department Manager: "The problem is that the system was always under maintenance. The period of the maintenance was quite long. It gave (bad) effects to the company."

According to the interview with JAKIM Technical Officer, it is clearly understood that maintenance works are needed to ensure the system is updated and maintained.

"As the caretaker of the system, maintenance could not be avoided as it will help the system to perform well from time to time".

However, the frequent number of maintenance works plus the duration it takes for each maintenance work is affecting the efficiency of the system. These frequent and longer maintenance works obstruct the company works to complete their halal application.

The technical problem continues with the failure of the MYeHalal system to perform the functions as assigned by the user. MYeHalal system users described that the technical issue pertaining to the failure to perform the assigned tasks was seen the process of adding the ingredients' information into the online application form:

System User I, Halal Executive: "When I updated the ingredients and print it out, I saw the printed version of the form was different from what I have updated in the system"

System User K, Halal Department Manager: "I have experienced, I clicked to submit the application form, but JAIM did not receive it. I am forced to key-in back the information into the application form and submit it again. It wasted my time".

All halal applicants are required to declare the ingredients used in their products before they can choose them. Therefore, this process will consume a lot of efforts because the number of ingredients to be declared could reach thousands for some companies. In this case, it has been reported that some of the ingredients' information was lost even though it was saved by the users. The missing data discovered during the submission was sent to JAKIM or during the printing of the online form. All these cases were then referred to JAIM or JAKIM and surprisingly, the missing data can sometimes be retrieved and viewed by JAIM or JAKIM officers via the system's administrative view. However, in other cases, the information was totally lost and users had to repeat the declaration process all over again.

Besides that, the technical problems were caused by limited internet browser that can be used for efficient performance of the system. The MYeHalal system users mentioned that only limited browsers can be used:

System User E, Halal Executive: "The problem is the system cannot be opened with Google Chrome, only Mozilla can..."

System User N, Halal Executive: "This system cannot be surfed by all browsers. It must be surfed by Internet Explorer."

This issue was also admitted by JAKIM Technical officers that other internet browsers, such as Google Chrome, Mozilla Firefox, Opera, etc., can be used but a few functions would fail to load and cannot function at the truest capacity.

Applicants' Problems

The problems in this category refer to the problems caused by the applicants themselves. As applicants are the main users of the system, it is important to investigate how an applicant can affect the effectiveness of the system. Five applicants' problems were found from their interview. The applicants' problems are shown in the figure below.



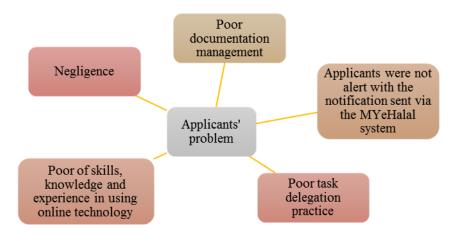


Figure 3. Applicants' problems

The first applicants' problem is poor documentation management. The MYeHalal system user stressed the difficulties of having a halal certificate for the imported ingredient:

System User C, Company Owner: "Before this, my halal application was stuck because of pandan (screw pine) flavor that I imported from Indonesia. The halal certification of the flavor was still in process of application with their halal authority and my halal application sent via MYeHalal system was rejected as I failed to present the halal certification of the pandan flavor".

Every application of halal certificate must be attached with a halal certificate of the ingredients as the supporting documents. According to JAIM Administrative Officer, the applicants must compile all of the halal certificates of the ingredients and present them to the JAIM's office to prove the ingredients are positively certified as halal. Like Malaysia, halal certification issued by certifiers from other countries have their own period of validity, and every applicant must understand and be aware of these important details (Othman et al., 2016). It is stressed by JAKIM Administrative Officers that if applicants declared any ingredients without a valid halal certificate in the MYeHalal system, then the application might be rejected due to failure in presenting a complete set of documents after the online form submission. As experienced by the system users, the applicants would be required to repeat the online application after completing their documentation. JAKIM policy also emphasized that any online application will be automatically rejected if the documents were not completely received within 14 days after the online form submission. This entails that it is critical for applicants to present the valid halal certificate of the ingredients before declaring any ingredients' information in the MYeHalal system to ensure an efficient practice of document management.

Besides, the problem was also rooted by applicants who were not aware of the notification sent via MYeHalal system.

System User C, Company Owner: "I did not know, I'm not always logged into the system to check. They (JAIM) should call me to inform any important thing regarding my application."

In MYeHalal system, there is one function used to check applicants' status. The system administrator, either JAKIM or JAIM, will update the application status from time to time. The notification will notify the applicants if they need to take some actions pertaining to their applications or to acquire their application status. However, some applicants did not put serious attention to check the notification in the MYeHalal system, leading to abandoned messages and unresponsive acts. The consequence could be worse if the failure to respond leads to the rejection of their online application. This happens because the applicants would expect either a phone call, an email, or an official letter to be notified on their application status. Moreover, many halal applicants are used to communicate with officer via phone call or by meeting them personally at the JAIM or JAKIM office. Another factor of un-notified messages is due to the applicants, who are mostly halal executives and owners of the company, were too busy with their routine jobs. Besides, as the halal application is conducted once in two years, they are more likely to forget about their applications.

System User N, Halal Executive: "This system will reject immediately if the form was not complete. It will send you a notification. But the problem is, as an industrial employee, we need to be alert. Because we do not do halal application every day, we sometimes need to do other tasks also."



The applicants' problem can also be caused by poor knowledge, skills, and experience in using online technology. The knowledge, skills, and experience of each individual in using online technology can be varied. It depends on how much they have used the technology, specifically the devices, the software or the online system.

System User F, Halal Executive: "There was something that I did not understand. I got confused when I used this system for the first time, especially to register the ingredients. I did not know that I need to register all the ingredients first before I can choose which ingredients for which products. I thought I can just put the ingredients of the products straightaway."

System User J, Company Owner: "I don't know what the system wants. I submitted the form but there were some parts that are not completed,"

"There were some parts that confused me, I did not know when I should submit the form and I could not tell which parts I haven't completed it yet. When I asked the officer if I can submit the form or not, the officer told me that I need to complete some other parts before submitting. I do not remember what parts it was."

The applicants' background is different, especially when comparing between halal executive and the owner of the company. Halal executives usually go through systematic training and courses and possess more knowledge and skills when compared to the company owner. Small-sized company owners are responsible for the halal application of their companies and without proper training and exposure, this situation could result in more serious issue or difficulty during the online application process.

Besides that, poor task delegation practice could hinder the successful usage of the MYeHalal system. In halal application, it is crucial to have a key person that can be referred for any halal certification matters, including the application of halal certificate. Appointing a key person can facilitate communication between the certifier and the company, and make it easier and systematic, as each of the processes is managed by the key person.

System User M, Halal Executive cum Administration Executive: "I am the only one who responsible for halal certification application in this company"

In some other cases, the poor delegation tasks happened due to a combination of job tasks of the halal executive position, making the tasks and load of the job strenuous for one person.

System User N, Halal Executive cum Administration Executive: "Halal Executive usually got the responsibility to do other tasks rather than just responsible for halal certification matters."

Lastly, the applicants' problem is due to negligence. Negligence is a remote but common issue especially when relating to human act. In the usage of MYeHalal system, some applicants unintentionally forgot to declare the ingredients and some tend to forget their passwords as they used the system once in two years.

Operational Problems

Operational problems are constituted with the certifier that acts as the processor of halal applicants as well as the administrator of the MYeHalal system. JAKIM and JAIM have partnership as certifiers and they need to ensure that the procedures in halal certification applications are obeyed and well-administered. However, the findings found five problems related to operational sides of online halal application as presented in the figure below:

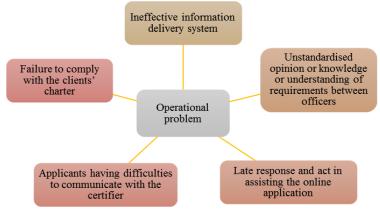


Figure 4. Operational problems



The first operational problem is the ineffective information delivery system. This problem is mostly seen during the announcement of any new procedures by JAKIM to be notified by all existing or prospective halal applicants. The applicants only realize the changes in procedures after the rejection of the application on the ground of failure to comply with the new requirements.

System User B, Halal Executive cum Administration Executive: "After I submitted the form, then JAIM called me and asked me to fill in the ingredients one by one. The weakness is JAIM did not update us on the newest procedures. For example, before, we can put fish curry paste as the ingredient, but not anymore. I need to put the ingredients in the fish curry paste. I asked them why there was no notification on this matter and they said it is the newest requirement."

This situation has led to a prolonged process of application, which has wasted applicants' time and business opportunity, as the halal certificate of the product cannot be obtained within the expected period.

Besides, ineffective information delivery system was faced by new or prospective halal applicants. This is because they were not aware of the procedures and requirements for the application process of the halal certificate even though they had visited JAIM's office.

System User J, Company Owner: "That time I already went to their office 2 or 3 times, but no one told me about the procedures. I was upset. Supposedly they should tell me what the procedures and the requirements during my first meeting are, not after the third time I came to submit the hard copy form."

The new applicants with lack of knowledge and preparation thought that they just need to submit the online application form without knowing that failure to comply with requirements will result in a rejected application. However, JAIM administrative officer has informed that all updated requirements and procedures are published in the halal certification official website as guidance for all applicants. In fact, as halal certifiers, it is impossible for them to send each thousands of the applicants the notification letter of updates. "It is the responsibility of the halal applicants to regularly check for any new or updated version of rules, procedures, and requirements as we (JAKIM) have published it in the website". Although the certifiers have taken effort to deliver the information through the official website, it would not guarantee that the information will be successfully acknowledged to all expected recipients.

The second operational problem is caused by the unstandardized opinion or knowledge or understanding of requirements between officers, which can occur in two situations. The first situation can happen when the JAIM officer does not have an equal opinion or mutual understanding of certain halal requirements.

System User C, Company Owner: "That time I met one person and she told me like this, but when I met the other person, what she told me is different than what I've heard from the other person" ... "I was told that I can declare more than 2 products of the same ingredients in the system. I've done it for my pandan (screw pine) flavor. But it was confusing as the other officer told me to take it out from the system"

This situation is seen in the requirements that are not documented in the manual procedure of halal certification, such as the requirement to declare more than one product of the same ingredient in the MYeHalal system. Some officers agreed to allow applicants to declare more than one product for each ingredient as a precaution, in case one of the products has any problem with its halal certificate. However, some officers imposed to declare only the used ingredients into the system.

Secondly, the unstandardized opinion can occur between JAIM or JAKIM and other government agencies.

System User L, Company Co-Owner: "Some of the documentation was related to the Ministry of Health (MOH), but their requirements are not standard, especially for product label. JAIM said yes, but then MOH said no, there was a conflict between them that burdened us as the halal applicant." ... "I don't understand why they (JAIM) questioned about the picture used in the product label; they just need to check the halal logo or other related elements"

This case is mostly seen in the issue of the product label, because it must show the certifications of halal and MESTI symbol (Makanan Selamat Tanggungjawab Industri) managed by the Ministry of Health. Some contradicted requirements were reported between both certifications, which left the halal applicants in despair. Even though the product label was verified by MESTI, some irrelevant issues, such as the picture used in the product label had to be changed as ordered by the halal certification officer.



The operational problem is seen with the late response and acts in assisting the online application. The information gathered from the MYeHalal system users stated that there were cases of applicants, who wanted to make some changes in their submitted application. It is only permitted if the JAIM officer unlocks or opens the system for any amendment. The applicants need to inform JAIM and JAIM will open the system for them. However, some applicants informed that it took quite a long time for JAIM to fulfill that request.

System User F, Halal Executive: "It depends on who is the officer in charge. But usually I do not need more than half an hour to check whether the system is already opened or not. Usually, it took them 30 minutes to open the system, for me they need to improve that"

The same problem also happened when JAIM/JAKIM is late in delivering and updating their status of the application.

System User L, Company Co-Owner: "What burdened me the most is when my halal application was not granted, and they did not inform me by letter." "Have you checked the status in the system?" "They did not update. If you do not call them, they will not update the status in the system. I called them many times, I have checked in the system, but it was not updated. They said I am the one who not check the status. I told them I was looking at the system now; it was last updated a while ago. They said if they are any feedback we will inform you. And suddenly the status was updated"

This is because the status of the application in the MYeHalal system needs to be updated by the system administrator. However, it is reported that the status is barely updated, and the applicants are left without being notified of their application status. In some cases, the applicants need to call a few times to JAIM office to get the information of the halal application status.

Other than that, the fourth operational problem is difficulty among applicants to communicate with the certifier. It is informed by the system users thatthe officers are occasionally not available at the office:

System User F, Halal Executive: "It is very hard to reach them by phone especially on a special occasion like Awal Muharram; everybody was not at their place. If I were about to go over there I need to confirm with them first"

Lastly, the operational problem is referred to as the failure of the certifier to comply with the clients' charter. Clients' charter is created to provide an expected timeline to the clients of the provided services. It contains the required processes and the expected time to complete all processes. It also represents the motivation of the organization to be effective and efficient in ensuring the punctuality is served to their clients. However, as stated by the halal applicants, the application can take a longer time compared to what has been declared in the clients' charter. A relatively longer time was required in processing the documents after online form submission, in issuing the payment letter, and the schedule for a field audit.

System User K, Halal Department Manager: "According to clients' charter, JAKIM needs to give the applicants the payment letter after 10 days the online form was submitted and after that field audit will be conducted. But normally it took them over a month to do that."

JAIM has defensively responded to this accusation. According to JAIM officers, the application can be done according to the clients' charter if the applicants have followed all requirements during their first attempt of application. The delay will surely happen if applicants fail to give the complete set of supporting documents, as required by JAIM and as declared in the MYeHalal system. However, JAIM also admitted that the delay in scheduling the audit inspection cannot be avoided due to a huge number of applications.

CONCLUSION

In conclusion, the problems identified in the use of MYeHalal system have come from three sources, applicants, certifiers, and technology itself. These problems are inter-related and cannot be solved separately. Therefore, all three problems must be addressed simultaneously with an approach that can give equal treatment to every element of the problem. Considering these problems involved both social and technical factors, it is proposed for a future study to investigate the holistic and comprehensive interactions between the socio-technical factors in the usage of MYeHalal system with the adoption of the translation process of ANT. This will assist the study to come out with a possible solution in making the process of online halal application to become easier and faster for both applicants and certifiers. The development of the socio-technical model is considered as the best remedy in providing guidelines for both halal



applicants and certifiers to understand and practice their respective roles towards a successful halal application, thereby ensuring a sustainable usage of online halal certification.

LIMITATIONS

As this research is limited to the investigation of difficulties that threatened the successful usage of the MYeHalal system among food manufacturers in Melaka, it is suggested that future researchers investigate the similar usage of MYeHalal system application, but in a different context for other halal certification schemes, such as cosmetics, logistics, and others.

ACKNOWLEDGMENT

We express our highest gratitude to the Ministry of Higher Education Malaysia and Universiti Teknikal Malaysia Melaka (UTeM) for funding the research under research grant FRGS/1/2016/SS06/ PBPI-CTED/F00330.

REFERENCES

- Almaghaslah, D. et al. (2018) 'Pharmacy students' perceptions towards online learning in a Saudi Pharmacy School', Saudi Pharmaceutical Journal. King Saud University, 26(5), pp. 617–621. doi: 10.1016/j.jsps.2018.03.001.
- Aminu, R. and Ismail, G. (2015) Factors That Affect Graduation, Engineering. Retrieved from https://sachsmarketinggroup.com/factors-that-affect-website-speed/accessed on 11 July 2018.
- Callon, M. (1986) 'Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay', Power, action, and belief: a new sociology of knowledge? pp. 196–223. doi: 10.1111/j.1467-954X.1984.tb00113.x.
- Dalhan, G. and Akkoyunlu, B. (2016) 'Modeling the continuance usage intention of online learning environments', Computers in Human Behavior, 60, pp. 198–211. doi: 10.1016/j.chb.2016.02.066.
- Dziuban, C. et al. (2018) 'Blended learning: the new normal and emerging technologies', International Journal of Educational Technology in Higher Education. International Journal of Educational Technology in Higher Education, 15(1), pp. 1–16. doi: 10.1186/s41239-017-0087-5.
- Greenhalgh, T. and Stones, R. (2010) 'Theorising big IT programmes in healthcare: Strong structuration theory meets actor-network theory', Social Science and Medicine. Elsevier Ltd, 70(9), pp. 1285–1294. doi: 10.1016/j.socscimed.2009.12.034.
- Gregory, G. D., Ngo, L. V., and Karavdic, M. (2016) 'Developing e-commerce marketing capabilities and efficiencies for enhanced performance in business-to-business export ventures', Industrial Marketing Management. Elsevier Inc. doi: 10.1016/j.indmarman.2017.03.002.
- Guest, G., Bunce, A. and Johnson, L. (2006) 'How Many Interviews Are Enough?', Field Methods, 18(1), pp. 59–82. doi: 10.1177/1525822X05279903.
- Haque, A. et al. (2015) 'Non-muslim consumers' perception toward purchasing halal food products in Malaysia', Journal of Islamic Marketing, 6(1), pp. 133–147. doi: 10.1108/JIMA-04-2014-0033.
- Ismail, W. R. B. W. et al. (2016) 'Halal Malaysia Logo or Brand: The Hidden Gap', Procedia Economics and Finance. Elsevier B.V., 37(16), pp. 254–261. doi: 10.1016/S2212-5671(16)30122-8.
- JAKIM (2014) Halal Penjenamaan Semula Sistem E-Halal Kepada MYeHALAL. Retreived from http://www.halal.gov.my/v4/index.php/my/arkib-pengumuman/138-penjenamaan-semula-sistem-e-halal-kepada-sistem-myehalal accessed on 30 December 2016).
- Mariscal, J. Batelho, A. J. J. and Gutiérrez, L. H. (2008) Information and Communication Technology (ICTs) Training, Employment, and Youth. Centre of Information Society, University of Washington, pp.16-18. Retrieved from http://lanic.utexas.edu/project/laoap/iep/ddtlibro39_eng.pdf.
- Maxwell, J. a (2009) 'Designing a Qualitative Study', The SAGE Handbook of Applied Social Research Methods, pp. 214–253. doi: 10.1111/1467-9299.00177.
- Minas, F. et al. (2016) 'Water Meters and Monthly Bills Meet Rural Brazilian Communities: Sociological Perspectives on Technical Objects for Water Management', World Development, 84, pp. 149–161. doi: 10.1016/j.worlddev.2016.03.014.
- Othman, B., Shaarani, S. M. and Bahron, A. (2016) 'The potential of ASEAN in halal certification implementation: A review', Pertanika Journal of Social Sciences and Humanities, 24(1), pp. 1–24.



- Patton, M. Q. (2002) Qualitative Research and Evaluation Methods. Third Edit, Qualitative Inquiry. Third Edit. United States of America: SAGE Publications. Retrieved from http://books.google.com/books/about/Qualitative_research_and_evaluation_meth.html?id=FjBw2oi8El4C.
- Pedersen, K. (2017) 'Realizing e-government benefits with minimal capabilities', Transforming Government: People, Process and Policy, 11(2), pp. 262–285. doi: 10.1108/TG-11-2016-0083.
- Ranerup, A. (2012) 'The socio-material pragmatics of e-governance mobilization', Government Information Quarterly. Elsevier Inc., 29(3), pp. 413–423. doi: 10.1016/j.giq.2012.02.012.
- Rivera, G. (2013) 'The use of actor-network theory and a practice-based approach to understanding online community participation', PQDT UK & Ireland, (May), p. 1. Retrieved from http://easyaccess.lib.cuhk.edu.hk/login?url=http://search.proquest.com/docview/1512393350?accountid=10371%5 Cnhttp://findit.lib.cuhk.edu.hk/852cuhk/?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:P.
- Shafie, S. (2007) 'e-Government Initiatives in Malaysia and the Role of the National Archives of Malaysia in Digital Records Management', National Archives of Malaysia, pp. 1–15. Retrieved from http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan041040.pdf.
- Shim, Y. and Shin, D. (2016) 'Analyzing China's Fintech Industry from the Perspective of Actor-Network Theory', Telecommunications Policy. Elsevier, 40(2–3), pp. 168–181. doi: 10.1016/j.telpol.2015.11.005.
- Shin, D. (2016) 'Telematics and Informatics Application of actor-network theory to network neutrality in Korea: Socioecological understanding of network dynamics', Telematics and Informatics. Elsevier Ltd, 33(2), pp. 436–451. doi: 10.1016/j.tele.2015.10.002.
- Szopiński, T. S. (2016) 'Factors affecting the adoption of online banking in Poland', Journal of Business Research, 69(11), pp. 4763–4768. doi: 10.1016/j.jbusres.2016.04.027.
- Troshani, I. and Wickramasinghe, N. (2014) 'Tackling complexity in e-health with actor-network theory', Proceedings of the Annual Hawaii International Conference on System Sciences, pp. 2994–3003. doi: 10.1109/HICSS.2014.372.
- Viana Thompson, D., Rust, R. T. and Rhoda, J. (2005) 'The business value of e-government for small firms', International Journal of Service Industry Management, 16(4), pp. 385–407. doi: 10.1108/09564230510614022.
- Xuan, Y. (2014) 'Risk assessment for the development of scaled carbon capture and storage project in china-a sociotechnical point of view', Energy Procedia. Elsevier B.V., 63, pp. 7125–7132. doi: 10.1016/j.egypro.2014.11.748.