

Intention to adopt halal concept in online food delivery meatball restaurants

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Abstract

Purpose – This study aimed to analyze the impact of engagement, personal norms, perceived organizational readiness, and behavioral controls on meatball partners' intentions to adopt halal concepts..

Methodology – The Respondents are the meatball partner OFD in Yogyakarta and Solo Raya, gathering 195 respondents through purposive sampling. The number of samples determined follows Roscoe's principle. The information gathered was analyzed using Structural Equation Modeling (SEM) in conjunction with Partial Least Squares (PLS) techniques to determine the relationships between the different factors.

Findings – The results indicated that religious commitment, halal awareness, personal characteristics, perceived behavioral control, subjective norms, and attitudes do not affect the intentions of meatball partners to apply the halal concept, contrary to TPB theory in influencing the intention to perform a behavior. On the contrary, the obligation of halal certificates and organizational readiness has a positive effect on the intentions of meatball partners to apply the halal concept..

Implications – It is necessary to increase entrepreneurs' awareness of halal and their religious commitment. Halal obligation and organizational preparedness are two factors that significantly influence partners' intentions to implement the halal concept. Because it takes the combined efforts of all members, strengthening the organization becomes a source for producers.

Originality – Its examination of the application of the halal concept to meatball partners incorporated in online applications. It contributes to the understanding of the impact of engagement, personal norms, perceived organizational readiness, and behavioral controls on meatball partners' intentions to adopt the halal concept.

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Introduction

There has been a shift in consumer behavior in the food and beverage industry following the Covid-19 pandemic. This has led to an increased awareness of healthy and nutritious food and beverages, as well as the need for safe, clean, and high-quality food and beverages (Hidayat et al., 2021). This shift was triggered by media reports that food safety was the source of the spread of the Covid-19

virus, not from food, but from viruses that grow in raw materials derived from wild animals that are consumed directly because they have not yet paid attention to food safety factors (Ceniti et al., 2021). This aligns with the concept of halal thayyiban, which is currently in the trial phase of implementing Law No. 33 concerning Halal Product Guarantees introduced in 2014, and is expected to become mandatory by the government in 2026. The halal aspect is interpreted not only as "halal" in the sharia sense, namely ingredients that are free from haram ingredients, but also often associated with "thoyyiban," which means halal, clean, safe, and nutritious. Halal food is clean, safe, nutritious, and healthy (Billah et al., 2020).

Mandatory halal certification raises the priority level of food and beverage businesses to consider halal certification as part of their compliance and market legitimacy strategies to maintain competitiveness (Kamiliyah et al., 2024). In particular, after the pandemic, there has been an increase in online transactions, creating a highly competitive environment (Yang et al., 2022). Every business owner attempts to increase consumer trust in the goods they offer in the face of business rivalry (Zakia et al., 2020). Online business actors feel that having a halal certification, or even mentioning halal in their business, increases consumer trust, reduces doubts about online products, and even becomes an advantage in itself (Yener, 2022). Service quality and sales will increase, and the online food ordering system that is being built will be at its best if the meatball partners include halal status information in the food delivery service app (Ikawati et al., 2024).

Post-pandemic operational changes, such as cleanliness, hygiene, food safety, and demand for natural and healthy products, can trigger a relationship between organizational readiness and certification intention (Wahyuni et al., 2024). Research by Priantina et al. (2023), using the TPB theoretical framework with the addition of trust and functional factors, shows that trust is crucial for increasing business participation in implementing halal certification. Fianto et al. (2025) found that halal knowledge, knowledge of halal benefits, and knowledge of process procedures significantly influence the intention to implement halal certification. Only a few studies have explicitly modeled business leader characteristics, namely leadership commitment, as an element of attitudes towards halal (Elias et al., 2019). Although the mandatory halal certification regulation coming into effect in 2026 is highly relevant, little research has examined how business actors prepare for this regulation and how it influences certification intention (Darmalaksana, 2023). Organizational readiness and internal motivation are key factors that contribute to the successful implementation of halal food in businesses (Giyanti et al., 2021).

Previous studies have not addressed the relationship between online transactions using applications and the factors influencing the adoption of the halal concept among partners or producers. This study aimed to analyze the relationship between religious commitment, personal leadership characteristics, and halal awareness, which influence attitudes, halal certification obligations that shape subjective norms, and organizational readiness, which indicates perceived behavioral control, on the intention to adopt the halal concept among meatball food delivery partners using online applications. The results of this study are expected to contribute to the development of theories and strategies for implementing the halal concept in businesses facing increasing business competition.

Literature Review

The Theory of Planned Behavior (TPB), a social psychology method that has been extensively used in MSME research, was developed from the Theory of Reasoned Action (Ajzen, 1991). Botetzagias et al., (2024). TPB is a theory that explains the existence of variables such as attitude, subjective norms, and perceived behavioral control that all have an impact on an individual's intentions at the same time. According to this theory, attitudes are the most influential factor. The TPB demonstrates that an individual's cognitive interpretation and preparedness to act constitute their intention. A positive or negative emotion regarding a specific feeling is referred to as attitude. Another way to define subjective norms is the perceived social duty to engage in or refrain from a specific behavior. On the other hand, perceived behavioral control can include being aware of one's capacity to carry out a specific action. According to the TPB model's application in MSME research, MSMEs' motivation to engage in a specific behavior is determined by whether they

believe they can execute that behavior and whether there is a need for it. Additionally, according to TPB, behavioral goals are influenced by attitudes, subjective norms, and perceived actions, all of which have an impact on an individual's present behavior (Rakshit et al., 2021). While behavior is the actual action taken, behavioral intention is still a form of interest, and intention itself is the desire to carry out a behavior (Conner & Norman, 2022).

Religious commitment embraces the strength of one's religiosity, practices, and beliefs, which are believed to drive halal-related choices. Stronger commitment increases motivation and awareness to comply with halal regulations and offers halal-compliant products (Rahmawaty & Wibowo, 2025). Partner backgrounds influence the capacity and motivation to implement halal practices; for example, more educated or experienced partners may better understand the certification process, and younger traders may be more responsive to market demand (Ab Talib, 2017). Halal awareness, including knowledge of halal regulations, consumer demand for halal certification, and the benefits of certification can influence the perceived need to adopt halal concepts. Studies show that awareness predicts purchase intentions and halal implementation behavior of companies (Septiani & Ridlwan, 2022). When producers perceive certification as mandatory, for example, through government mandates or platform rules, this creates external pressure and increases their intention to comply. This can act as institutional pressure from outside the producer (Fattah et al., 2025).

Implementing the halal concept is not just an attitude; partners require resources, procedures, material control, and documentation to meet the halal criteria. Organizational readiness is the closest predictor of intention or actual halal implementation behavior. Recent MSME research has discussed knowledge and readiness as crucial factors in implementing halal certification (Tuhuteru & Iqbal, 2024). Attitudes toward implementing the halal concept, based on perceived benefits versus costs, are core predictors of the intention to implement the TPB. Positive attitudes enhance intention, and many studies have successfully used TPB (Nizar & Triyawan, 2020). Perceived social pressure from customers, families, religious leaders, and platform managers influences merchants' intentions. Research shows that subjective norms influence the purchase of halal (Salmah & Shikur, 2023). Perceived Behavioral Control captures perceptions of ease or difficulty, and controls the implementation of the halal concept (cost, time, and bureaucracy). If merchants feel capable of doing so, their intentions increase, and if they perceive obstacles, their intentions decrease (Salmah & Shikur, 2023).

Hypotheses

Attitude (AT)

The Theory predicts that attitudes toward a behavior are the primary predictor of behavioral intentions in halal-related studies for both consumers and producers (Salmah & Shikur, 2023). Empirical studies on Indonesian food SMEs and halal certification show that attitudes toward and perceptions of halal positively influence intentions to adopt halal practices and pursue halal certification. As attitudes play a significant role in determining consumer intentions, high levels of positive attitudes appear to increase consumer interest in purchasing halal food products (Ikawati et al., 2024). As attitudes play a significant role in determining consumer intentions, high levels of positive attitudes appear to increase consumer interest in purchasing halal food products (Rasdi et al., 2023). According to Md Nawi et al. (2023), attitude plays a significant role in the implementation of halal certification. Viewpoints on adopting the halal concept based on the balance of perceived gains and expenses are fundamental indicators of the intention to use the TPB. Optimistic views boost intention, and numerous halal studies have effectively utilized TPB (Nizar & Triyawan, 2020). Thus, the following hypothesis was developed:

H₁: Attitudes are positively related to the intention of meatball partners to implement the concept of halal.

Subjective Norm (SN)

Subjective norm is the level of trust an individual has in external demands deemed important, leading to their willingness or unwillingness to perform certain behaviors in accordance with these demands. Subjective norms are determined by a combination of a person's or group's beliefs about a behavior

(normative beliefs) and the individual's motivation to comply with those recommendations (motivation to comply) (Ajzen, 2012). Subjective norms serve as a guideline for behavior but are dependent on circumstances. A Muslim's social environment serves as a model for their behavior regarding how they consume, reducing the potential for errors that could occur if they consume from restaurants that do not yet have a halal logo (Zuhri et al., 2023). Subjective norm has been shown to influence the implementation of halal standards in the food industry (Yaumidin et al., 2025). Felt societal pressure from patrons, relatives, religious authorities, or platform supervisors affects merchants' intentions. Studies demonstrate that subjective standards affect decisions to embrace halal principles (Salmah & Shikur, 2023). Therefore, the hypotheses of this study are as follows.

H₂: Subjective norms are positively related to meatball partners' intention to implement the halal concept.

Perceived Behavior Control (PBC)

With the knowledge that every individual has some degree of control over their will, the Theory of Planned Behavior (TPB) is an evolution of the theory of reasoned action (Ajzen, 1991). Future behavior is predicted using the Theory of Reasoned Action (TRA). Both specific and general behaviors are covered by the Theory of Planned Behavior (TPB) (Hagger, M., 2019). A person's attitude toward the behavior, subjective norms, and perceived behavioral control can all be used to predict their behavioral intentions. According to research, organizational non-compliance with halal standards is strongly impacted by perceived behavioral control (Aslan, 2023). Additionally, the application of Islamic finance models is greatly impacted by perceived behavioral control (Abid & Jie, 2023). Perceived behavior also has a positive impact on the adoption of halal certification in the food industry (Yaumidin et al., 2025). Perceived Behavioral Control reflects impressions of simplicity, complexity, and authority over enacting the halal concept (expense, time, and red tape). If merchants feel they are capable, their intentions rise, and if they observe hindrances, their intentions diminish (Salmah & Shikur, 2023). Therefore, the following hypotheses are developed. H₃: Meatball partners' intention to apply the halal concept is positively correlated with their perception of behavioral control.

Meatball partners' intention to implement the halal concept (IAHC)

The Theory of Reasoned Action (TRA) defines behavioral intention as a function of attitudes and subjective norms toward behavior. This suggests that a person's intention to perform behaviors (behavioral intention) can be predicted by their attitude toward the behavior and how they perceive others to judge their behavior, defined as subjective norms (Botetzagias et al., 2024). Internal producer motivation stems from their readiness to adopt the halal concept in accordance with their resources (Jaswir et al. 2023). The intention to implement halal standards is crucial for maintaining the halal logo in product packaging and ensuring consumer satisfaction (Pauzi et al., 2025). Adopting the halal concept goes beyond mere perspective; associates require resources, processes, material oversight, and paperwork to fulfill halal standards. How prepared is an organization the best indicator of intention or actual behavior in adopting halal practices? Current studies on MSMEs have emphasized knowledge and preparedness as vital components in pursuing halal certification (Tuhuteru & Iqbal, 2024).

Religious Commitment (RC)

At the individual and societal levels, religion has a profound impact on attitudes, values, and behavior, making it an essential component of social life (Koc et al., 2024). The two dimensions of religion are the external dimension, which is related to religious affiliation, worship services, membership in religious communities, religious activities, and the internal dimension, which includes religious identity and shapes attitudes, values, and beliefs within a religion (Riegel et al., 2024). Religion plays a significant role in fostering consumer loyalty to halal products and may even assist managers in creating successful plans to cultivate devoted customers in the expanding Muslim market (Suhartanto et al. 2020). In addition to boosting potential profits, producers' adoption of the halal concept demonstrates their social responsibility and business ethics by obtaining halal certification, which gives customers confidence in the halal status of their goods (Razak et al. 2025).

Heightened dedication amplifies the desire and understanding needed to adhere to halal standards and provide items that meet these requirements (Rahmawaty & Wibowo, 2025) Consequently, the following theory is established:

H₄: Religious commitment is positively related to religious attitudes.

H₅: Religious commitment is positively related to meatball partners' intentions to implement the concept of halal.

Personal Characteristics (PC)

Every participant in a business competition needs a competitive edge that can be attained by employing suitable competitive business strategies (Breja, 2022). The traits of the owner or manager are among the factors that affect the growth of MSMEs, according to research by Sanu and Anjum (2023). Age, education, prior experience, financial motivation, job creation, and self-fulfillment are examples of these personal traits. Resilience and business continuity are also impacted by strong leadership motivation in the face of difficult circumstances such as a pandemic (Kurniawan et al., 2024). When external pressures fail, leaders can inspire their staff to be highly motivated, creating a shared commitment to the company's halal standards (Giyanti et al., 2021). The skills and enthusiasm for adopting halal methods are shaped by the background of those involved. Partners with superior education or broader experience might possess a greater grasp of certification steps, while younger merchants could display increased sensitivity to consumer preferences (Ab Talib et al., 2017). The discussion above leads to the development of the following hypothesis:

H₆: Attitudes is positively correlated to personal characteristics

H₇: Personal characteristics are positively correlated with meatball partners' intentions to apply the halal concept.

Halal Awareness (HA)

Muslims must comprehend the idea of halal because they are required to be conscious of the goods they use and consume (Jannah & Al-Banna, 2021). Food regulations are unambiguous, distinguishing between what is haram and what is halal, and they are rigorously followed (Aziz, 2023). As part of a learning or experiential process, knowledge can be characterized as awareness in the form of expertise and skills as well as facts, feelings, or experiences of an individual or group (Jannah & Al-Banna, 2021). An internal halal management team, whose members are responsible for halal compliance in their respective areas of responsibility, implements the Halal Assurance System (HAS) (Othman & Md Nawi, 2025). Research by Haleem et al. (2021) indicates that cooperative relationships between staff members who have a common understanding of halal practices are essential for the successful implementation of a halal supply chain. This entails keeping facilities, production procedures, and halal ingredients to guarantee that the finished product retains its halal status, as the business promises its customers (Bahrudin et al., 2024). Research indicates that understanding influences consumers' buying choices and how businesses implement halal practices (Septiani & Ridlwan, 2022).

H₈: Attitude is positively correlated to halal awareness

H₉: Halal awareness is positively correlated with the intention of meatball partners to apply the halal concept.

Halal Certification Obligation (HCO)

Through the implementation of Law No. 33 of 2014 concerning Halal Product Assurance, the government has ensured that its citizens have access to halal and thayyib products when consuming food (Government of the Republic of Indonesia, 2014). From the phases of material procurement, processing, storage, packaging, distribution, sales, and presentation, halal products are deemed halal in accordance with Islamic laws. Producers can convince consumers to buy their products by claiming that they have a halal certificate (Fauzi, 2023). Because halal certification guarantees that the process a product goes through satisfies halal product requirements, it can have an impact on the quality of the product (Zakia et al., 2020). The government implemented a mandatory halal

certification policy to protect consumers. According to Darmalaksana (2023), producers generally agree with the halal certification policy, although there are some complaints about the information and knowledge surrounding halal designation. As a result of this policy, businesses whose goods and services are included in the required halal product category are under additional pressure. When manufacturers view verification as mandatory, as in government requirements or platform guidelines, this creates external pressure and strengthens their desire to comply. This may serve as an institutional pressure originating from entities beyond the manufacturer (Fattah et al., 2025).

H₁₀: The obligation to have a halal certificate is positively related to the intention of meatball partners to implement the concept of halal.

H₁₁: The obligation to obtain a halal certificate is positively related to subjective norms.

Organizational Readiness (OR)

As the country with the largest Muslim population, Indonesia offers business opportunities in the halal industry (Anwar & Bin Sarip, 2024). The Covid-19 pandemic has changed people's perceptions of their food consumption choices. According to Yener (2022), consumers view halal-certified products as safer, more hygienic, and healthier. Producers use halal certification to ensure that their products meet the growing demand for halal products. The ability of business actors to put in place a halal assurance system depends on the size of the company, whether it is a large corporation or a micro, small, or medium-sized business (MSMEs) (Darmalaksana, 2023). According to Jaenal Effendi (2023), organizational readiness refers to the capacity of an organization to apply operational management in the implementation of halal services, both financially and in terms of human resources. Human resource management is a key element that influences the success of halal logistics (Karudin et al., 2025). Adequate technical capabilities, expertise, infrastructure, and training availability contribute to organizational readiness (Purwadi & Sardjono, 2024). Organizational preparedness and internal motivation are essential for successful implementation of halal practices in businesses (Giyanti et al., 2021). The organization's readiness to implement halal certification applies from the top management to operators (Tuhuteru & Iqbal, 2024).

H₁₂: Organizational readiness is positively related to perceived behavioral control.

H₁₃: Organizational readiness is positively related to meatball partners' intention to implement the halal concept.

From the explanation above, with reference to TPB theory, which accommodates the variables of attitude, subjective norms, and perceived behavioral control, the research model built in this study is shown in Figure 1.

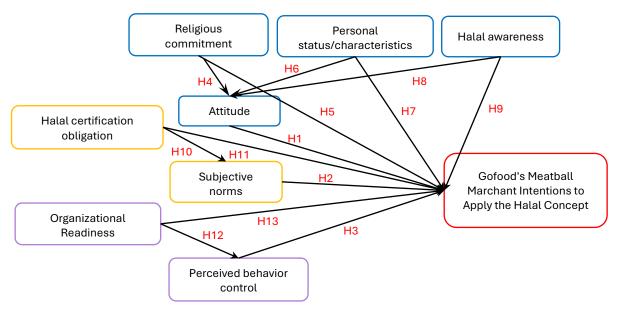


Figure 1. Research model Source: Authors'own work

Research Methods

The theory of planned behavior was used to develop this research model, which predicts the intention of meatball restaurants to adopt the halal concept based on eight independent variables: religious commitment, halal awareness, personal characteristics, perceived behavioral control, subjective norms, attitude, obligation of halal certificates, and organizational readiness. Considering the uncertain number of individuals taking part, the sample size was ascertained based on Roscoe (1975) guideline, which suggests that in multivariate analysis, the participant count ought to be a minimum of 10-fold the number of variables under scrutiny (Hill, 1998). This study encompassed nine independent and dependent variables, necessitating a minimum sample of 90 survey participants. The aggregate of survey participants in this study was 195 individuals. Owners or managers of halal meatball restaurants who were registered on GoFood, a well-known OFD platform in Indonesia, were potential respondents and received the questionnaire online. Subsequently, the data acquired from the survey participants were analyzed using the Partial Least Squares Structural Equation Model, employing Smart PLS. 3 for data processing and analysis. This approach was adopted because of its widespread endorsement by numerous researchers as a suitable statistical tool for path modelling, enabling solutions for intricate multivariate scenarios. Furthermore, this methodology exhibits greater adaptability and strength, and excels in both predictive capabilities and theoretical assessments (Hair et al., 2014; Henseler et al., 2015).

Results

The respondents in this study were business owners and those authorized to implement the halal concept (halal supervisors) for meatball (Table 1). The respondents were spread across the Yogyakarta and Soloraya areas. Data were obtained from 195 respondents (68% male and 31.7% female), with the largest age ranges being 30-39 and 40-49 years. The majority of respondents were Muslim (94.4%), with the remainder non-Muslim. Government Regulation Number 7 of 2021 classifies respondents into micro-, small-, and medium-sized businesses based on their yearly turnover. Micro businesses constituted the largest group (84.6%), followed by small (14.9%) and medium-sized businesses (0.5%). The majority of respondents (73.3%) did not possess a halal certification, 19% said they did, and 7.7% said they were in the process of applying for one.

Table 1. Description of respondent

Variables	Category	Number	Persentage (%)
1. Gender	Men	133	68.2
	Women	62	31.7
2. Ages	18-29 y.o	28	14.4
	30-39 y.o	62	31.8
	40-49 y.o	60	30.8
	50-64 y.o	45	23.0
3. Religion	Buddhism	3	1.5
G	Moslem	184	94.4
	Catholicism	2	1.0
	Christianity	6	3.1
4. Yearly turnover	Micro-business	165	84.6
•	(turnover < IDR 1 Billion)		
	Small-business	29	14.9
	(IDR 1 Billion < turnover < IDR 5 Billion)		
	Medium-business	1	0.5
	(IDR 5 Billion < turnover < IDR 10 Billion)		
5. Halal certification status	Uncertified	143	73.3
	On process	15	7.7
	Certified	37	19.0

Source: Authors'own work

The content validity of the questionnaire was examined before distribution. According to Romero Jeldres et al. (2023), this validity guarantees that the entire instrument used satisfies the research objectives. Three categories—important, useful but not important, and not important—were used by the panelists to rate the variables. CVR formula (1) was then used to determine the items that needed to be evaluated. In formula (1), N is the number of panelists, and ne is the number of panelists who answered "important." Academics and professionals working in the halal industry comprised 12 expert panelists who participated in the content validity test. Whith ne as The CVR was then computed using the test results. Variable indicators PC₁, PC₂, SN₃, SN₄, SN₅, HA₅, PBC₃, PBC₅, OR₁, OR₄, and IAHC₂ which failed to reach the minimum CVR value, were eliminated. As the CVR value was less than 0.75, which is the bare minimum needed to satisfy content validity, these question items were eliminated (Romero Jeldres et al., 2023).

$$CVR = \frac{ne - \frac{N}{2}}{\frac{N}{2}} \tag{1}$$

The research model criteria were processed using SmartPLS, and the results are presented in Table 2. A valid search model is obtained by checking the load factor. The load factor is the value generated by each index used to measure the structure. As a result, if the loading factor value of the indicators assessed was less than 0.70, it was not suitable and eliminated. The loading factor is the value produced by each indicator to measure the construct. Indicators that did not meet the requirements were deleted to obtain an outer loading value that met the requirements. If the structure is measured by the decrease indicator, the external load value will also change because the value divider is distributed across all indicators. The value of the load factor provides a clear explanation of the latent structure (Hair et al., 2014).

Table 2. Convergence validity and construct reliability results

Variabel	Item	Cross Loadings	CR	Cronbach's Alpha	AVE	
Religious commitment	RC_1	0,841	0,948	0,932	0,786	
	RC_2	0,919				
	RC_3	0,878				
	RC_4	0,912				
	RC_5	0,881				
Halal awareness	HA_1	0,850	0,901	0,853	0,694	
	HA_2	0,863				
	HA_3	0,822				
	HA_4	0,796				
Organizational readiness	OR_2	0,876	0,856	0,664	0,748	
	OR_3	0,853				
Personal status/characteristics	PC_3	0,902	0,905	0,792	0,827	
	PC_4	0,917				
Perceived behavior control	PBC_1	0,907	0,876	0,720	0,780	
	PBC_2	0,858				
Halal certification obligation	HCO_2	0,843	0,862	0,712	0,635	
_	HCO_3	0,806				
	HCO_4	0,737				
Intentions to apply the halal	$IAHC_3$	0,749	0,839	0,785	0,609	
concept	$IAHC_4$	0,736				
-	$IAHC_5$	0,866				
	$IAHC_6$	0,763				
Subjective norms	SN_1	0,845	0,861	0,693	0,764	
	SN_2	0,901				
Attitude	AT_1	0,852	0,866	0,763	0,677	
	AT_2	0,872				
	AT_3	0,738				

Source: Authors'own work

The composite reliability value of all latent variables in the study shows a value > 0.7, and a value > 0.6 is allowed, so it can be said that all latent variables are reliable. Average variance extracted (AVE) was used to assess the convergent validity of each latent construct, and all latent constructs had an AVE value > 0.5, so that the convergent validity measure was good or met the convergent validity criteria. The ability of latent variables to differentiate themselves from other latent variables was demonstrated by discriminant validity (Hair et al., 2014). The correlation value between the variable and the variable itself cannot be less than the correlation value between the variable and other variables. This means that the indicators in the underlying latent variable are strongly and weakly correlated with other latent variables. This condition can be observed from the resulting cross-loading value of > 0.7, as presented in Table 3.

R² was divided into three categories, namely substantial at 0.67, moderate at 0.33, and weak at 0.19 (Chin, 1998), but Hair et al. (2014) suggested that the minimum R² value that was still met was 0.10. The results of data processing showed that the R² value for the endogenous variable attitude was 0.522, indicating that the variables of religious commitment, status or personal characteristics of leaders, and halal awareness explained 52.2% of the variation in attitude, and 47.8% was influenced by other variables. The R² value for the endogenous variable subjective norm was 0.344, indicating that the latent variable halal certificate obligation explains 34.4% of the variation in subjective norms, and 65.6% is explained by other variables not included in this research. Meanwhile, the R² value of the endogenous variable perceived behavioral control was 0.238; therefore, organizational readiness explained 23.8% of the variation in perceived behavioral control, and 76.2% was explained by other variables outside the research. The R² value of the endogenous variable, the meatball partner's intention to apply the halal concept, was 0.566, meaning that the exogenous variables of halal awareness, personal characteristics, religious commitment, attitudes, halal obligations, subjective norms, organizational readiness, and perceived behavioral control explained 56.6% of the variation in the partner's intention. Applying the halal concept, 43.4% were explained by other variables not yet mentioned. From this value, it can be concluded that this study was substantial in accordance with the accepted criteria.

Table 3. Discriminant validity (Fornell-Larcker criterion)

Constructs	RC	НА	OR	PC	PBC	НСО	IAHC	SN	AT
Religious commitment (RC)	0.887								
Halal awareness (HA)	0.791	0.833							
Organizational readiness (OR)	0.368	0.364	0.865						
Personal status/characteristics (PC)	0.505	0.502	0.196	0.910					
Perceived behavior control (PBC)	0.344	0.400	0.488	0.255	0.883				
Halal certification obligation(HCO)	0.322	0.341	0.453	0.366	0.305	0.797			
Gofood's meatball marchant	0.439	0.475	0.573	0.361	0.444	0.644	0.780		
Intentions to apply the halal									
concept (IAHC)									
Subjective norms (SN)	0.148	0.160	0.238	0.349	0.211	0.587	0.378	0.874	
Attitude (AT)	0.695	0.656	0.237	0460	0.282	0.380	0.415	0.235	0.823

Source: Authors'own work

Table 4. Fit summary

	Saturated model	Estimated model
SRMR	0.079	0.090
d_ULS	2.383	3.092
d_G	1.088	1.127
Chi-square	1215.351	1242.277
NĤ	0.654	0.646

Source: Authors'own work

The data analysis results are presented in Table 4. The fit summary shows that the structural equation model was fit with a Standardized Root Mean Residual (SRMR) value of 0.079. The

estimated model (0.090) is slightly above 0.08 (Hu & Bentler, 1998) but still within acceptable limits. The model fit was adequate, although not optimal. Henseler et al. (2015) introduced SRMR as a goodness-of-fit measure for PLS-SEM that can be used to avoid model misspecification. These values were compared using bootstrap confidence intervals. From the table, the saturated model is 2.383, and is estimated to be 3.092. When the d_ULS value derived from the model falls below the upper limit of its bootstrap CI, it indicates satisfactory model fit. Given that only raw figures are presented, a complete assessment remains unfeasible. Similar to d_ULS, d_Geodesic Distances) is acceptable within the bootstrap CI. The estimated model shows a very small increase, suggesting minimal distortion and an overall good model quality. However, smaller values indicated a superior fit. In this instance, the predicted model exhibits a slightly inferior fit, but is still within acceptable limits. A lower chi-square indicates a better fit (Bentler & Bonett, 1980); however, in PLS-SEM, this metric is not heavily emphasized and usually increases with sample size and complexity. The small increase indicates that the estimated model fits slightly worse, but this is not critical for the PLS-SEM evaluation. An NFI of ~0.65 indicates a moderate fit, is typical for complex PLS-SEM models. Therefore, this model is acceptable but not strong. The estimated model demonstrates acceptable, though not perfect, fit and can be considered adequate for the interpretation of structural relationships.

Table 5. Hypotheses test

Hypothesis	Relationships	Path coefficient	T statistics	P values	Supported
H ₅	RC → IAHC	0.012	0.125	0.901	No
H_4	$RC \rightarrow AT$	0.438	4.621	0.000*	Yes
H_9	HA → IAHC	0.135	1.532	0.126	No
H_8	$HA \rightarrow AT$	0.253	2.737	0.006*	Yes
H_{12}	$OR \rightarrow PBC$	0.488	4.452	0.000*	Yes
H_{13}	OR → IAHC	0.262	2.500	0.013*	Yes
H_7	$PC \rightarrow IAHC$	0.032	0.315	0.753	No
H_6	$PC \rightarrow AT$	0.111	1.334	0.183	No
H_3	PBC → IAHC	0.109	1.347	0.179	No
H_{11}	HCO → IAHC	0.405	3.867	0.000*	Yes
H_{10}	HCO → SN	0.587	6.966	0.000*	Yes
H_2	$SN \rightarrow IAHC$	0.007	0.073	0.942	No
H_1	$AT \rightarrow IAHC$	0.056	0.503	0.615	No

Notes: The results of the direct influence of exogenous constructs on endogenous constructs used t-count values (t-statistics) > t-table and a significance level of 5% (0.05); therefore, Ho was supported if the P-value was less than 0.05

Source: Authors'own work

Table 5 presents the research hypotheses. The results indicate that religious commitment (RC) has a positive and significant effect on attitude (AT) (H₄); however, religious commitment (RC) does not affect the intention of meatball partners to implement the halal concept (IAHC) (H₅). Halal Awareness (HA) has a positive and significant effect on attitude (AT) (H₈); however, Halal Awareness (HA) does not affect the intention of meatball partners to implement the halal concept (IAHC) (H₉). Personal Characteristics (PC) do not affect attitude (AT) (H₆) and Personal Characteristics (PC) do not affect the intention of meatball partners to implement the halal concept (IAHC) (H₇). Organizational Readiness (OR) has a positive and significant effect on Perceived Behavioral Control (PBC) (H₁₂), and Organizational Readiness (OR) has a positive and significant effect on the intention of meatball partners to implement the halal concept (IAHC) (H₁₃). Perceived Behavioral Control (PBC) does not affect the intention of meatball partners to implement the halal concept (IAHC) (H₃). Subjective Norms (SN) do not affect the intention of meatball partners to implement the halal concept (IAHC) (H₂), and Attitude (AT) does not affect the intention of meatball partners to implement to implement the halal concept (IAHC) (H₁). The obligation of the Halal Certificate (HCO) has a positive and significant effect on Subjective Norms (SN) (H₁₀) and the

obligation of the Halal Certificate (HCO) has a positive and significant effect on the intention of meatball partners to implement the halal concept (IAHC) (H₁₁).

Discussion

The findings clarify that attitude (AT) is positively and significantly impacted by religious commitment (RC). Naturally, committing to a religious lifestyle entails abiding by laws and regulations that influence attitudes and actions in day-to-day interactions. Koc et al. (2024) found that religion has a positive effect on attitudes toward choosing halal products, and Setyawati et al. (2020) found that religion plays an important role in implementing halal practices in MSMEs and green marketing. However, this study discovered that meatball partners' intention to apply the halal concept (IAHC) was unaffected by Religious Commitment (RC). This result was also consistent with studies that found that religious commitment did not affect the intention to use halal vaccines (Sudarsono et al., 2023) or purchase of halal products (Fauzi, 2023). Religion has no bearing on performance intent because other contexts, such as administrative, physical, and financial readiness, affect willingness to perform (Ikawati & Rahman, 2022).

Halal awareness (HA) has a positive and significant effect on attitudes (AT). According to earlier studies on halal perception, MSMEs' perceptions of halal logistics (Izzati Ab Ghani et al., 2020) and halal supply chains (Jannah & Al-Banna, 2021). Exhibitions, training, and the halal certification process increased the amount of information city dwellers were exposed to regarding the implementation of halal (Bahrudin et al., 2024). However, because they have trouble fulfilling current requirements, they have not yet been applied for halal certification. The implementation of the halal concept is delayed by producers who, despite being aware of the concept, are not yet prepared to fulfill other responsibilities, such as providing production areas that comply with halal requirements and administration (Ikawati & Rahman, 2022). Economic incentives to earn money and satisfy customers drive non-Muslim producers' awareness of halal (Azam & Abdullah, 2020). In Indonesia, where the majority of the population is Muslim, halal awareness, particularly among Muslim producers, has not yet resulted in consumer demand or economic competition, because they continue to operate under the assumption that their businesses will continue to operate with problem-free customers in the absence of halal certification (Silalahi et al., 2021).

Personal characteristics (PC) did not affect attitude (AT), nor did they affect the intention to embrace the halal meatball partner's concept. This outcome is supported by Oemar et al. (2023), who found that the intention to run a halal restaurant is unaffected by attitude. The decision-making personality of the leader is a personal characteristic evoked by this study. Age, educational attainment, leadership style, and drive to manage the company were among the individual traits discussed. As they serve as mentors, listen to and recognize differences in opinion, and engage directly with their staff, these leadership traits will have an impact on organizational orientation (Palmucci et al., 2025). Social entity factors, familiarity with innovation, social characteristics, social networks, and personality all have an impact on the personal traits that entrepreneurs possess and have a positive impact on the development of their businesses (Nguyen et al., 2021).

Organizational readiness (OR) has a positive and significant impact on perceived behavioral control (PBC). The desire to adopt Organizational Readiness (OR) had a positive and significant impact on the concept of a halal meatball partner. One of the difficulties faced by manufacturers was preparing for changes, such as the administrative order, when implementing the halal concept (Ikawati & Rahman, 2022). Adjusting production facilities is also considered in fulfilling halal requirements because it requires financing to adjust (Silalahi et al., 2021). A company's size also influences its readiness to implement new concepts. According to Kraus et al. (2020), large organizations find it easier to develop their resources and adjust to changes in the business world, whereas small businesses rely on direct collaboration to respond to Indonesia's mandatory halal certification. Large corporations have already earned halal certification, and the MSMEs they support receive funding for halal certification through Corporate Social Responsibility (CSR) initiatives. Growth through network collaboration is a purposeful business strategy; therefore, even though smaller businesses are typically older, this does not necessarily translate into poorer business performance (Haneberg, 2021).

Perceived behavioral control (PBC) did not affect the intention to perform the halal concept (IAHC) of meatball partners. This is in contrast to earlier consumer-side research (Handriana et al., 2020) which found that purchase intention and decisions were significantly influenced by perceived behavioral control. Several factors, such as organizational, technological, and environmental preparedness, affect producers' mortgage financing (PBC) (Ghani et al., 2020). Government support also affects perceptions of how easy or difficult it is to integrate PBC into business processes (Silalahi et al., 2021). As there were no sanctions from stakeholders to support the implementation of the halal concept, PBC had no discernible impact on its implementation in this study. Owing to insufficient facilities and administrative requirements, the production concept and business process are still the same.

Subjective norm (SN) did not affect the intention to adopt the halal concept (IAHC) of the meatball partner, and attitude (AT) did not affect the intention to adopt the halal concept (IAHC). Organizational capacity has not been able to alter it at the level of implementing the concept, despite the fact that they already possess knowledge and awareness of its implementation. When it comes to incorporating the concept of halal into the business process, the producer's internal motivation is crucial (Bachtiar et al., 2024). The conclusion that attitude has no bearing is also in line with earlier studies, which found that MSMEs' motivation to start halal businesses is unaffected by risky attitudes. This attitude is crucial for halal certification. This is especially true for business actors, who already possess a high level of halal knowledge and awareness (Silalahi et al., 2021). The implementation of halal obligations in Indonesian society has many advantages and disadvantages. Its implementation has been sanctioned because it requires funding for both administrative and halal requirements (Priantina et al. 2023).

Halal Certification Obligation (HCO) had a positive and significant impact on Subjective Norms (SN) and Halal Certification Obligation (HCO) has a positive and significant impact on the intention to implement the halal concept of meatball partners. The government and affiliated organizations provide extensive information on the requirements for halal certification. Therefore, to create a mutually supportive environment, society needs to develop a positive social network. Government support has a positive impact on MSMEs' growing motivation to become halal entrepreneurs, in line with earlier research (Fianto et al., 2025). The idea of upgrading MSMEs, which is an attempt by business communities to increase turnover, profile, income, and business classification through sustainable businesses, is also in line with this halal certification application (Fathoni et al., 2024).

Conclusion

This study reveals that internal religious and awareness-based factors shape attitudes toward the halal concept, but these attitudes do not translate into intentions among meatball partners. Religious commitment (RC) and halal awareness (HA) significantly strengthened positive attitudes (AT), confirming earlier research that religion and awareness enhance perceptions related to halal practices. However, these internal dispositions do not influence the intention to implement the halal concept (IAHC). This suggests that although meatball partners value the idea of halal compliance, their willingness to act is constrained by contextual limitations, such as administrative demands, facility readiness, and financial constraints, as indicated in previous studies.

Personal characteristics (PC) neither shape attitude nor intention, indicating that individual traits, such as age, education, or leadership style, do not play a central role in the decision to adopt halal practices. Instead, organizational and structural factors appear to be far more influential. Organizational readiness (OR) emerged as one of the strongest predictors in the model. OR significantly enhances perceived behavioral control (PBC) and directly strengthens intention, highlighting that businesses are more likely to act when they possess adequate resources, preparation, and operational capacity. Nevertheless, PBC itself does not affect intention, which suggests that even if partners perceive some level of control, intention will not materialize without tangible organizational support and clarity from external authorities.

Furthermore, neither subjective norms (SN) nor attitude (AT) influences intention, reflecting that social pressure and personal evaluations alone are insufficient motivators for halal

adoption within this context. Instead, Halal Certification Obligation (HCO) plays a critical role: it significantly strengthens both subjective norms and intentions. This demonstrates that regulatory pressures, institutional requirements, and governmental directives are more effective drivers of compliance than are personal or social motivations. The strong effect of the HCO also indicates that formal obligations accompanied by adequate communication and institutional support can encourage MSMEs to move toward halal implementation. The study found that the intention to implement the halal concept is shaped more by external structural pressures and organizational readiness than by internal attitudes, religious values, or personal characteristics.

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References

- Ab Talib, M. S. (2017). Motivations and benefits of halal food safety certification. *Journal of Islamic Marketing*, 8(4), 605–624. https://doi.org/10.1108/JIMA-08-2015-0063
- Abid, A., & Jie, S. (2023). Understanding farmers' decision-making to use Islamic finance through the lens of theory of planned behavior. *Journal of Islamic Marketing*, 14(4), 1084–1106. https://doi.org/10.1108/JIMA-10-2020-0324
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Ajzen, I. (2012). The theory of planned behavior. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology: Volume 1* (pp. 438–459). SAGE Publications Ltd. https://doi.org/10.4135/9781446249215.n22
- Anwar, A., & Bin Sarip, M. M. (2024). SME support for halal industry and sharia economy in Indonesia: SWOT analysis. *Asian Journal of Islamic Management*, 6(1), 35–49. https://doi.org/10.20885/ajim.vol6.iss1.art4
- Aslan, H. (2023). The influence of halal awareness, halal certificate, subjective norms, perceived behavioral control, attitude and trust on purchase intention of culinary products among Muslim customers in Turkey. *International Journal of Gastronomy and Food Science, 32*, 100726. https://doi.org/10.1016/j.ijgfs.2023.100726
- Azam, M. S. E., & Abdullah, M. A. (2020). Global halal industry: Realities and opportunities. International Journal of Islamic Business Ethics, 5(1), 47–59.

- https://doi.org/10.30659/ijibe.5.1.47-59
- Aziz, I. (2023). Where do we go from here? Halal food regulation and monitoring. UCLA Journal of Islamic and Near Eastern Law, 20(1), 179–214. https://doi.org/10.5070/n420160506
- Bachtiar, W. F., Masruroh, N. A., Asih, A. M. S., & Sari, D. P. (2024). Halal food sustainable traceability framework for the meat processing industry. *Journal of Islamic Marketing*, 15(11), 2759–2784. https://doi.org/10.1108/JIMA-12-2023-0412
- Bahrudin, M., Iqbal, M., Saefurrohman, G. U., & Walsh, J. (2024). Halal food industry: Reinforcing the Halal Product Assurance Organizing Body (BPJPH) in the development among urban Muslim community in Indonesia. *Akademika: Jurnal Pemikiran Islam, 29*(1), 61–78. https://doi.org/10.32332/akademika.v29i1.9039
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. Psychological Bulletin, 88(3), 588–606. https://doi.org/10.1037/0033-2909.88.3.588
- Billah, A., Rahman, M. A., & Hossain, M. T. B. (2020). Factors influencing Muslim and non-Muslim consumers' consumption behavior: A case study on halal food. *Journal of Foodservice Business Research*, 23(4), 324–349. https://doi.org/10.1080/15378020.2020.1768040
- Botetzagias, I., Grigoraki, E., & Kokkoris, G. D. (2024). Using the theory of planned behavior for explaining mobile phone recycling: The role of subjective norms. *Sustainability*, 16(20), 8773. https://doi.org/10.3390/su16208773
- Breja, S. K. (2022). Creating competitive edge-looking beyond competition. *Management Dynamics*, 7(1), 17–31. https://doi.org/10.57198/2583-4932.1197
- Ceniti, C., Tilocca, B., Britti, D., Santoro, A., & Costanzo, N. (2021). Food safety concerns in "COVID-19 era." *Microbiology* Research, 12(1), 53–68. https://doi.org/10.3390/microbiolres12010006
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Lawrence Erlbaum Associates. https://doi.org/10.4324/9781410604385
- Conner, M., & Norman, P. (2022). Understanding the intention-behavior gap: The role of intention strength. *Frontiers in Psychology, 13*, 923464. https://doi.org/10.3389/fpsyg.2022.923464
- Darmalaksana, W. (2023). How is the halal certification policy implemented? Perspective analysis of small and medium enterprises (SMEs) in Indonesia. *Journal of Islamic Accounting and Business Research*. Advance online publication. https://doi.org/10.1108/JIABR-12-2022-0342
- Elias, E. M., Mahidin, N., & Bahaudin, A. Y. (2019). The influence of religiosity leadership practices towards the SMEs business performance in food and beverages industry. *International Journal of Supply Chain Management*, 8(4), 1082–1088. https://doi.org/10.59160/ijscm.v8i4.3568
- Fathoni, M. A., Faizi, F., Suprima, S., Wiryanto, F. S., & Suryani, S. (2024). Exploring halal certification literacy measurement for micro small enterprises (MSEs). *Review of Islamic Economics and Finance Journal*, 7(2), 1–14. https://doi.org/10.17509/rief.v7i2.73607
- Fattah, F. A., Muflih, B. K., & Jamaludin, M. A. (2025). Assessing MSME preparedness for compulsory halal certification: A case study of Bogor Regency, Indonesia. Amorti: Jurnal Studi Islam Interdisipliner, 2(2), 43–51. https://doi.org/10.59944/amorti.v3i2.296
- Fauzi, M. A. (2023). Consumer purchase of halal certified product: A quantitative systematic literature review. *Journal of Islamic Marketing*, 14(6), 1397–1416. https://doi.org/10.1108/JIMA-09-2021-0299
- Fianto, B. A., Fauzi, F. P., Suprayogi, N., Filianti, D., Gan, C., & Anisha, A. I. I. N. (2025). Factors

- influencing behavior intention to obtain halal certificate: Study on MSMEs in Indonesia and Malaysia. *Journal of Islamic Marketing*. https://doi.org/10.1108/jima-09-2024-0446
- Giyanti, I., Indrasari, A., Sutopo, W., & Liquiddanu, E. (2021). Halal standard implementation in food manufacturing SMEs: Its drivers and impact on performance. *Journal of Islamic Marketing*, 12(8), 1577–1602. https://doi.org/10.1108/JIMA-11-2019-0243
- Government of The Republic of Indonesia. (2014). Law No. 33 of 2014 concerning Guarantees for Halal Products. https://www.peraturan.go.id/id/uu-no-33-tahun-2014
- Hagger, M. (2019). The reasoned action approach and the theories of reasoned action and planned behavior. https://doi.org/10.31234/OSF.IO/6USZK
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128
- Haleem, A., Khan, M. I., & Khan, S. (2021). Understanding the adoption of halal logistics through critical success factors and stakeholder objectives. *Logistics*, 5(2), 36. https://doi.org/10.3390/logistics5020038
- Handriana, T., Yulianti, P., Kurniawati, M., Arina, N. A., Aisyah, R. A., Ayu Aryani, M. G., & Wandira, R. K. (2020). Purchase behavior of millennial female generation on halal cosmetic products. *Journal of Islamic Marketing*, 12(7), 1295–1315. https://doi.org/10.1108/JIMA-11-2019-0235
- Haneberg, D. H. (2021). How combinations of network participation, firm age and firm size explain SMEs' responses to COVID-19. *Small Enterprise Research*, 28(3), 229–246. https://doi.org/10.1080/13215906.2021.1989626
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Hidayat, S. E., Rafiki, A., & Nasution, M. D. T. P. (2021). Halal industry's response to a current and post-COVID-19 landscape and lessons from the past. *Journal of Islamic Marketing*, 13(9), 1843–1857. https://doi.org/10.1108/JIMA-06-2020-0180
- Hill, R. (1998). What sample size is "enough" in internet survey research? *Interpersonal Computing and Technology Journal*, 6(3–4), 1–10. https://api.semanticscholar.org/CorpusID:168474117
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424–453. https://psycnet.apa.org/fulltext/1998-11538-003.html
- Ikawati, R., Erwanto, Y., & Purnomo, B. R. (2024). Are online meatball restaurants in Indonesia committed to their declared halal label? *Veterinary World*, 17(4), 778–784. https://doi.org/10.14202/vetworld.2024.778-784
- Ikawati, R., & Rahman, A. N. B. (2022). Awareness and willingness to apply for halal guarantee certification: A study of MSMEs assisted by BAZNAS Yogyakarta. *Journal of Halal Science and Research*, 3(2), 70–78. https://doi.org/10.12928/jhsr.v3i2.6870
- Izzati Ab Ghani, N., Karim, F., & Muhammad, N. (2020). The dynamic of technology, organization and environment model in the halal certification adoption study: A conceptual paper. *International Journal of Asian Social Science*, 10(5), 223–231. https://doi.org/10.18488/journal.1.2020.105.223.231
- Jaenal Effendi, J. (2023). Human resources readiness of small medium enterprises (SMEs) for halal product in Indonesia. *Global Review of Islamic Economics and Business*, 10(2), 83–95. https://doi.org/10.14421/grieb.2022.102-08

- Jannah, S. M., & Al-Banna, H. (2021). Halal awareness and halal traceability: Muslim consumers' and entrepreneurs' perspectives. *Journal of Islamic Monetary Economics and Finance*, 7(2), 285–316. https://doi.org/10.21098/jimf.v7i2.1328
- Jaswir, I., Sari, D. P., Haji Che Daud, M. R. bin, & Sukmana, R. (2023). Motives for participation in halal food standard implementation: An empirical study in Malaysian halal food industry. *International Journal of Islamic and Middle Eastern Finance and Management, 16*(5), 928–954. https://doi.org/10.1108/IMEFM-07-2021-0264
- Kamiliyah, N., Rahmawati, L., & Abida, N. L. (2024). Dynamics of the halal industry in Indonesia: Analysis of demand aspects. *PROFJES: Profetik Jurnal Ekonomi Syariah*, *3*(1), 60–73. https://doi.org/10.24952/profjes.v3i1.11378
- Karudin, K. M., Shaharudin, M. R., Zainoddin, A. I., & Khan, M. S. (2025). Halal manufacturers as orchestrators in halal logistics: Implications for organizational performance in Malaysia. *Management & Sustainability: An Arab Review.* Advance online publication. https://doi.org/10.1108/MSAR-09-2024-0147
- Koc, F., Ozkan, B., Komodromos, M., Efendioglu, I. H., & Baran, T. (2024). The effects of trust and religiosity on halal products purchase intention: Indirect effect of attitude. *EuroMed Journal of Business*, 20(5), 141–165. https://doi.org/10.1108/EMJB-01-2024-0004
- Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A., & Tiberius, V. (2020). The economics of COVID-19: Initial empirical evidence on how family firms in five European countries cope with the corona crisis. *International Journal of Entrepreneurial Behaviour and Research*, 26(5), 1067–1092. https://doi.org/10.1108/IJEBR-04-2020-0214
- Kurniawan, D., Tambunan, D. B., & Dewi, G. C. (2024). Relationships among crisis leadership, innovation capability, implementation of business continuity management, and sustainable performance in the Covid-19 pandemic. *The South East Asian Journal of Management, 18*(1), 130–155. https://doi.org/10.21002/seam.v18i1.1457
- Md Nawi, N. H., Megat Ahmad, P. H., Ibrahim, H., & Mohd Suki, N. (2023). Firms' commitment to halal standard practices in the food sector: Impact of knowledge and attitude. *Journal of Islamic Marketing*, 14(5), 1260–1275. https://doi.org/10.1108/JIMA-10-2021-0333
- Mohamad Rasdi, N. F. B., Khalid, F. D. B., Kueh, J. S. H., Janang, J. S., & Abdullah, M. A. B. (2023). Factors that influence consumer's attitudes and decision-making in shopping for halal food. *International Journal of Academic Research in Business and Social Sciences*, 13(5), 2573–2586. https://doi.org/10.6007/IJARBSS/v13-i5/15834
- Nguyen, P. V., Huynh, H. T. N., Lam, L. N. H., Le, T. B., & Nguyen, N. H. X. (2021). The impact of entrepreneurial leadership on SMEs' performance: The mediating effects of organizational factors. *Heliyon*, 7(6), e07326. https://doi.org/10.1016/j.heliyon.2021.e07326
- Nizar, N., & Triyawan, A. (2020). Systematic review of halal studies adopting theory of planned behaviour. TIFBR: Tazkia Islamic Finance and Business Review, 14(2), 181–195. https://doi.org/10.30993/tifbr.v14i2.225
- Oemar, H., Prasetyaningsih, E., Bakar, S. Z. A., Djamaludin, D., & Septiani, A. (2023). Awareness and intention to register halal certification of micro and small-scale food enterprises. F1000Research, 11, 170. https://doi.org/10.12688/f1000research.75968.3
- Othman, B., & Md Nawi, N. H. (2025). Halal standards practices in the food industry: The impact of halal assurance and operations. *Journal of Islamic Marketing*, 16(5), 1469–1492. https://doi.org/10.1108/JIMA-02-2023-0051
- Palmucci, D. N., Giovando, G., & Vincurova, Z. (2025). The post-Covid era: Digital leadership, organizational performance and employee motivation. *Management Decision*, 63(7), 2452–2485. https://doi.org/10.1108/MD-04-2024-0865

- Pauzi, N., Razali, A., Man, S., Syed Jaafar, S. M. J., & Jamaludin, M. H. (2025). Influence of customer intention on patronizing halal logo in the food premises of Malaysia. *Journal of Islamic Marketing*, 16(2), 484–501. https://doi.org/10.1108/JIMA-05-2023-0158
- Priantina, A., Indra, I., Zaerofi, A., & Mughni, A. (2023). Analysis of the factors that influence the perceptions of culinary business owners regarding intention to register for halal certificates. *Perisai: Islamic Banking and Finance Journal, 7*(2), 143–176. https://doi.org/10.21070/perisai.v7i2.1663
- Purwadi, I. K. B., & Sardjono, W. (2024). Developing strategies to improve organizational readiness for knowledge management system implementation. *Journal of System and Management Sciences*, 14(2), 372–384. https://doi.org/10.33168/JSMS.2024.0223
- Rahmawaty, P., & Wibowo, A. (2025). Certification in halal food purchases by Indonesian Muslim youth. *Jurnal Ilmiah Manajemen Kesatuan*, 13(5), 3627–3638. https://doi.org/10.37641/jimkes.v13i5.3587
- Rakshit, S., Islam, N., Mondal, S., & Paul, T. (2021). Mobile apps for SME business sustainability during Covid-19 and onwards. *Journal of Business Research*, 135, 28–39. https://doi.org/10.1016/j.jbusres.2021.06.005
- Razak, S., Syahabuddin, S., & Raking, J. (2025). Assessing social impact in halal business practices: A maslahah-oriented framework for sustainable development. *Journal of Islamic Marketing*. Advance online publication. https://doi.org/10.1108/jima-10-2024-0450
- Riegel, U., Engel, D., Penthin, M., & Pirner, M. L. (2024). Measuring Muslim lifestyle using a halal scale. *Religions*, 15(11), 1346. https://doi.org/10.3390/rel15111346
- Romero Jeldres, M., Díaz Costa, E., & Faouzi Nadim, T. (2023). A review of Lawshe's method for calculating content validity in the social sciences. *Frontiers in Education*, 8, 1271335. https://doi.org/10.3389/feduc.2023.1271335
- Roscoe, D. F. (1975). New methods for the derivation of stable difference representations for differential equations. *IMA Journal of Applied Mathematics*, 16(3), 291–301. https://doi.org/https://doi.org/10.1093/imamat/16.3.291
- Salmah, S., & Shikur, A. A. (2023). The relationship of attitude, perceived behavioral control, subjective norm on halal food purchasing behavior on Indonesian Muslim millennials. *Ekonomi Islam Indonesia*, 5(1), 1–15. https://doi.org/10.58968/eii.v5i1.258
- Sanu, M. S., & Anjum, S. (2023). Constraints to the development of MSMEs in Assam, India: Do owner-managers' background characteristics and firm-specific characteristics matter? *Journal of Economic and Administrative Sciences, 39*(4), 1277–1301. https://doi.org/10.1108/JEAS-08-2021-0159
- Septiani, D., & Ridlwan, A. A. (2022). The effects of halal certification and halal awareness on purchase intention of halal food products in Indonesia. *Indonesian Journal of Halal Research*, 2(2020), 55–60. https://doi.org/10.5575/ijhar.v2i2.6657
- Setyawati, H. A., Suroso, A., Adi, P. H., & Helmy, I. (2020). Linking green marketing strategy, religiosity, and firm performance: Evidence from Indonesian SMEs. *Management Science Letters*, 10(11), 2617–2624. https://doi.org/10.5267/j.msl.2020.3.031
- Silalahi, S. A. F., Fachrurazi, F., & Fahham, A. M. (2021). Factors affecting intention to adopt halal practices: Case study of Indonesian small and medium enterprises. *Journal of Islamic Marketing*, 13(6), 1244–1263. https://doi.org/10.1108/JIMA-05-2020-0152
- Sudarsono, H., Ikawati, R., Kurnia, A., Azizah, S. N., & Kholid, M. N. (2023). Effects of religiosity, halal knowledge and halal certification on the intention of Muslims to use the halal vaccine during Covid-19 pandemic. *Journal of Islamic Marketing*, 14(11), 2854–2874. https://doi.org/10.1108/JIMA-06-2021-0179

- Suhartanto, D., Dean, D., Sarah, I. S., Hapsari, R., Amalia, F. A., & Suhaeni, T. (2020). Does religiosity matter for customer loyalty? Evidence from halal cosmetics. *Journal of Islamic Marketing*, 12(8), 1521–1534. https://doi.org/10.1108/JIMA-03-2020-0069
- Tuhuteru, A. D., & Iqbal, M. (2024). Readiness of Micro, Small, And Medium Enterprises (MSMEs) in the food and beverage sector for halal certification implementation: A case study in Magelang, *Indonesia. Journal of Islamic Economics Lariba*, 10(2), 1091–1114. https://doi.org/10.20885/jielariba.vol10.iss2.art24
- Wahyuni, H. C., Masudin, I., Wulandri, T., & Voak, T. (2024). Analysis of interplay between food safety systems and halal standards in Indonesia. *International Food Research Journal*, 31(2), 306–319. https://doi.org/10.47836/ifrj.31.2.03
- Yang, M., Jaafar, N., Yeng, S. K., & Mamun, A. A. (2022). Modelling the significance of global mind-set and halal brand trust to determine the performance of halal SMEs. *International Journal of Business and Society*, 23(2), 987–1004. https://doi.org/10.33736/IJBS.4854.2022
- Yaumidin, U. K., Yuliana, C. I., Soesilowati, E. S., Hidayatina, A., Mulyaningsih, Y., Bakti, I. G. M. Y., Oelviani, R., Adiyoga, W., Purwanto, P., Sihombing, Y., & Malik, F. (2025). The moderating effect of halal certification awareness on farmers' behaviour for halal rice: An extended theory of planned behaviour. *Journal of Islamic Marketing*, 16(6), 1720–1741. https://doi.org/10.1108/JIMA-07-2024-0281
- Yener, D. (2022). The effects of halal certification and product features on consumer behavior: A scenario-based experiment. *International Journal of Management Studies*, 29(2), 101–136. https://doi.org/10.32890/ijms2022.29.2.5
- Zakia, N., Suhartanto, D., & Kania, R. (2020). Factors forming trust in purchasing halal food through online food delivery. *Prosiding The 11th Industrial Research Workshop and National Seminar*, 1186–1191. https://doi.org/10.35313/irwns.v11i1.2182
- Zuhri, S., Ilyas, I., Erwan, E., Syahputra, R. A., Sentia, P. D., & Noprita, Z. (2023). Structural equation modeling analysis of purchase behavior of halal products. *Indonesian Journal of Halal Research*, *5*(1), 12–20. https://doi.org/10.15575/ijhar.v5i1.20170