

Linkage among halal quality standard certification and SME's performance: Palestinian food halal certified SME's context

Linkage of halal certification and performance

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Abstract

Purpose – The aim of this study is to study the relationship between halal certification and small and medium enterprise (SME) performance in a turbulent environment such as the Palestinian environment.

Design/methodology/approach – In this study quantitative cross-sectional research design using questionnaires distributed over 51 certified SME's used, and analysis was performed using partial least squares-structural equational modeling.

Findings – The current study revealed that there is a positive relationship between certification and business performance of SME's in terms of financial and operational performance, and operational performance can mediate the effect between certification and financial performance. It is recommended to conduct further research with larger sample sizes and conduct research using different research designs, such as the longitudinal research design.

Practical implications – Certification of Halal also has a positive relationship with performance, even in a turbulent environment like Palestine. Accordingly, Palestinian food manufacturing firms are called to implement food safety standards like the Halal certificate to gain beside the good gained image the good financial performance.

Originality/value – This study was conducted in one of the most turbulent environments, as well as in developing countries, enriching the literature with results from emerging/turbulence and developing countries.

Keywords HALAL, Halal certification, Business performance, Operational performance

Paper type Research paper

Introduction

Halal is an Arabic terms that mean preamble or allowable in accordance with Islamic regulations, according to Islamic regulations (Maqasid Al-Sharia) Halal term is a holistic term that cover all Muslims daily life activities and not limited to food and beverage consumptions, (Amer, 2023a; Syazwan, Talib, Chin, & Fischer, 2017; Talib, 2015).

Increased interest in halal food consumption among Muslim and non-Muslim consumers (Amer, 2023a). Halal food certification positively contributes to customer willingness to buy food products. Likewise, more business interests in certification and academic research in the field of halal food have been reported. (Amer, 2023a, b, c, d; Salindal, 2019; Syazwan *et al.*, 2017; Talib, 2015, 2016; Yama, Jemsittiparsert, Saregar, Islam, & Raden, 2019; Zainuddin, Saifudin, Deraman, & Mahidin, 2019).

Despite the growing interest in halal food certification, limited research on halal food certifications (Syazwan *et al.*, 2017), and most of the published works tackled the halal food



supply chain and upstream bodies related to the halal food industry (suppliers, manufacturers, producers and retailers) (Ali & Tan, 2021; Hendayani & Febrianta, 2020; Saifudin, Zainuddin, Elias, & Fatehah, 2018; Talib, 2016; Talib, 2016; Tan and Ali Mohd, 2017; Usman, 2021; Zainuddin *et al.*, 2019; Zainuddin, Saifudin, Deraman, & Osman, 2020).

Global food companies like Nestle and McDonald' are interested in halal certification (Syazwan *et al.*, 2017), as a result of customers' preferences for Muslim and non-Muslim customers, as both perceive halal food certification as a food safety type of quality assurance besides the religious issues related to Muslim consumers (Amer, 2023a, b, c, d).

Such scarcity or limited research on halal food certification (Syazwan *et al.*, 2017; Talib, 2015), especially in the Middle East (Amer, 2023a), would increase the importance of conducting research in the field of Halal in Middle East, especially in a turbulent business environment like the Palestine environment, (Buchanan & Ahmad, 2014; Dwikat & Arshad, 2023; Robert, 2012).

Accordingly, this study attempts to close the literature gap in the field of halal certification and its implementation and impact on business performance. Hence, the purpose of this study is to examine the relationship between halal implementation and certification on business performance, as understanding the relationship between halal certification and business performance will benefit academic research as well as food companies in terms of enhancing related knowledge and encouraging more companies to obtain the certificate.

Accordingly, this paper answered the following questions.

- (1) Does there are direct positive relationship between Halal and business performance?
- (2) Does there are positive relationship between Halal and financial performance?
- (3) Does there are positive relationship between Halal and Operational performance?
- (4) Does the operational performance mediate the effect?

Finally, this paper give a small spark on the importance of Halal certificates not only to gain the marketing image, but also to gain an additional financial performance resulted from good practices. Hence, the paper includes recommendations for policy makers to enhance, facilitate and promote the implementation of sound good practices like Halal.

Palestinian food industrial sector background

The Palestinian food industrial sector shares the same general characteristics as other industrial sectors, in which most of the companies in this sector are small and medium enterprises (SMEs) and family businesses. Generally, the Palestinian industrial sector comprises SME's and suffers from the occupation of Palestinian territories (Dwikat, Arshad, Noor, & Shariff, 2022; Dwikat & Arshad, 2023).

SME's in Palestine, including the food industry sector, suffer from many challenges that limit their ability to achieve higher levels of sustainable competitive advantages. These challenges can be divided into two main categories: external factors, such as the political situation related to occupation and Oslo agreements limitations, the internal related to internal structure of the industrial sector and internal factors inside the SME's (Dwikat *et al.*, 2022).

On average, the Palestinian local food production market share did not exceed 60%. Hence, in some food subsectors such as soft drinks, does not exceed 30%. Likewise, most Palestinian food industrial SME's operate at 50% of their available production capacities. Moreover, if the Palestinian industrial sector, including food, could increase the utilization percentage up to 75%, it would generate more than 44,000 direct and indirect jobs, (Aburaida & St, 2018; UN, 2022). Hence, quality and food safety certification and standards could increase customer trust and, thus, increase the local product market share in the domestic market [1].

Proper linking between industrial standards such as Halal, International Standard Organization (ISO) 9001, and other food safety systems with business performance would affect the market share and would enhance the market presence of local food products in the domestic and export markets (Syazwan *et al.*, 2017).

Finally, the Palestinian Standard Institute (PSI) initiated Palestinian Halal certification, in which a growing number of Palestinian firms engaged in such certification schemes. However, other bodies, such as Malaysian Halal certification bodies, are also engaged in issuing halal food certificates for Palestinian food companies.

Literature review

The concept of halal, which refers to things that are permissible or lawful in Islamic law, has gained increasing attention in recent years, especially in the business context. However, limited literature links the relationship between halal certification and implementation with business performance compared to other food and quality certificates (Amer, 2023a).

A large body of literature links the relationship between different food safety certificates such as the Hazard Analysis and Critical Control Point, ISO 9001, ISO 22000, and Good Manufacturing Practices with business performance (Emre, 2013; Escanciano & Santos-Vijande, 2014; Syazwan *et al.*, 2017; Talib, 2015, 2016), and most of the literature reveals a positive relationship between food safety and quality management and organizational performance. However, few studies have revealed a negative or no relationship (Amer, 2023c).

Likewise, halal certification, which can be considered a food safety certificate (Amer, 2023a), has received increased attention in the literature in the last decade, and many publications, mainly in the far east (Malaysia and Indonesia context), revealed that a positive relationship between different aspects of halal implementation has a positive influence on business performance (Amer, 2023a; Syazwan *et al.*, 2017; Talib, 2015, 2016).

By exploring the Scopus database using Halal and Business performance as a search protocol, it was revealed that only 43 published articles within the well-known Scopus database are related to halal and food business performance, which was reduced to 25 articles after abstract and full-text review by eliminating the articles that were not directly related to the food sector. The Scopus database was chosen for this literature review, as it includes most journals indexed with WoS (Amer, 2023b, d). Hence, data analysis using the Scopus database following methodology, who stated, "Scopus includes most of the journals indexed in WoS [2]." The low number of published articles in the Scopus database can be regarded as good evidence for the limited publication of Halal and business performance, and the need to publish more papers that are empirical in the Halal Standard field.

Previous studies on food safety, including halal literature, revealed that there is a positive relationship between food safety and business performance (Chen, Flint, Perry, Perry, & Lau, 2015; Demirci, Soon, & Wallace, 2016; Escanciano & Santos-Vijande, 2014). However, the Halal literature is not as rich as other food safety literature, (Amer, 2023a, b; Zailani *et al.*, 2019). Hence, a limited number of studies have attempted to link the relationship between halal standards and business performance in terms of marketing (Salindal, 2018, 2019), supply chain (Ali & Tan, 2021; Hendayani & Febrianta, 2020; Saifudin *et al.*, 2018; Tan & Ali Mohd, 2017; Usman, 2021; Zainuddin *et al.*, 2019, 2020) and financial performance (Syazwan *et al.*, 2017).

Fewer published works mainly in the East Asian context (Malaysian and Indonesian) tried to study the mediating effect of operational performance between Halal implementation/certifications and financial performance, where the majority of the reviewed literature revealed the positive relationship, (Giyanti, Indrasari, Sutopo, & Liquiddanu, 2021; Syazwan *et al.*, 2017). Other authors studied the mediating effect of operational capabilities between

supply chain and operational performance in Halal certified organizations, (Domenek, Moori, & Vitorino Filho, 2022).

The mediating role of operational performance Halal certification was not well addressed in the literature, two articles founded in Scopus database tried to cover the literature gap in this field, (Giyanti *et al.*, 2021; Ab Talib *et al.*, 2017), both studied the far Asian contexts (Indonesia and Malaysia). Both founded that operational performance could mediate the effect between certification and financial performance. Such results, would encourage firms to apply different food safety standards specially the Halal.

Theoretical background

The well-established Resources Bases Theory (Barney, 1991) and Technology, Organization and Environment (TOE) frameworks (DePietro *et al.*, 1990) were utilized in this study. The TOE model covers the internal and external environments. Resources Based View (RBV) theory focuses more on resources and its impact on sustainability. Hence, halal standards can be regarded as valuable organizational assets that are integrated with other assets to achieve sustainability. Moreover, good operational performance could be regarded as intangible assets.

The TOE model balances internal and external factors, in which external factors can be realized through governmental regulations, stakeholders, and cultural changes. Thus, the TOE model can be used as a theoretical framework for halal standards-related studies.

As for the well-known RBV theory, as clarified by Barney, the link between a firm's internal characteristics and performance" (P:101), according to Barney (1991), the resource-based view has two main assumptions: heterogeneity in the control of resources and that resources are not perfectly mobilized across firms. Thus, heterogeneity is long-lasting (Barney, 1991; 2001). According to the RBV philosophy, a firm's competitive advantage can be competitive as long as it is not implemented by competitors.

Accordingly, Halal standard implementation can be a competitive advantage for halal-certified firms over noncertified firms, in which the RBV can be used as a theoretical framework for halal-related studies. The RBV was previously used as a theoretical framework in most Halal standards-related studies that attempted to link Halal and performance (Syazwan *et al.*, 2017; Talib, 2016).

Hypothesis and framework

Based on the RBV and TOE theories, this paper suggests that certification/implementation of Halal standards can be regarded as a tool to achieve a sustainable competitive advantage as food companies strive to become market leaders by offering high-standard products that comply with different food safety schemes, including Halal, as achieving halal standards enables food companies to offer higher quality products.

To support this argument, previous studies have indicated that certification against different food and quality certificates is used as an instrument to achieve the desired performance (Emre, 2013; Escanciano & Santos-Vijande, 2014; Syazwan *et al.*, 2017; Talib, 2015, 2016). Likewise, Ab Talib *et al.* (2016a, p. 470) explained that, apart from implementing halal certification as a tool to gain business legitimacy, industry practitioners use halal certification as a mechanism to improve organizational performance". Accordingly, this study proposes the following hypotheses:

- H1.* There is a positive relationship between Halal certification/implementation and operational performance.

- H2. There is a positive relationship between Halal certification/implementation and financial performance.
- H3. Operational performance can mediate the effect of halal certification/implementation on financial performance.

Linkage of halal certification and performance

Figure 1 below represents the general framework of this study, which suggests a positive relationship between halal certification and business performance.

Methodology

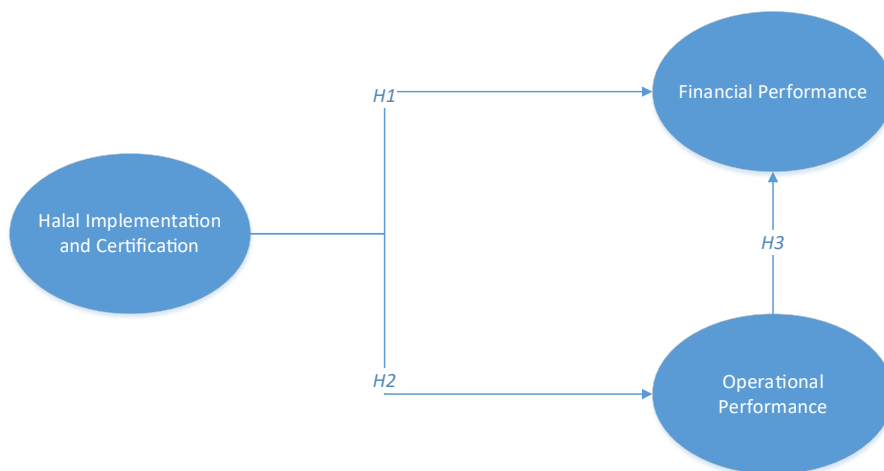
This study followed a cross-sectional quantitative research design, using a survey questionnaire as a data collection tool, which was distributed to Palestinian food halal certified firms through the Palestinian food industry association,

The questionnaire has three main sections: the first section covered Halal Implementation/certification consisting of eight questions, the second section covering operational performance consists of three questions, and the final section covers the financial section consisting of three questions.

The questionnaire was reviewed, verified and validated by Palestinian food industrial associations and local Halal food certification auditors (two Halal System Auditors) and was tested on five halal certified firms as a pilot study, before sending it to 51 Halal Certified Companies, targeting a sample size of 41 respondents, in which the questionnaire was amended and streamlined.

The population of the study was 51 Palestinian halal-certified firms from different halal schemes, such as local Palestinian Halal certificates. Judgmental sampling technique was chosen and managerial position was the unit of analysis, in which the survey was filled by middle or top management who have good operations, productions and influence on the organization, such as Chief Executive Officer (CEO) and production managers (Zailani *et al.*, 2019).

Once the data were gathered, the correlation between dependent and independent variables was examined using the partial least squares-structural equational modeling (PLS-SEM) technique. PLS-SEM was chosen because it can observe multiple latent variables and



Source(s): Figure generated by author

Figure 1. Theoretical framework

consider errors (Hair *et al.*, 2014). Hence, PLS-SEM is widely used and has superior position to analyze complex equations with multiconstructs, (Hair *et al.*, 2014).

Measurement

Six-point Likert scale was used as in previous studies (Giyanti *et al.*, 2021; Ab Talib *et al.*, 2016a, b; Ab Talib *et al.*, 2017), where 1 indicates not important at all and 6 indicates the most important).

Results

51 questionnaires were distributed. Whereas, 40 collected questionnaires were received and analyzed using the SMART PLS 4. Moreover, PLS-SEM is not sensitive to sample size as other techniques and the quality of measurement can obtained without normality assumption. Such measurement includes internal consistency, reliability and validity measures, (Hair, Risher, Sarstedt, & Ringle, 2019). Following (Hair *et al.*, 2019) assessments of the internal consistency (composite reliability (CR)), indicator reliability, convergent validity (average variance extracted (AVE)) and discriminant validity was calculated using the SMART PLS 4 software, Table 1 below represent these values as obtained from the software.

As the CR values are more than 0.7, AVE values are greater than 0.5 and the Cronbach Alpha (CA) values is greater than 0.9, this indicated good validity of the model and good reliability too. As for the AVE in specific it indicated significant convergent validity and more than half of construct are explained by its indicators, (Hair *et al.*, 2019).

The discernment validity was measured using the Fornell–Larcker criterion and the heterotrait-monotrait ratio (HTMT) as well as the factor loading; Tables 2 and 3 represent the Fornell–Larcker criterion and the HTMT, respectively, while Figure 2 represents the factor loading analysis. The values of the Fornell–Larcker ratio and HTMT were 0.98 or less and 0.8 or less, respectively.

The variance inflation factor (VIF) was used to assess multicollinearity and determine whether there is a correlation between constructs (Hair *et al.*, 2019). A VIF value of less than 4 indicates a well-fitting model and there is no multicollinearity (Garson, 2016). Hence, the

Table 1.
CA, CR and AVE
values

	Cronbach's alpha	Composite reliability (CR)	Average variance extracted (AVE)
Financial performance	0.982	0.985	0.965
Halal implementation and certification	0.93	0.95	0.689
Operational performance	0.949	0.952	0.867

Source(s): Table generated by author

Table 2.
Fornell–Larcker
criterion

	Financial performance	Halal implementation and certification	Operational performance
Financial performance	0.982		
Halal implementation and certification	0.742	0.83	
Operational performance	0.777	0.7	0.931

Source(s): Table generated by author

actual VIF values were less than 4. Thus, there were no multicollinearity problems, as indicated in Table 4 below. Moreover, the contract is well loaded as indicated in Table 5.

The coefficient of determination (R²) measures the effect of exogenous constructs on endogenous constructs. Hair Jr *et al.* (2014) indicated that R² values of 0.25, 0.5 and 0.75 is weak, moderate and substantial predictive accuracy, respectively. As the coefficient of determination for this study is the coefficient of financial performance is 0.681 which is more than 0.5 and the R² of operational performance is 0.481. Thus, there is a moderate to strong relationship between implementation and financial performance, while a weak to moderate relationship exists between implementation and operational performance, all these results was obtained through the bootstrapping process within the PLS 4. Hence Table 4 below represents the factor loading of all constructs.

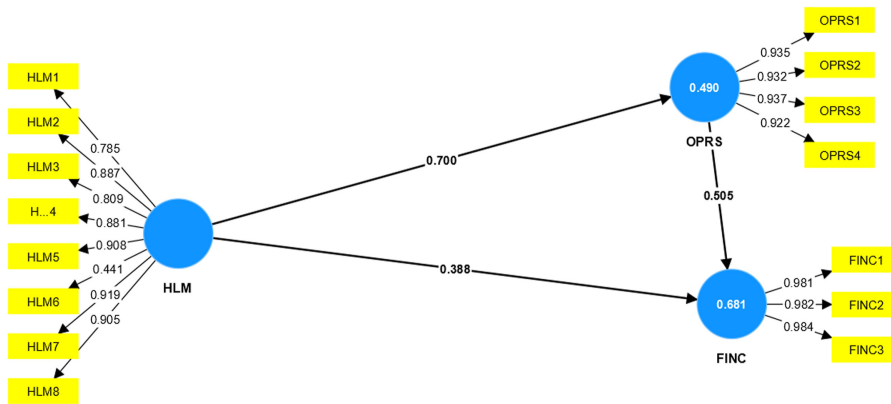
Hypothesis testing

In order to test the hypothesis using PLS, the bootstrapping technique was conducted with a two-tailed *t*-test, and the results (P-values) are shown in the bootstrapping Figure 3 below.

	Financial performance	Halal implementation and certification
Halal implementation and certification	0.768	
Operational performance	0.8	0.741

Source(s): Table generated by author

Table 3.
HTMT



Source(s): Figure generated by author

Figure 2.
PLS algorithm figure (factor loading and coefficient of determination)

	Financial performance	Halal implementation and certification	Operational performance
Halal implementation and certification	1.961		1
Operational performance	1.961		

Source(s): Table generated by author

Table 4.
VIF values

Variables	Constructs code	Construct	Factor loading
HLIM	HLIM1	Policy of Halal Standard	0.715
	HLIM2	Halal Training & Development	0.837
	HLIM3	Materials	0.809
	HLIM4	Productions Facilities	0.881
	HLIM5	Halal SOPs	0.908
	HLIM6	Traceability	0.441
	HLIM7	Nonconformities and Corrective Procedures	0.919
	HLIM8	Halal Auditing (Internal)	0.905
OPRS	OPRS1	Raw Materials Handling	0.935
	OPRS2	Internal Production Processes	0.932
	OPRS3	Capacity of Production	0.937
	OPRS4	Quality of Final Products	0.922
FINC	FINC1	Volumes of the Sales	0.981
	FINC2	Revenues	0.982
	FINC3	Gross Profit	0.984

Table 5.
Construct factor loading

Source(s): Table generated by author

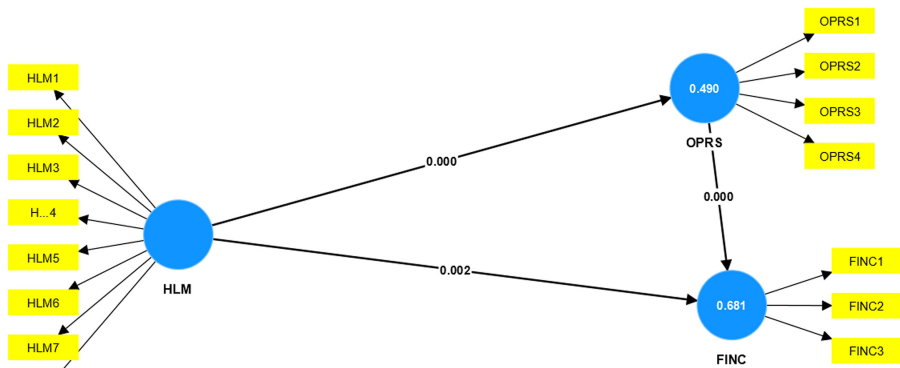


Figure 3.
Bootstrapping results

Source(s): Figure generated by author

The results of hypothesis testing using bootstrapping techniques indicated that all three hypotheses were accepted, and the path relations were supported, as indicated in Table 6.

These results were in line with previous literature concerning the impact of halal certification on business performance in other contexts such as the Indonesian context, (Syazwan *et al.*, 2017), and the Malaysian context, (Baharuddin & Ismail, 2019; Salindal, 2018).

Hypo	Path	Path coefficient	P-value	t-value	Decision
H1	HLM-OPRS	0.388	0.002	3.113	Supported
H2	HLM-FINC	0.700	0.000	9.625	Supported
H3	OPRS-FINC	0.505	0.000	4.172	The mediation also supported

Table 6.
Hypo testing table

Source(s): Table generated by author

Discussion, recommendation and future researches

As this study was designed and conducted to explore the relationship between halal certification and business performance in terms of financial and operational performance, three hypotheses were proposed, as shown in [Figure 1](#).

H1 was selected to link halal certification and operational performance, and it has been proven that there is a strong positive relationship between halal certification and operational performance. However, the religious domain was not considered in this study, as religious issues might have affected such relationships. This study considered halal certification as one of the food safety certification in which future studies can measure the joint effect of religious and halal certificates on business performance.

Furthermore, the results of this study are consistent with ([Chen et al., 2015](#); [Escanciano & Santos-Vijande, 2014](#); [Syazwan et al., 2017](#)) those of, who showed that the implementation of halal and food safety systems positively influences operational performance. Hence, this research enriches the literature body and accumulates the understanding of halal certification and its impact not only on advanced and non-turbulent environments, but also in a turbulent working environment such as the Palestinian environment, where the decision to implement strategic initiatives like the Halal is not an easy decision, like other nonturbulent environments, ([Robert, 2012](#)).

H2 attempted to establish a relationship between operational and financial performance, and the results clearly revealed that such a positive relationship exists, which supports the findings of ([Syazwan et al., 2017](#)) the Indonesian context.

H3 was intended to study the mediating effect of operational performance on certification and financial performance, which was also supported, in which the current results of this study supported the previous results of ([Syazwan et al., 2017](#)). This ([Syazwan et al., 2017](#)) can be regarded as the only previous study that considers such a mediating effect.

The results of this study support a relationship between halal certification and implementation. It is obvious that such results cannot be secured if Halal standard implemented “for show,” ([Syazwan et al., 2017](#)).

In terms of theoretical contribution, this study enriches the literature on the RBV and TOE frameworks, which increases our understanding of certification and implementation as organizational resources and its impact on sustainability in terms of long-term business performance.

This study suffers from many limitations; the smaller sample size and future research can cover this limitation by conducting regional studies in all Middle Eastern countries. The current empirical results are supported by a cross-sectional research design and a longitudinal research design is recommended for future research.

As this study does not consider other external drivers like the Halal and competitive advantages in terms of export capabilities for example, it is recommended to include such drivers’ in future related researches. Hence, in Palestinian situation the export capabilities could be one of these external drivers that need to be studied, based on the comments and feedback from many of surveyed SME’s.

Finally, it is recommended for policy makers to adopt a national quality policy that aimed to promote the implementation of Halal certification through enhancement of national Halal certification process within Palestinian standard institute. Moreover, it is recommended for local halal system certificates issued by PSI to include more requirements or instructions regarding the product traceability as it was obvious out of this study that the lack of product traceability based on factor loading results of HLM4 (Traceability).

It was noticed that SME’s holding different certificates other than Halal achieved superior results compared with SME’s holding only Halal certificate due to comprehensive effect of these different system, as the weakness of one can be covered by others.

Finally, it can be concluded that turbulent environment like the Palestinian business environment behaves the same as stable environment in the case of Halal standards and its impact on performance, in which it give good contribution to the literature in case of turbulent environment as most of related publications in the stable and established environment.

Practical implication

It is recommended for policy makers in Palestine to focus on promoting Palestinian Halal standard among food companies. Moreover, Palestinian firms focus on Halal standard and certification as it has positive impact on operational performance resulted on good financial results.

Halal system and certification can leverage the good food practices with minimum requirements comparing with other international food safety certification like the ISO 22000. Hence, Halal certification could achieve good impact as other food certification with less investment and efforts from SME's compared with ISO 22000 implementation.

As the number of certified SME's in Palestine is growing, it is essential to update and generate general framework for Halal implementation and PSI should be more active in promoting the local Halal certificate as many of SME's obtained their certificates from outside Halal certification providers. Therefore, it is essential to have awareness and promotion campaigns to increase the awareness and to promote the local certificate scheme.

Notes

1. Ministry of National Economy, National Quality Policy, 2022.
2. World of Science.

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