

HALAL OPERATIONAL CAPABILITIES IN FOOD MANUFACTURING INDUSTRY

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ABSTRACT

Interest in operational capabilities and its influence on competitive advantage and performance have generated a large research stream within the operations management strategy literature particularly in automotive and electronic industry. However, there is limited study on operational capabilities in food industry particularly on Halal food manufacturing industry. The difference in research environment between the industries requires further study to identify relevant items in the dimensions forming operational capabilities. This paper aims to establish the dimensions of Halal operational capabilities in the Halal food manufacturing industry. This exploratory qualitative research paper is based on focus group interview held in Sarawak, Malaysia to define the scope of Halal Operational Capabilities. Based on focus group interview findings, Halal operational capabilities' dimensions in Halal industry cover innovation, cooperation, customization, responsiveness and reconfiguration. Studies on operational capabilities dimension in the Halal food industry will provide an understanding on what are the dimensions in operational capabilities in this industry and which capabilities should be prioritized by the firm to sustain their competitive advantage.

Keywords: Halal Industry; Operational Capabilities; Process Management; Competitive Advantage, Focus Group Interview and Resource-Based View.

INTRODUCTION

In recent times, efficient operation in the food manufacturing process has gained more attention because of increasing competition in the developing market of Halal products. However, sometimes the Halal industry is inefficient because of resources and capability constraints (Thomson Reuters, 2013). Operational capabilities from operation management (OM) perspectives enable the firms to perform operational activities such as logistic, manufacturing, marketing and sales through purposive sampling technique (Collis, 1994).

The importance of operational capabilities to provide an understanding of how sustainable competitive advantage arises from heterogeneous resources has caught the attention of operations strategy researcher (Flynn & Flynn, 2004) Operational capabilities studies by Skinner (1974) suggest that manufacturing offers an organization certain capability that could be used as a competitive weapon. Operational capabilities based on Skinner (1974) emphasizes on trade-off between capabilities (cost, quality and time) due to inability of the plant to simultaneously implement multiple dimensions. However, there are limited studies on

operational capability in the food industry particularly in the Halal food industry since the previous studies focus more on automotive and electronic industry.

Capabilities form the primary basis for competition between firms and distinguish a company from its competitors in the eyes of its customers (Stalk et al., 1992). Operational capabilities refer to firm-specific sets of skill, process and routines developed within the operations management system that is regularly used in solving its problem through reconfiguring its operational resources (Wu et al., 2010). The objective of this research is to determine the operational capabilities' dimensions that may affect Halal firm performance through focus group interview.

LITERATURE REVIEW

Halal is an Arabic term which means permitted, allowed, authorised, approved, sanctioned, lawful, legal, legitimate or licit. Guidelines for Halal are written very clearly in the holy Book - Quran; "Forbidden to you (for food) are: Al-Maytatah (the dead animals-cattle-beast not slaughtered), blood, the flesh of swine..." (Surah Al Maidah, verse 3). Halal food producers attempt to introduce their product as a symbol of quality and furthermore Halal dimension is the most important dimension influencing customer preference in the food service industry (Abdullah et al., 2013). As a result, they can market their products not only to Muslims, but also to all consumers, immaterial of their race or religion.

The global increase in the Muslim population, which is estimated to be at 1.8 billion has created a spending trend of US\$2.1 trillion in 2017 (Thomson Reuters, 2018). The halal food industry has advanced beyond religious requirements and created enormous potential locally and internationally (Backhouse & Mohamad, 2014). Therefore, the Halal food production capabilities has gained interest among Halal food manufacturers to sustain the competitive Halal demand globally (Manzouri et al., 2013).

Operational capabilities as a competitive advantage factor is in tandem with resource-based view (RBV) of the firm, which has emerged as a theoretical framework for analysing the sources and sustainability of competitive success (Barney, 1991). As argued by Barney (1991), competitive advantage is created by firms acquiring and utilizing resources in an inimitable manner due to the specialization of assets and implicit knowledge and skills. Operational capabilities in this study is based on Wu et al. (2010) adapted from relevant literature (Schroeder, et al., 2002; Subramaniam & Youndt, 2005).

Halal industry studies mainly focus on supply chain, logistic certification, promotion and intention to purchase (Ab Talib et al., 2015; Manzouri et al., 2013; Yunos et al., 2014). Therefore, identification of operational capabilities dimensions to enhance the Halal industry competitiveness in the global market is crucial. As emphasized by Kellen & Wolf (2003) and Flanagan (2005), critical success factors need to be identified in order to provide the industry with specific focus on performance management and measurement. Past studies adapted and adopted the operational capabilities dimensions in the non-food manufacturing environment. Hence this study, using a focus group interview is aimed to establish whether the dimensions, namely improvement, innovation, customization, cooperation, responsiveness and reconfiguration are applicable among the halal industry players.

METHOD

In this study, a focus group interview has been structured to allow open in-depth discussions with a group of selected individuals led by the researcher (Walden, 2006), to establish consensus on the dimensions of Halal operational capabilities. Halal Operational capabilities are a new phenomenon, and the focus group is a useful tool to identify and reconfirm the dimensions identified by previous studies (Sekaran & Bougie, 2016). Focus groups were conducted within the class room setting at the Malaysia Productivity Corporation (MPC) Sarawak. The session was audiotaped, and tapes were transcribed verbatim to ensure systematic analysis of the discussions. Each discussions duration was approximately 3.5 hours and was facilitated by a moderator and co-moderator. The focus group assessed whether the dimensions of operational capabilities in the Halal industry reflected the perceptions of representatives from the companies who consisted of officers at supervisory and managerial positions and above. On average, they had worked in the operations management of the companies for 9.5 years (3 years minimum, 15 years maximum). The following four steps were followed in organizing the Focus Group Interview session (Walden, 2006).

Planning; the discussion group was synchronized with the objectives i.e. a) To identify and build consensus of dimensions of operational capabilities in Halal food manufacturing firms. b) To discuss whether elements of operational capabilities exist or applied in the Halal food manufacturing operation. c) To acquire further information related to operational capabilities and process management in the Halal food manufacturing company.

Recruiting of participants: Participants for the session were invited based on purposeful selection (Maxwell, 2012) a variety of participants, consisting owners of company, executives, managers, operation managers, QA managers and Halal executives (see Table 1). Operational capabilities according to Wu et al. (2010) are embedded in operation processes, which can be more easily identified in a firms context. Therefore, the targeted participants for the study are the owner of the company and supervisory level personnel, because they have the knowledge to respond to the questions during the focus group interview. Based on Halal certification classification by the Department of Islamic Development Malaysia (JAKIM) there are four categories of Halal certification; pharmaceutical, food product, food premises (including beverages) and slaughter house. For the focus group session, representatives were invited from food product manufacturers and slaughter houses. There were no companies registered for pharmaceutical manufacturing in Sarawak and food premises such as coffee shop and restaurants were excluded in order to focus on firms that have machine and equipment.

Conducting the discussion session: The discussion group started with the explanation of the session objectives followed by a presentation on Halal industry development in Malaysia. The participants were briefed on operational capabilities to familiarize the participants with the discussion topic. With the key personnel involved directly in operations management of the companies, the focus group session discussed on: a) What are the dimensions in operational capabilities that could influence performance of the companies; b) Issues and challenges related to Halal Industry. At the end of the session, participants were requested to list down the items related to operational capabilities that in their opinion may influence the firm's performance.

Analyzing and reporting; In line with Walden (2006) and Chambers & Muñoz (2009), ideas were classified in categories in order to discover patterns or also called themes or perspectives. According to Sim (1998), conformity of opinion within focus group data is an emergent property of the group context, rather than an aggregation of the views of individual participants. Secondly, as argued by Prince & Davies (2001), the moderator should be well

versed in the topic of Halal industry and operational capabilities. The moderator in this study has been involved with several industries including food manufacturing as a Quality Management Consultant for more than 10 years with Malaysia Productivity Corporation (MPC).

Questions asked to the respondents were mainly to capture their understanding about operational capabilities in their company. Questions on the dimensions which were practiced and were available in their company were also asked. Moderator also prompted specific questions on Halal operational capabilities' dimensions such as innovation, cooperation, customization, responsiveness and reconfiguration.

Company	No of employee	Description	Position	Years in the Halal Industry
Company A	50	Food Product	Director	6
Company B	17	Food Product	Executive	10
Company C	7	Food Product	General Manager	6
Company D	58	Food Product	Manager	12
Company E	25	Slaughter House	Operation Manager	12
Company F	300	Slaughter House	Halal Manager	12
Company G	70	Food Product	QA Manager	3
Company H	235	Food Product	Halal Executive	15

RESULTS AND DISCUSSION

Table 2 shows the assessment of respondent's feedback during the focus group interview using the micro-interlocutor analysis as proposed by Onwuegbuzie et al. (2009) to determine their consensus on operational capabilities dimension. The matrix for assessing level of consensus show that six out of eight participants indicate agreement that improvement is associated with the dimension for halal operational capabilities. For innovation, only two out of eight participants indicate agreement via verbal or non-verbal that innovation is related to operational capabilities dimension. There are participants who indicate dissent verbally that innovation is not fit for the operational capabilities due the financial constraints for small companies to invest for radical change. In the theme "*customization*" there were three participants who indicated agreement verbally and five indicated significant statements or examples suggesting agreement. The highest consensus is "*cooperation*" with seven participants indicating agreement as a halal operational capability. Responsiveness and reconfiguration received five and six verbal agreements respectively.

Theme	Company Management Representatives							
	A	B	C	D	E	F	G	H
Improvement	IA	IA	SE	IA	SE	IA	IA	IA
Innovation	SE	SE	SD	IA	SE	SE	SE	IA
Customization	IA	SE	SE	SE	SE	SE	IA	IA
Cooperation	IA	IA	IA	IA	SE	IA	IA	IA
Responsiveness	SE	IA	IA	SE	IA	SE	IA	IA
Reconfiguration	SE	SE	IA	IA	IA	IA	IA	IA
Others	SE	SE	SE	IA	IA	SE	SE	IA

Note: IA= Indicated agreement (i.e., verbal or nonverbal)

ID= Indicated dissent (i.e., verbal or nonverbal)
SE= Provided significant statement or example suggesting agreement
SD= Provided significant statement of example suggesting dissent
NR= Did not indicate agreement or dissent (i.e., nonresponse)

CONCLUSION

The dimension of Halal Operational Capabilities based on the focus group interview can be summarized as: innovation, reconfiguration, cooperation, customization, responsiveness and process management as an intervening factor. The focus group interview highlights the issues related to high operation cost borne by the industry players due to low volume of halal raw material demand in Sarawak. In addition, the participants highlighted the importance of government support to ensure positive growth of Halal industry in Sarawak. Relevant agencies under the state and federal government should engage with the industry players particularly in the food processing industry before any physical facilities related to Halal industry is developed. This preliminary study on Halal operational capabilities provide the platform for further investigations to be done on the relationship between operational capabilities and firm performance among Halal food manufacturing companies in Sarawak. The future study should focus on the interaction of capabilities and identify which capabilities have significant impact on firm performance.

REFERENCES

- Ab Talib, M.S., Abdul Hamid, A.B., & Zulfakar, M.H. (2015). Halal supply chain critical success factors: a literature review. *Journal of Islamic Marketing*, 6(1), 44-71.
- Abdullah, F., Abdurahman, A.Z.A., & Hamali, J. (2013). The dimensions of customer preference in the foodservice industry. *Business: Theory and Practice*, 14, 64.
- Backhouse, C.J., & Mohamad, N. (2014). A framework for the development of Halal food products in Malaysia.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage', *Journal of Management*, 17, 99-120.
- Chambers, D.H., & Muñoz, A.M. (2009). Focus-group evaluation of nutrition education displays by Hispanic adults who live in the USA. *Health Education*, 109(5), 439-450.
- Collis, D.J. (1994). Research note: how valuable are organizational capabilities?. *Strategic Management Journal*, 15(S1), 143-152.
- Flanagan, C. (2005). An investigation into the performance measurement practices of Irish hotel groups. *Unpublished MSc thesis. Dublin Institute of Technology, Dublin.*
- Flynn, B.B., & Flynn, E.J. (2004). An exploratory study of the nature of cumulative capabilities. *Journal of operations management*, 22(5), 439-457.
- Kellen, V., & Wolf, B. (2003). Business performance measurement. *Information Visualization*, 1(312), 1-36.
- Manzouri, M., Nizam Ab Rahman, M., Saibani, N., & Rosmawati Che Mohd Zain, C. (2013). Lean supply chain practices in the Halal food. *International Journal of Lean Six Sigma*, 4(4), 389-408.
- Maxwell, J.A. (2012). *Qualitative research design: An interactive approach*. Sage publications.
- Onwuegbuzie, A.J., Dickinson, W.B., Leech, N.L., & Zoran, A.G. (2009). A qualitative framework for collecting and analyzing data in focus group research. *International journal of qualitative methods*, 8(3), 1-21.
- Prince, M., & Davies, M. (2001). Moderator teams: an extension to focus group methodology. *Qualitative Market Research: An International Journal*, 4(4), 207-216.
- Schroeder, R.G., Bates, K.A., & Junttila, M.A. (2002). A resource-based view of manufacturing strategy and the relationship to manufacturing performance. *Strategic Management Journal*, 23(2), 105-117.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Sim, J. (1998). Collecting and analysing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing*, 28(2), 345-352.
- Skinner, W. (1974). The focused factory. *Harvard Business Review*, 114-121.
- Stalk, G., Evans, P., & Shulman, L.E. (1992). Competing on capabilities: The new rules of corporate strategy. *Harvard Business Review*, 70(2), 57-69.
- Subramaniam, M., & Youndt, M.A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450-463.
- Thomson Reuters. (2013). State of the global Islamic report 2013. Dubai.
- Thomson Reuters. (2018). State of the global Islamic economy Report 2018/2019.
- Walden, G.R. (2006). Focus group interviewing in the library literature: A selective annotated bibliography 1996-2005. *Reference Services Review*, 34(2), 222-241.
- Wu, S.J., Melnyk, S.A., & Flynn, B.B. (2010). Operational capabilities: The secret ingredient. *Decision Sciences*, 41(4), 721-754.
- Yunos, R.M., Mahmood, C.F.C., & Mansor, N.H.A. (2014). Understanding mechanisms to promote halal industry-the stakeholders' views. *Procedia-Social and Behavioral Sciences*, 130, 160-166.