

**INTENTION TO USE HALAL-CERTIFIED BAKERY
INGREDIENTS AMONG ONLINE MUSLIM ENTRE-
PRENEURS: APPLICATION OF EXTENDED THEORY
OF PLANNED BEHAVIOUR (TPB) MODEL**

BY

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**A thesis submitted in fulfillment of the requirement for the
degree of Master of Halal Industry Management**

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ABSTRACT

The development of halal industries has created more business opportunities for entrepreneurs. Although there is growing literature in Halal management and consumerism, empirical studies that focus on both bakery ingredients and online entrepreneurs are limited. To fill this gap, factors that influence intention to use halal-certified bakery ingredients among online entrepreneurs are investigated. A quantitative method was used in this study. The data were obtained from 165 online Muslim entrepreneurs in Malaysia by using convenience sampling. The adopted questionnaire was used as a research instrument, grounded by the Theory of planned behaviour (TPB). In this study, the TPB model was extended by including additional components to measure self-identity, moral obligation, and barriers. Descriptive analysis and exploratory factor analysis were conducted through a statistical package for social sciences (SPSS). Partial least squares (PLS), a variance-based structural equation modelling method was adopted to test the hypotheses. The results obtained based on the path analysis showed that attitude and subjective norm of the entrepreneurs both are statistically significant in influencing intention to use halal-certified bakery ingredients. In contrast, perceived behavior control, self-identity, and moral obligations of entrepreneurs had no significant influence on intention to use halal-certified bakery ingredients. Thus, to improve intention and usage behaviour, intervention should be made on the attitude and subjective norm of respondents. In addition, to complement the study on determinants of intention to use halal-certified bakery ingredients, this study also assesses whether an intention to use halal-certified bakery ingredients is different depending on the demographics of the online Muslim entrepreneurs. Using one-way ANOVA, results showed that there were no significant differences in the intention of using halal-certified bakery ingredients among entrepreneurs with different gender, ages, education levels, residency and income. There were also no significant differences in intention among those who sold different bakery products, and how long they have been selling their bakery products. Limitations, theoretical and practical implications of the study are also discussed.

خلاصة البحث

زاد تطوير الصناعات الحلال من الفرص التجارية لرواد الأعمال. وعلى الرغم من تزايد الأدبيات المنشورة عن إدارة الحلال والتزعة الاستهلاكية، فإن الدراسات التجريبية التي تركز على كل من مكونات المخبوزات وتجاريتها عبر الإنترنت ظلت محدودة. وملء هذه الفجوة، يتم التحقيق في العوامل التي تؤثر على نية استخدام مكونات المخابز الحلال بين رواد الأعمال عبر الإنترنت. تم استخدام طريقة التحليل الكمي في هذه الدراسة. تم الحصول على البيانات من 165 رائد أعمال مسلم عبر الإنترنت في ماليزيا باستخدام عينات ملائمة. تم استخدام الاستبيان المعتمد كأداة بحث، على أساس النظرية الموسعة للسلوك المخطط (TPB). في هذه الدراسة، تم توسيع نموذج TPB من خلال تضمين مكونات إضافية لقياس الهوية الذاتية والالتزام الأخلاقي والحواجز. تم إجراء التحليل الوصفي وتحليل العوامل الاستكشافية من خلال الحزمة الإحصائية للعلوم الاجتماعية (SPSS). المربعات الصغرى الجزئية (PLS)، تم اعتماد طريقة نمذجة المعادلة الهيكلية القائمة على التباين المشترك في اختبار الفرضيات. أظهرت النتائج التي تم الحصول عليها بناءً على تحليل المسار أن سلوك رواد الأعمال والمعايير الذاتية لكلاهما لهما دلالة إحصائية في التأثير على نية استخدام مكونات المخابز الحلال. وفي المقابل، لم يكن للتحكم في السلوك والهوية الذاتية والالتزامات الأخلاقية لأصحاب المشاريع أي تأثير كبير على النية في استخدام مكونات المخابز الحلال. وبالتالي، ومن أجل تحسين سلوك النية والاستخدام، يجب أن يتم التدخل على الموقف والمعايير الذاتية للمستجيبين. بالإضافة إلى ذلك، ولإستكمال الدراسة حول محددات النية عند استخدام مكونات المخابز الحلال، تقيّم هذه الدراسة أيضاً ما إذا كانت نية استخدام مكون المخابز الحلال تختلف باختلاف التركيبة السكانية لرجال الأعمال المسلمين عبر الإنترنت. أظهرت النتائج استخدام تحليل ANOVA أحادي الاتجاه، أنه لا توجد فروق ذات دلالة إحصائية في النية لاستخدام مكونات المخابز الحلال بين رواد الأعمال من مختلف الأجناس والأعمار ومستوى التعليم والإقامة والدخل. لم تكن هناك أيضاً فروق ذات دلالة إحصائية في النية بين أولئك الذين تاجروا في منتجات المخابز المختلفة، ومدة وزمن بيع منتجاتهم من المخابز. وتمت أيضاً مناقشة القيود والآثار النظرية والعملية للدراسة.

APPROVAL PAGE

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I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

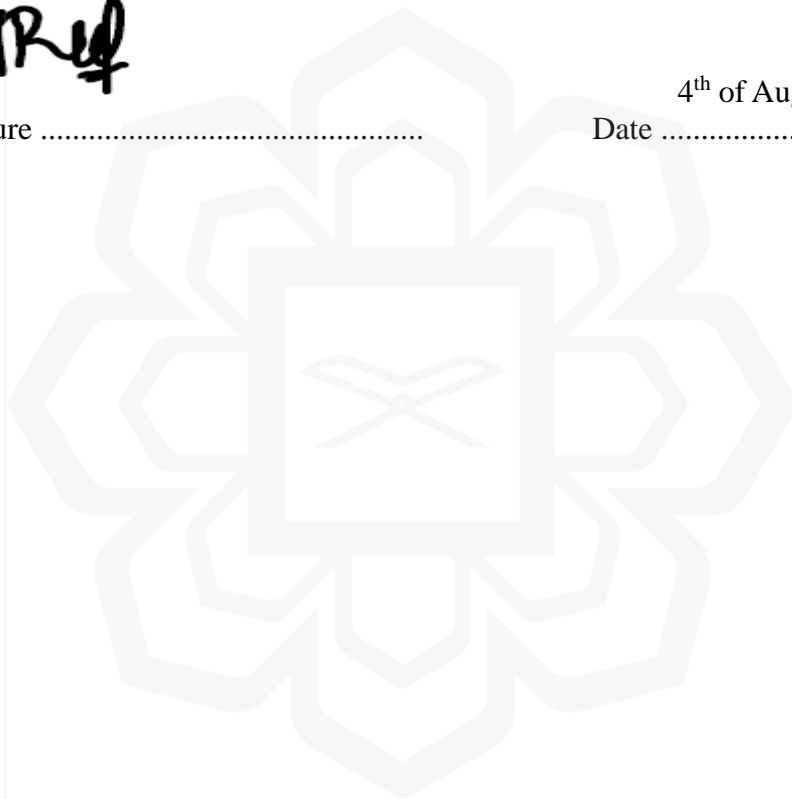
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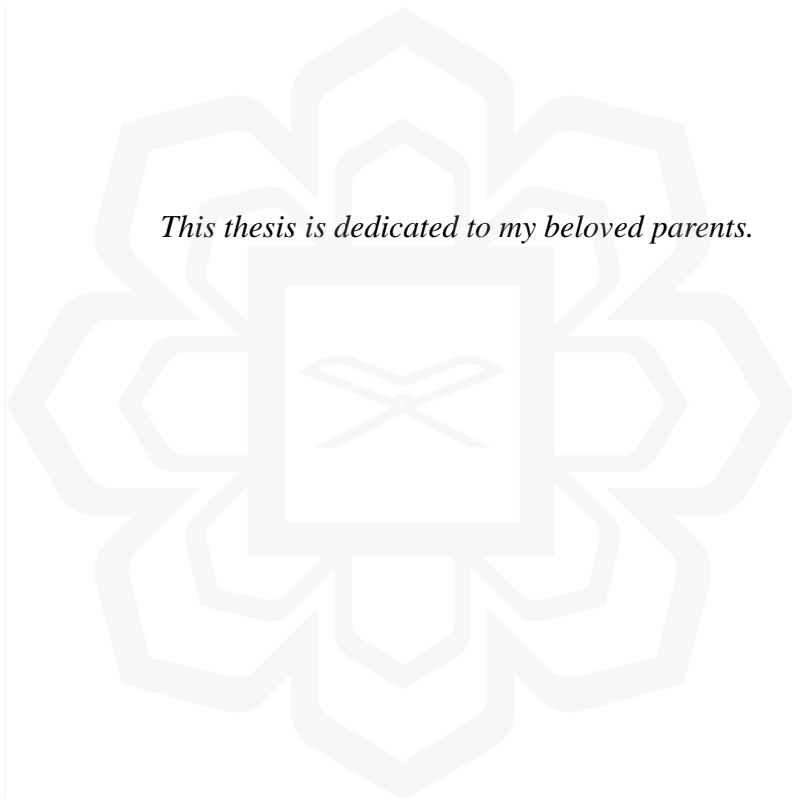
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DEDICATION

This thesis is dedicated to my beloved parents.



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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

Islamic teachings strongly emphasize the importance of embodying “halal” in every aspect of Muslim life. This include in fulfilling the dietary requirements, which is especially important as food consumed eventually becomes our blood and meat (Tieman and Hassan, 2015). Quran and Hadith are the basis for the determination of halal and haram concerning to food. This is stated in several Quranic verses Surah Al-Maidah verses (1, 4, 5, and 88). There is also one Quranic verse that orders Muslim to only eat halal or permissible food which is in Al-Baqarah, 2:168:

“O Mankind! Eat anything lawful, wholesome that exists on earth, and do not follow in Satan’s footsteps; he is an open enemy of yours” (Al-Baqarah, 2:168).

The order to eat only Halal food is further supported by a hadith narrated by At-Tirmidhi: 1205, the Prophet (pbuh) said:

“Halal (the lawful and permissible) is clear, and haram (the unlawful and impermissible) is clear. Between halal and haram lays some doubtful things. Many people do not know whether it is permissible or not. Whoever leaves out these doubtful things to protect his religion and honour, and then he is safe.”

Consuming what is halal is a way for Muslim to fulfil the principles of maqasid al-shariah (Yusuf Al-Qardhawi, 1993), especially in the protection of life or soul, protection of intellect (Hasan, 2019) as well as religion. Protection of soul and life is very influential to one’s harmony in living life. Halal and toyyib diet are closely related to healthy diet. Healthy body from diet that are toyyib makes it easier for Muslim

to worship Allah (SWT). This is related to preserving the religion, one of the maqasid al-sharia, which is fundamental in Islamic law. Muslim believe that consuming halal food will make it easier for someone to worship and maintain their religion, then with this hifz ad-din will be fulfilled (Hasan, 2019).

Muslim all over the world are increasingly concerned with the doubtful status of the food products, especially those imported from non-Muslim countries. Food and consumer products may contain illicit substances because overseas manufacturers and importers/exporters may not understand the concept of halal/haram as required in Islam. This situation exposes consumers to various types of foods that may contain syubhah or haram substances. The situation gets worse when these substances cannot be detected even by the scientific method. In the case of gelatine, although the source of the animal can be detected, it is almost impossible to determine whether the animal was slaughtered in accordance with the Islamic way (Rezai and Mohammed, 2009).

Gelatine is one of the most important setting agents often used in pastry products. Besides gelatine, many other ingredients and additives used in bakery and pastry industry could also be sourced or processed in doubtful manners; these have raised concerned on their halal status (Wan Ismail et al., 2020). Muslim are obliged to buy and consume halal food only. Therefore, entrepreneurs need to realize the importance of using halal-certified ingredients in their bakery products, as their target consumers are in a country that is predominantly Muslim.

1.2 PROBLEM STATEMENT

The needs for manufacturers and business owners to adopt halal certification has been much emphasized by the Malaysian halal authority and government (Mohd, 2019).

However, compared to other food and beverages sub-industries, bakery industry in general, is very slow to adopt halal certification. According to Rusni et al., (2020), there are a very low number of bakery and pastry premises approved by Jabatan Kemajuan Islam Malaysia (JAKIM). For example, JAKIM Halal Directory database has indicated that only three premises in Pulau Pinang and two premises in Perak have acquired the halal certification. This may be due several reasons which include the difficulty in getting halal-certified ingredients as many ingredients come from different sources, including animal-based sources (Wan Ismail et al., 2020). In Malaysia, there are only 12 major suppliers for bakery and pastry products who are responsible in distribution and wholesale of pastry and bakery ingredients; these companies are all owned by non-Muslim, which could be source of concern of some consumers (Malaysian-German Chamber of Commerce and Industry (MGCC), 2016).

To add layer into this complex issue, there is also another concern about ingredients used in bakery products, especially produced by small home bakeries business. It is common for these small business, even small cafes to purchase small quantities of repacked items from the independent bakery supply store. It is unclear whether the repacked items sold by these independent bakery suppliers are halal as there are very limited information printed on the packs. Often information provided are only name of the ingredients and their shelf life, without halal endorsement. Therefore, although the sellers are Muslim, the status of these bakery and pastry products cannot be ascertained, especially the ingredients of these bakery products cannot be confirmed (Wan Ismail et al., 2020).

Bakery entrepreneurs must be careful in selecting and using bakery ingredients. If the bakery products they processed are mixed with unlawful ingredients or doubtful ingredients, this will render their product impermissible even in a very little amount.

Also, the online Muslim entrepreneur should be honest in explaining whether the bakery products they sell are indeed from halal ingredients, this is especially as most online Muslim entrepreneurs often market their products as halal on social media such as Facebook and Instagram. This is explained in the verse of the Quran:

And do not utter falsehoods by letting your tongues declare: “This is lawful” and “That is unlawful,” thus fabricating lies against Allah. Surely those who fabricate lies against Allah will never prosper. Surah An-Nahl (chapter 16), verse 116.

In the Quran, it is also explained that it requires Muslim to eat what is halal, so every online Muslim entrepreneur must ensure that only halal ingredients are used in their bakery products. Online Muslim entrepreneurs must be transparent in detailing about ingredients especially those that are derived from animals. However, in the current market, a lot of bakeries on the market only provide basic ingredients such as flour, water, butter, and oil in their packaging. Some products provide additional ingredients used (e.g., additives used) but do not explain in more detail whether the ingredients come from animals slaughtered in an Islamic way. Online Muslim entrepreneurs also need to know that about ingredients that are doubtful. They must be aware that they must use halal ingredients when making and producing bakery products. Using the halal-certified ingredients is the first step toward adoption of halal certification. Therefore, it is important to know what are the factors that influence these entrepreneurs to use halal-certified ingredients.

Despite the critical issues of bakery ingredient in halal context. There are not many studies have been conducted on halal bakery products. Few exceptions are studies conducted by Aditami (2016) and Rizka et al., (2018). These studies however focused on consumers perspective. No study however has been specifically conducted

on small home bakeries business or entrepreneurs. Even less is known about study that focuses on online Muslim entrepreneurs in Malaysian halal bakery context. Therefore, this study aims to examine online Muslim entrepreneurs of bakery products' self-reported intention to use halal-certified ingredients in their products.

1.3 RESEARCH OBJECTIVES

This study aims to examine online Muslim entrepreneurs of bakery products' self-reported intention to use halal-certified ingredients by employing the extended theory of planned behaviour (TPB) as the research framework. The sub-objectives of this study are as follow:

1. To identify the underlying structure of the proposed constructs (attitude, subjective norms, perceived behavioural control, moral obligation, self-identity, and barrier).
2. To determine the influence of the underlying constructs in forming intention to use halal-certified bakery ingredients in their bakery products.
3. To compare differences in intention to use halal-certified bakery ingredient in relation to demographics of the entrepreneurs.

1.4 RESEARCH QUESTION

This research will try to answer the following questions:

1. What is the underlying structure of the constructs in the proposed model (attitude, subjective norms, perceived behavioural control, moral obligation, self-identity, and barrier)?

2. Does intention to use halal-certified bakery ingredients is influenced by the underlying constructs?
3. Are there any differences between intention to use halal-certified bakery ingredients and the demographics of the entrepreneurs?

1.5 RESEARCH SCOPE

This study specifically addresses determinants or factors influencing intention to use halal-certified bakery ingredients among online Muslim entrepreneurs in Malaysia. The researcher chose to focus on the online Muslim entrepreneur's bakery products to keep up with the current increasing trend of e-commerce. Recognizing the rapidly increasing number of bakery premises and products in Malaysia as well as the critical ingredients used in these products, the scope of this research focuses on bakery products. The extended TPB theoretical framework is chosen to frame the proposed model because of its suitability with the nature of this research. Quantitative approach was used via online questionnaire as the tool to collect the data. The data were collected between November 2019 to December 2019.

1.6 SIGNIFICANT OF STUDY

The rise number of online Muslim entrepreneurs through social media platforms such as Facebook and Instagram as part of the digital economy is an emergent topic in the academia. There are also multiple issues pertaining to bakery ingredient in halal context that are still unresolved, yet limited research has been conducted on this topic.

This warrants the need to conduct an empirical study on both halal bakery and online Muslim entrepreneurs.

Given the scarcity of literature on the online Muslim entrepreneur in a halal context, this study attempts to fill the gap by conducting an empirical investigation on intention of online Muslim entrepreneurs to use halal-certified bakery ingredients. This is with the hope that empirical study will contribute to both halal research and policy. This study could also add to the literature of recently introduced concept, halal entrepreneurial.

In term of theory, this study will also contribute to the application of the Theory of Planned Behaviour (TPB) in a new context and online Muslim entrepreneurs. In short, the findings could advance the current understanding of intention of online Muslim entrepreneurs to use halal-certified bakery ingredients and its complex relationships with attitude, subjective norms, perceived behavioural control, barriers, moral obligation, and self-identity.

By identifying the factors that influence intention of the online Muslim entrepreneur to use halal-certified ingredients in their bakery products, the Malaysian government, and halal authorities (such as JAKIM and Halal Industry Development Corporation (HDC)) can target specific factors to educate and construct suitable programs and further promote halal entrepreneurship in Malaysia. This could also be used to further support the design of more effective interventions to effectively promote the application of halal-certified ingredients specifically in homemade bakery products, especially advertise through an online platform. This study will help to push the online Muslim entrepreneur out of their routine of buying conventional uncertified re-packed ingredients, and hopefully set the first step to adopt using fully halal-certified food in their product-making. For many years, Malaysian authorities have tried to promote

adoption of halal certificate among online Muslim entrepreneurs, and this finding may indirectly help this effort.

1.7 DEFINITION OF THE TERM

The following represents the definition of the terms used in this study:

Halal and haram: Halal is an Islamic term, derived from the Arabic word which means allowed. Haram, on the other hand, is the opposite of Halal because it means breaking the law and is prohibited (Al-Qardhawi, 2013).

Bakery products: Bakery products refer to a wide variety of products as bread, rolls, buns, crumpets, muffins, bagels, pancakes, doughnuts, waffles, and cookies and other filled products such as fruit and meat pies, sausage rolls, pastries, sandwiches, cream cakes, pizza, and quiche. These products are mainly composed of raw ingredients such as wheat flour, water, yeast, salt, and other ingredients (Pinto et al., 2014).

Halal certification: Halal certification in the food industry context refers to the examination of food processes (preparation, slaughtering, ingredients used, cleaning, handling, processing, and storage), including transportation and distribution (Badrudin et al., 2011).

Halal-certified products: Halal-certified products refer to products that have been certified as halal by the recognized halal certification bodies (Badrudin et al., 2011).

Online Muslim entrepreneur: “An Muslim owner of the internet-based business who makes money through their own initiative and risk” (Asiah, 2018).

Intention: Intention is assumed to capture the motivational factors that influence behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, to perform the behaviour (Ajzen, 1991).

Attitude: Attitude is “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991)

Perceived behaviour control: Perceived behavioral control is “people’s perceptions of their ability to perform a given behavior” (Ajzen, 1991).

Subjective norms: The subjective norm “which is regarded as social pressure to commit or not perform certain behaviors” (Ajzen, 1991).

Moral obligation: Moral obligations are described as “a personal feeling of responsibility for doing, or refusing to do certain behaviors” (Ajzen, 1991).

Self-identity: Self-identity reflects the “label people use to describe themselves as fulfilling the criteria for any societal role” (Biddle et al., 1987; Conner and Armitage, 1998).

Barrier: Something that prevents something else from happening or makes it more difficult (Cambridge Dictionary).

1.8 OVERVIEW OF CHAPTER

This thesis consists of five chapters. Chapter 1 presents the background of the study, problem statement, research objectives and questions, scope and significant of the study. Definition of terms used in this study are also provided in Chapter 1.

Chapter 2 provides background on halal market, halal industry and issues related to bakery products. Entrepreneur’ characteristics in Islam is also discussed. Previous halal literature on Theory Planned Behaviour (TPB) is included which frame the need for the current study. Conceptual framework based on TPB in the context pertaining to intention to use halal-certified bakery ingredients was then proposed.

Chapter 3 describes the research methodology used in this study. This research used questionnaire as instrument to survey intention to use halal-certified bakery ingredients among online Muslim entrepreneurs of bakery products. The components of Chapter 3 include research design, population, sampling, and research instrument, data collection and analytical procedure.

Chapter 4 is on the results and of the study. It started with the descriptive results and results from exploratory factor analysis (EFA). EFA is used as a data reduction method to analyse respondent perception about determinants and intention using halal-certified ingredients. Structural equation modelling with partial least squares (PLS) was then adopted to test the hypotheses. One-way ANOVA test for used to assess differences in intention to use halal-certified bakery ingredients in relation to demographic variables of interest.

Chapter 5, the final chapter is on the conclusions and recommendations, it describes the summary of this thesis, theoretical implication, limitations of the study, and recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides research background and discusses relevant literatures. It is sectioned into five parts. First, this chapter gives a clear idea about terms related to halal, as well as background of halal market, bakery industry and Muslim entrepreneurs. This chapter then reviews and discusses the existing literature related to behavioural intention. This includes discussion on Theory of Planned Behaviour (TPB), one of the main theories in behavioural intention and past halal literature. Additionally, this chapter discusses determinants that perceived as important and leads to intention in using halal-certified ingredients among online Muslim entrepreneurs. Finally, this chapter concludes proposed conceptual framework.

2.2 HALAL MARKET

2.2.1 Definition

Halal is a term, derived from the Arabic word which means allowed. Haram, on the other hand, is the opposite of halal. Haram refers to something that is prohibited and is against Islamic laws (Yusuf Al-Qardhawi, 1993). According to Malaysian Standards for Halal food, MS 1500: 2019 (Departement of Malaysia standards, 2019), halal food must meet all the following criteria to be certified as Halal.

1. Food or ingredients those are not dirty according to Sharia law.
2. Food does not contain unclean ingredients according to Sharia law.