

## Research Framework for the Impact of Innovative Mindset, Innovative Behaviour, and Innovation Performance on Competitive Advantage: An Application for Halal Smes Owner-Manager

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### Abstract

The purpose of this paper is to provide a more realistic competitive advantage concept in order to investigate the impact of an innovative mindset, behaviour and performance on Halal SME's competitive advantage in the context of a challenging worldwide Halal's market. This study uses an constant methodology by outlining, analysing, arranging, and focusing the current state of the literature and proposes a research framework which assist in overcoming the restraints encountered in previous empirical research. The use of an innovative mindset and behaviour enables the researchers to provide a great explanation of a innovative performance and its relationship to competitive advantage. This study seeks to contribute to the practice of competitiveness of Halal SMEs area of research. Specifically, this study emphasises that Halal SMEs owner-managers should have innovative mindsets that can stimulate innovative behaviour and which can be translated into innovation performance and subsequently competitive advantage.

**Keywords:** Halal SMEs owner-Manager; Innovative mindset; Innovative behaviour; Innovation performance; Competitive advantage.



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### 1. Introduction

The halal food industry is an industry which has the potential for tremendous growth. With a global Muslim population of 1.8 billion, the market for halal food is estimated at US\$547 billion a year (Dierks, 2011). This trend is expected to increase to USD2.1 trillion in tandem with the fivefold dynamics driving the global halal food market: 1) the growth of the Muslim population and the primary market for halal food; 2) rising incomes in primary markets for halal food; 3) increasing demand for safe, high quality food in primary markets; 4) increasing demand for greater halal food variety in primary markets; and 5) incidents of food marketed as halal but failing to meet halal requirements. This has spurred demand for genuine halal products (Dagang Asia Net, 2011). In Arabic, the word 'halal' was defines as 'authorized' or 'legal' and in connection to food in particular it represents 'cleanliness' and is protected by certain Islamic practices (Lever, 2014). There are some Muslim requirements that have been met in the global food industry, including an injunction to keep away from substances that pose a threat of cross contamination from unacceptable and unwanted ingredients and for the halal certification industry to choose healthier food options (Tieman, 2016). This demonstrates that halal industry has a substantial influence on the global food industry. SMEs need to remain competitive in the global halal marketplace as this is not an industry without serious challenges. Failure to respond to the challenges related to the halal industry including food safety and food quality may erode the competitiveness of halal food SMEs and show that they will not be able to sustain their profitability and attractiveness for consumers and investors alike (Bohari *et al.*, 2017).

In past literature shows that the positive effects of innovation on competitive advantage is justified by many scholars as well as in exploratory studies (Augusto and Coelho, 2009). Nevertheless, only some definitions in the past literature define the relationship between innovation and competitiveness particularly in the context of Halal SMEs. Previous studies have also failed to distinguish between the concepts of competitive advantage and performance. Moreover, most previous studies have discussed the external factors that lead to innovative behaviour rather than looking at the internal factors such as an innovative mindset which have been found to have an important

influence on stimulating innovative behaviour (Sidhu *et al.*, 2016). Innovative behaviour also has been associated with firm performance without looking the predecessor of the firm performance including innovation performance and competitive advantage (Escribá-Carda *et al.*, 2017). Therefore this study aims to clarify the role of an innovative mindset and innovative behaviour and their relationship with innovation performance and competitive advantage. In this study, three research questions was determine and need to be answered in the above context: (1) Has an innovative mindset maintained an active role in stimulating innovative behaviour? (2) Has an innovative behaviour positively contributed to innovative performance? (3) Does an innovation performance play important role in creating a competitive advantage? As the competition global halal market is increasing dramatically, this research model helps Halal SMEs effectively apply within the innovative mindset and behaviour to build up their competitive advantage and perform in their businesses.

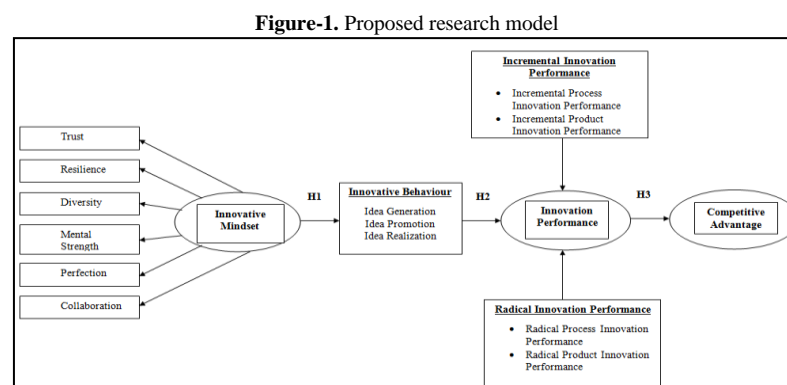
## 2. Theoretical Background and Hypotheses

### 2.1. Theoretical Background

In this study here focuses on innovative behaviour as a particular kind of individual behaviour which is of great significance for organisational strength, competence and persistence (Scott and Bruce, 1994). Individual innovative behaviour stands for the ability of individuals to produce new ideas and viewpoints, which are subsequently transformed into innovation (Shih and Susanto, 2011). Considering that the creation of innovation lies in ideas and how individuals develop them, an analysis of the aspects that facilitate innovative behaviour becomes critical. Hereof, some studies have focused on the influence of factors, such as the role of supervisor support (Dysvik *et al.*, 2014); organizational commitment (Hakimian *et al.*, 2016) and organizational climate and culture (Scott and Bruce, 1994). Yet, there is scarce empirical evidence to explain how several aspects of individual and contextual nature (e.g. Halal SMEs Owner-Manager's perceptions of innovation may have an effect on their innovative behaviour which subsequently increases the Halal SMEs innovation performance and leads to a competitive advantage.)

### 2.2. Proposed Research Model

Through previous literature, the research model is proposed as shown in Figure 1 which seeks to answers three research questions. In this model, an innovative mindset is considered as an important antecedent of an SMEs owner-manager's innovative behaviour which affects his innovation performance and the competitive advantage of firms.



### 2.3. Constructs in Proposed Research Model

#### 2.3.1. Innovative Mindset

Sidhu *et al.* (2016) defined the innovative mindset as a way of thinking that influences the way an individual views a situations and acts upon this situation that reflects his attitude towards innovation. Based on the psychological constructs such as 1) social cohesion and honest behaviour, 2) grit, resilience, and entrepreneurial failure, 3) social capital, 4) self-efficacy, 5) perfectionism, and the innovative mindset can be classified into six types as demonstrated in Table 1.

**Table-1.** The innovative mindsets and it descriptions

Innovative Mindset	Descriptions
Trust	The individual trusts others without expecting anything in return.
Resilience	The individual believe that it is necessary to be wrong sometimes. The individual has a plan to experiment and possibbly to fail (analyse, adapt, and repeat).
Diversity	The individual believes in the benefit of connections with people that they rarely engage with and listen to their opinions.
Mental Strength	The individual believes that he can succeed.
Perfection	<i>An individual's belief that nothing is perfect and that is good near enough.</i>
Collaboration	The ilividual believes in the potential of collaboration with other individuals, teams, competitors and partners.

Studies reveal that behaviour can drive a performance but a mindset is more powerful since it actually drives individual behaviours either to increase or decrease performance. One of the world's leading experts on global leadership Dr. H. Stephen Rhinesmith shared that "a mindset is a particular orientation to the world that shapes the behaviour of the individual". In large companies, research by the Arbinger Institute demonstrated that when a large company such as Spandex (a leading supplier of materials, sign systems, displays, and equipment to the sign making and graphic industries) changes its their leadership team's mindset from "inward" to "outward", the results lead to dramatically better organizational results (Lazan, 2016). In small firms such as SMEs, it has been found that an SMEs owner-manager with an innovative mindset will prioritize innovation as a tool to achieve business success and used strategic management practices and intellectual capital management as opposed to a SME owner-manager who lacks an innovative mindset (Volná *et al.*, 2015). This leads to the following hypothesis:

Hypothesis H1: Halal SMEs owner-managers innovative mindset has a positive impact on his innovative behaviour.

### 2.3.2. Innovative Behaviour

Innovative behaviour can be described as all the behaviours by which individuals can influence the innovation process, particularly focusing on behaviours oriented towards the generation and application of ideas (De and Den, 2007). It also involves the activity of an individual that results in the to generating, evaluating, realizing, and implementing of new ideas which are regarded as important aspects of high performance organizations (Shih and Susanto, 2011). The study of innovative behaviour and innovation has been the main focus of researchers and scholars in various disciplines of knowledge such as business management, psychology, sociology and economics. Table 2 illustrates the concepts of innovative behaviour derived from previous scholars.

**Table-2.** The Conceptualization of Innovative Behaviour

Author	The Conceptualization of Innovative Behaviour
(Van, 1986)	Relates to technical and administrative innovation. The introduction and/or application of new technologies, products, and services is related to technical innovation; while introduction and/or application of new procedures and policies is in reference to administrative innovation.
(West and Farr, 1989)	The intended behaviour of an individual to introduce and or apply new concepts, products, methods, and technique is considered both in their introduction and application, as they pertain to innovative behaviour.
(Scott and Bruce, 1994)	Activities with regard to both the introduction and generation, and the realization or execution, of a new idea.
(Tidd <i>et al.</i> , 1997)	Comprises four components including product innovation, process innovation, position innovation, and paradigm innovation.
(Cho and Lee, 2007)	Refers to the mindset to seek better ways to improve the level of productivity in an organization.
(Hakimian <i>et al.</i> , 2016)	Refers to four innovative processes including idea generation, idea promotion and idea realization.

Innovative behaviour can be regarded as an innovation stimulus for Halal SME's owner-managers which influences their leadership in innovation, the culture of innovation, managing the knowledge, creativity and technology. This innovation stimulus has been acknowledged to have a positive significant relationship with innovation performance (Prajogo and Ahmed, 2006). Thus, the following hypothesis is proposed:

Hypothesis H2: Halal SMEs owner-manager innovative behaviour has a positive impact on innovation performance.

### 2.3.3. Innovation Performance

A Review of past research of organizational innovation reports that numerous variations have been used to measure the innovation performance of organizations. To comprehensively capture the varied aspects of innovation performance, this study built a construct for measuring incremental innovation performance and radical innovation performance (Nguyen *et al.*, 2017). Incremental innovation refers to minor changes to existing technologies in terms of design, function, price, quantity, and features to match the needs with existing customers (Propriis, 2002). Incremental innovation focuses on clarifying, broadening, bettering and finessing existing knowledge, skills, and technical cycles (Gatignon *et al.*, 2002). Radical innovation can be defined as the adoption of new technologies to create a demand not yet recognized by customers and markets (Jansen *et al.*, 2006). Radical innovation, regarded as competence-destroying concentrates on market pull or technology push strategies. Radical innovation requires greater uncertainty and a high level of risk.

To bring about a competitive advantage in a changing market, firms must revise their quality and innovation. Commonly, a specific innovation provides particular advantages that can support strategies that benefit from those capabilities. Process innovation offers many competitive advantages. It can cut down the costs, refine the quality, minimize delivery times, reduce inventories, reduce plant and equipment investments, shift scale economies and let on greater flexibility. Tech-innovation is linked positively with economic and strategic export performance, implying that competitive advantage comes from technological advances (Silva *et al.*, 2017). The experimental research of involving 106 manufacturing firms in Taiwan revealed that innovation performance has a positive impact on competitive advantage. Experimental research by Aziz and Samad (2016) of 220 small and medium enterprises

producing food in Malaysia pointed out that innovation has a positive impact on competitive advantage. These theoretical and empirical bases lead to the following hypothesis.

Hypothesis H3: The incremental and Radical innovation performance of Halal SMEs has a positive impact on competitive advantage.

### 2.3.4. Competitive Advantage

In this research, the definition of competitive advantage based on the work of Newbert (2008) was modified by (Sigalas *et al.*, 2013) and is as follows selected: “Competitive advantage is the above industry average manifested exploitation of market opportunities and neutralization of competitive threats”. The competitive advantage definition used in this research framework match the criterion because it does not contain any judgements about its own value or company’s accomplishment (Sigalas *et al.*, 2013). Four observed variables of competitive advantage are taken from (Sigalas *et al.*, 2013). The reason these were chosen was because this measurement scale for competitive advantage is that it was developed accurately and carefully to meet all the requirements of the construction process for a new scale. This scale also match the requirement for determining competitive advantages with admirable performance that was agreed by the majority of scholars.

## 3. Methodology/Materials

Based on an iterative methodology, this paper *outlining, analysing, arranging, and focusing* the current state of the literature and proposes a research framework which allows overcomes the limitations encountered in previous empirical research and agreeably answers three research questions posed in the context of inadequate innovativeness of the Halal SMEs. To guarantee the generalizability, the probability sampling method should be used to provide the data for the analysis of the proposed research model (Ibrahim & Jaaffar). The partial least squares path modeling (Hair *et al.*, 2014) method to structural equation modeling would be appropriate to test the measurement model and structural model based on the proposed research model.

## 4. Discussion and Conclusion

Malaysia Halal SMEs not only face stiffer competition from large companies, but SMEs from other Muslim countries and Non-Muslim countries all over the world. This intensified competition decreased the innovation performance among Halal SMEs owner-managers (Piacentino *et al.*, 2017). Innovation performance can be viewed as a series of minor enhancements to an existing product or product’s value chain that usually helps organizations, like Halal SMEs, to maintain or improve their competitive position over time. Boosting the innovation performance is very important for Halal SMEs because the Halal industry nowadays needs further improvement to its products to include new features progressively preferred by Halal consumers, manufactures, traders, suppliers, logistic providers, and certification bodies all over the world (Ali *et al.*, 2017). As a result, to achieve competitive advantage, Malaysian Halal SMEs need to improve their innovation performance (e.g. Incremental and Radical innovation performance) which can be stimulated by the innovative behaviour deriving from the innovative mindset of Halal SMEs owner-managers. The proposed research model let the reasearchers to test the impact of the innovativeness of Malaysian Halal SMEs as a complete body including the importance of the innovative mindset of Halal SMEs owner-managers on their innovative behaviour, the effect of innovative behaviour on two types of innovation performance and on competitive advantage.

The competitive advantage concept outlined by Sigalas *et al.* (2013) used in the proposed research model has matched the requirements of highlighting competitive advantages and superior performance. The problem that arises when switching the competitiveness scale of Sigalas *et al.* (2013) to the competitive advantage scale has been set competently. Therefore, the proposed research model will help researchers answer satisfactorily three aforementioned research questions. The model is a sound theoretical framework for empirical studies. In order to stay long in the business industry, product quality has become a critical factor in maintaining a competitive edge in order to outperform competitors. This is mainly through if Malaysian Halal SMEs wish to join in the international market. Malaysian Halal SMEs active in food, cosmetics, logistics, transportation and storage have a strong potential to appeal for Muslim customers globally. Globalization and the fast development of technology have formed innovation as the key factor of international business success. Innovation is a determinant of competitive advantage in international markets, and is a crucial antecedent of firm export performance (Azar and Ciabuschi, 2017); (Pla-Barber and Alegre, 2007); (Singh, 2009). Innovation is critical for creating competitive advantage in international markets. This allows firms to benefit from economies of scale (Fernández-Mesa and Alegre, 2015) as well as overcome the size constraint of domestic markets (Kyläheiko *et al.*, 2011). Due to this, empirical research results based on this research framework will be a dependable information source for SMEs, especially for SMEs in the Halal industry.

There are obstacles to this study which should be taken into account. Initially, this study is only at the stage of building a framework for research. Thus, it is needs to have subsequent experimental studies to test the proposed research model in the context of today’s global competition. Futhermore, the proposed research model does disapprove the study of innovativeness from the aspect of partial innovativeness (including some of elements) that can have different impacts on competitive advantage. This researches approach can benefit Malaysian Halal SMEs owner-managers find the best way of engaging innovativeness to improve their competitive advantage.



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