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Reluctance Of Micro And Small Enterprises Toward Halal Certification: Evidence From The Food And Beverage Sector In Bone Regency, Indonesia

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Abstract
Halal certification is often perceived as a sectoral and fragmented issue, leading micro and small enterprises (MSEs) to hesitate in pursuing certification due to low literacy, the perception that the issue is more commercial than religious, and the limited dissemination of regulatory information. This study examines the reluctance of micro and small enterprises in Indonesia's food and beverage sector to obtain halal certification, using an integrated framework that combines the Theory of Planned Behavior (TPB), Mayer's Trust Model (TMM), and Reluctance Theory. The data analysis shows that distrust does not significantly affect certification reluctance, challenging previous assumptions that trust is a primary determinant. In contrast, weak behavioral intention and low literacy emerge as more influential factors. Furthermore, literacy significantly moderates the relationship between weak intention and reluctance, but not between distrust and reluctance. These findings highlight that practical barriers such as limited knowledge, procedural complexity, and lack of capability are more dominant than attitudinal distrust. This study provides new insights for policymakers and certification bodies to prioritize educational and procedural support rather than focusing solely on trust-related issues.

Keywords: *Halal Certification, Micro And Small Enterprises, Behavioral Reluctance, TPB, Mayer's Trust Model, Literacy, Intention, Indonesia, Food and Beverage Sector*

1. INTRODUCTION

Halal certification and the related discourse are often perceived as sectoral and partial, leading micro, small, and medium enterprises (MSMEs) to be reluctant to certify their products. This reluctance can be explained through three key aspects: (1) low levels of halal literacy, (2) the perception that halal certification is not a religious issue but a business and market concern, and (3) insufficient dissemination of halal certification regulations. The first aspect, low halal literacy, is supported by Masyhuri and Arie Risdiyanti, who state that public understanding, particularly among business actors, of halal product assurance regulations remains limited, which contributes to their low willingness to pursue halal certification for their products. (Masyhuri & Risdiyanti, 2022) This is supported by data released by BPJPH, which shows that only 408,960 micro enterprises (0.65%), 9,439 small enterprises (1.20%), and 2,881 medium enterprises (4.75%) have obtained halal certification. (Kholid Hazmi, 2023)

The second aspect is that halal certification is no longer a religious issue but has become a business and market concern. In practice, obtaining halal certification is often claimed to be sectoral and religion-related; however, it is driven primarily by business interests aimed at expanding market reach and building partnerships.(Sujibto & Fakhruddin, 2023) The third aspect that can be highlighted is the regulation that has not been maximally socialized, as Dewiangraeni et al. stated that the main weakness of the halal labeling and certification program is the lack of socialization regarding halal certification rules, both from the government, society, and specifically its intended use for business actors. (Dewianggraeni et al., 2020) This means that from the aspect of socialization regulation, it is still uneven and has not been fully implemented. Therefore, these three aspects above contribute to the reluctance of Micro, Small, and Medium Enterprises (MSMEs) to obtain halal certification. Indonesia has a Muslim population of more than 207 million people (87.2% of the total population), with a considerable halal market potential. (Wordometer, 2024) Bone Regency in South Sulawesi, with a population of around 830,120 people, of which 98% are Muslim, has more than 60,000 MSME units.(Noval Kurniawan, 2023) The food and

beverage sector dominates with 1,956 business units, consisting of 1,892 micro enterprises and 64 small enterprises. (Bidang UMKM, n.d.) However, the low level of halal certification among MSMEs in this region indicates the presence of barriers that need to be addressed.

This research uses various theories to understand MSMEs' reluctance toward halal certification, including the Theory of Planned Behavior (TPB), Trust Mayer's Model (TMM), and Theory of Reluctance. TPB explains that individual behavior is influenced by attitude, subjective norms, and perceived behavioral control (Ajzen, 2020). Meanwhile, TMM focuses on trust factors, which include ability, benevolence, and integrity (Roger C Mayer, 1995). In the context of reluctance, this research also refers to Prospect Theory, Status Quo Bias, and Endowment Effect to analyze how MSME actors tend to maintain the status quo and avoid change.

Third, the Theory of Reluctance, which encompasses Prospect Theory, Status Quo Bias, and the Endowment Effect, provides a behavioral perspective on decision making resistance. Prospect Theory, developed by Daniel Kahneman and Amos Tversky in 1979, examines how individuals make decisions under risk by evaluating gains and losses asymmetrically. The theory suggests that people tend to perceive losses more intensely than equivalent gains, which often leads to risk averse behavior and hesitation toward change (Kahneman & Tversky, 1986). Next, Status Quo Bias, introduced by William Samuelson and Richard Zeckhauser in 1988, explains the emotional tendency of individuals to maintain existing decisions or avoid change. This bias reflects a preference for the current state of affairs, even when alternative options may offer greater benefits or efficiency, (Kahneman et al., 1991) and 3) The Endowment Effect, introduced by Richard Thaler in the 1980s, refers to the psychological phenomenon in which individuals assign greater value to objects they own compared to identical objects they do not possess. This cognitive bias contributes to resistance to change, as business owners may overvalue their current practices or assets and thus hesitate to adopt new approaches, such as halal certification (Kahneman et al., 1991). The three theories Prospect Theory, Status Quo Bias, and the Endowment Effect are crucial in examining reluctance, as they reveal how individuals tend to avoid risk and resist change.

Previous studies have primarily highlighted aspects of halal awareness, halal certification regulations, and halal literacy, without explicitly addressing the reluctance of Micro, Small, and Medium Enterprises (MSMEs) to obtain certification. First, research on public halal awareness has been conducted by, among others (Aziz & Chok, 2013), (Mohd Anuar Ramli, 2023) and (Vizano et al., 2021) All three studies examine the concept of halal awareness, halal certification, and their influence on consumers' intention to purchase halal products.

Second, studies on regulations in the context of halal certification have been conducted by (Aam Slamet Rusydiana, Akmal Salim, 2023), (Devid et al., 2020) and (Ulfa, 2022) All three studies share a common focus in identifying challenges related to the implementation of halal product assurance in Indonesia, including issues of infrastructure, technical procedures, regulatory frameworks, and inter agency coordination. Furthermore, the third aspect studies on halal literacy has been explored by (Nurhasanah et al., 2023), (Malini, 2021) and (Soeherman & Panjaitan, 2022). All three studies discuss the level of halal literacy among MSME actors, and their findings indicate that halal literacy within the micro, small, and medium enterprise (MSME) sector needs significant improvement.

Therefore, this study aims to fill the existing research gap by examining the influence of Weak Intention (X1) and Distrust (X2) on halal certification reluctance (Y), as well as the moderating role of literacy (Z) in this relationship. By adopting an integrated framework of the Theory of Planned Behavior (TPB), Mayer's Trust Model (TMM), and the Theory of Reluctance, this research is expected to offer new insights into the factors influencing MSMEs' reluctance to obtain halal certification, particularly in the food and beverage sector.

2. HYPOTHESIS

H1: Weak intention has a positive and significant effect on the reluctance to pursue halal certification.
H1a: Weak attitude has a significant effect on weak intention.
H1b: Low subjective norms have a significant effect on weak intention.
H1c: Low perceived behavioral control has a significant effect on weak intention
H2: Distrust has a positive and significant effect on the reluctance to pursue halal certification.

H2a: Low ability has a significant effect on distrust.
H2b: Lack of benevolence has a significant effect on distrust.
H2c: Low integrity has a significant effect on distrust.
H3: Low literacy moderates the relationship between weak intention and reluctance to pursue halal certification.
H4: Low literacy moderates the relationship between distrust and reluctance to pursue halal certification.

3. METHODOLOGY

3.1 Data Collection

To ensure diversity and representativeness of the sample, this study broadly collected respondent data from various Micro and Small Enterprises (UMK) operating in the food and beverage sector in South Sulawesi, Indonesia. This approach was designed to ensure that the sample used is highly relevant to the research topic.

Furthermore, in determining the sample size, it is important to consider the ratio between the number of respondents in the research sample (N) and the number of parameters (p) to be estimated in the statistical model. Determining the appropriate sample size is crucial for obtaining accurate parameter estimates, such as path coefficients, variances, covariances, and factor loadings. The more complex the SEM model used, the more parameters need to be estimated, making the ratio between the number of respondents (N) and the analyzed parameters (p) a critical aspect. If the sample size is insufficient relative to the model's complexity, parameter estimation may become inaccurate, leading to less reliable analysis results. As a general guideline, Kline recommends an N:p ratio of 20:1, which means that each estimated parameter requires 20 respondents. (Kline, 2023). However, some researchers also suggest lower ratios, such as 10:1 or even 5:1, depending on the research conditions. (Bentler & Chou, 1987). Considering these various factors, the selection of sample size must be carried out carefully to ensure the validity and reliability of the SEM analysis results. According to Hair et al., the ideal sample size for Structural Equation Modeling (SEM) analysis ranges from 100 to 200 respondents, with a minimum recommended number of 155 respondents based on the previous calculation.

During the survey implementation, a total of 242 questionnaires were successfully collected using a combination of online and offline methods through a random sampling technique. After the initial screening stage, 42 questionnaires deemed invalid were eliminated, resulting in 200 questionnaires that met the validity criteria for further analysis. The effective questionnaire recovery rate for SEM analysis was 82.64%. An overview of the UMK profiles and UMK actors' profiles is presented in Table 1 and Table 2.

Table 1: Profile of Micro and Small Enterprises (UMK)

Variables		Frequency	Percentage
Business Sector	Food	102	51%
	Beverage	15	8%
	Food and Beverage	83	42%
Business Entity Type	Individual	198	99%
	Legal Entity	2	1%
Monthly Turnover	Below 3 Million	161	81%
	3 to 5 Million	29	15%
	4 to 10 Million	6	3%
	10 to 20 Million	3	2%
	Above 20 Million	1	1%
Business Duration	Less than 5 Years	160	80%
	6 to 10 Years	36	18%
	More than 10 Years	4	2%
Number of Employees	No Employees	136	68%

	1 to 10 People	64	32%
	More than 10 People	0	0%

Table 2: Profile of UMK Actors

Variables		Frequency	Percentage
Gender	Male	33	17%
	Female	167	84%
Age	Below 30 Years	75	38%
	31 60 Years	125	63%
	Above 60 Years	0	0%
Education Level	Did not graduate from high school/ vocational school/equivalent	63	32%
	Graduated from high school/vocational school/equivalent	82	41%
	Graduated from diploma/Bachelor's/Master's/Doctorate	55	28%
Marital Status	Single	47	24%
	Married	142	71%
	Divorced (Widowed/Divorced)	11	6%
Number of Children Dependents	None	65	33%
	1 2 Children	86	43%
	3 4 Children	40	20%
	More than 5 Children	9	5%
Monthly Expenditure	Below IDR 1,500,000	77	39%
	IDR 1,500,000 IDR 3,000,000	106	53%
	IDR 3,000,000 IDR 5,000,000	15	8%
	Above IDR 5,000,000	2	1%
ADo You Know About Halal Certification?	I know	90	45%
	I don't know	84	42%
	Unsure	26	13%

3.2 Instrument

In this study, the questionnaire design uses a five point Likert scale as the basis for measurement. However, unlike the conventional approach, the scoring in this study is applied in reverse. This is done because the statements in the questionnaire are formulated in a negative form. Thus, a score of 1 indicates a very high level of agreement (*strongly agree*), whereas a score of 5 reflects a very high level of disagreement (*strongly disagree*) (Schriesheim & Hill, 1981). This questionnaire consists of 18 statement items aimed at measuring the research variable more accurately.

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The questionnaire was developed by adapting measurement items from recent and reputable journals, as presented in Table 3. The constructs in this study are considered valid and reliable, given that all measurement items were derived from previous research that reported Cronbach's Alpha values of 0.70 or higher. Furthermore, the Average Variance Extracted (AVE) values were also recorded at 0.50 or above, indicating an adequate level of convergent validity. In the initial design phase, each variable was measured using three statements. However, due to similarities among items within each variable, the number of statements was ultimately simplified to two for each dimension or measured variable, as recommended by (Lindley et al., 2024).

Table 3: Questionnaire Adapted from Various Sources

No	Variable	Indicator	Symbol	Source
1.a	**Weak of Intention (X1)** – Weakness of Attitude	Up to now, I am still not interested in obtaining halal certification for my product	X1a.1	(Lada et al., 2009)
		I still have doubts about my product when it comes to halal certification.	X1a.2	(Hassan, 2016)
1.b	**Weak of Intention (X1)** – Low Subjective Norms	I have not received any pressure from my family to pursue halal certification.	X1b.1	(Mukhtar, A., & Butt, 2012)
		I have not received any encouragement from business partners to obtain halal certification.	X1b.2	(Shah Alam, S., & Mohamed Sayuti, 2011)
1.c	**Weak of Intention (X1)** Low of Perceived Behavioral Control	I have not had the free time to pursue halal certification for my product	X1c.1	(Rezai et al., 2012)
		I am not yet able to meet all the requirements for halal certification.	X1c.2	(Tieman, 2011)
2.a	**Distrust (X2)** – Low Ability	I do not know the technical requirements for halal certification.	X2a.1	(Riaz, M. N., & Chaudry, 2003)
		I do not have enough facilities or equipment to meet the requirements for halal certification.	X2a.2	(Bonne, K., & Verbeke, 2008)
2.b	**Distrust (X2)** – Low Benevolance	I have never thought about certifying my product as halal.	X2b.1	(Rahman et al., 2015)
		I do not care if there are products similar to mine that have a halal label.	X2b.2	(Bashir, 2019)
2.c	**Distrust (X2)** – Low Integrity	I am reluctant to disclose or inform about the contents of my product.	X2c.1	(Zailani et al., 2010)
		Even if asked about the contents of my product, I would not disclose all of it.	X2c.2	(Zulfakar et al., 2014)
3	**Reluctance in obtaining halal certification (Y)**	I doubt and worry that the cost of halal certification will be greater than the benefits I will gain.	Y.1	(Tieman, M., Che Ghazali, M., & Van Der Vorst, 2013)
		I do not pursue halal certification because I am comfortable with the current situation.	Y.2	(Hanzaee, K. H., & Ramezani, 2011)
		Even if halal certification becomes mandatory, I will try to adjust to the upcoming conditions.	Y.3	(Aziz, Y. A., & Vui, 2012)
		Until now, I have not pursued halal certification because there has been no demand from my customers.	Y.4	(Aziz, Y. A., & Vui, 2012)

No	Variable	Indicator	Symbol	Source
4	Low Literacy (Z)	Until now, I do not understand halal certification and its process.	Z.1	(Shah Alam, S., & Mohamed Sayuti, 2011)
		Until now, I do not understand the benefits gained when my product is certified.	Z.2	(Wilson & Liu, 2010)

3.3 Data Analysis Method

This study uses Structural Equation Modeling (SEM), a statistical method for analyzing complex relationships between variables within a single framework (Edeh et al., 2023). SEM integrates regression analysis, factor analysis, and path analysis, allowing for the testing of both direct and indirect causal relationships (Beran & Violato, 2010), Including mediation and moderation (Gunzler et al., 2013).

The use of SEM in this study aims to uncover the factors influencing the reluctance of Micro and Small Enterprises (MSEs) to pursue halal certification. With its ability to analyze latent variables and test for mediation and moderation, SEM provides in depth insights for formulating more effective strategies and policies.

In this context, the Second Order SEM method is highly relevant as it can illustrate the relationship between the main variable and its more specific dimensions. This approach allows for the measurement of complex variables with a higher level of precision. Each dimension within the variable is analyzed separately before being combined to form a more comprehensive main variable (Yamin, 2023). Thus, this method ensures that all important aspects of a variable are optimally represented, making the research results more accurate and representative.

4. RESULT

4.1 Descriptive Statistics of Research Variables

This study uses three types of variables, namely independent variables, dependent variables, and moderating variables. The moderating variable in this study serves as a factor that influences or strengthens the relationship between the independent and dependent variables. The following section presents the respondents' responses to each of the variables analyzed.

Table 4: Descriptive Statistics of Research Variables

Variable/Dimension		Item	Min	Max	Average	Deviation Standard	Excess kurtosis	Skewness
Reluctance Variable (Y)		**Y1**	1	4	1.655	0.637	0.589	0.687
		Y2	1	3	1.670	0.617	0.652	0.356
		Y3	1	3	1.590	0.549	0.943	0.184
		Y4	1	3	1.660	0.628	0.664	0.413
Average Reluctance of MSEs Actors					1.644			
Variable Weak of Intention (X1)	Weakness of Attitude (X1a)	**X1a.1**	1	3	1.620	0.571	0.753	0.250
		X1a.2	2	4	3.945	0.319	32.630	5.817
	Low Subjective Norms (X1b)	**X1b.1**	1	4	1.595	0.633	0.790	0.828
		X1b.2	1	5	1.705	0.669	4.347	1.234
	Low of Perceived Behavioral Control (X1c)	**X1c.1**	1	5	1.855	0.827	1.578	1.079
		X1c.2	1	5	1.810	0.751	2.808	1.186
Average Weak of Intention					2.088			

Variable/Dimension		Item	Min	Max	Average	Deviation Standard	Excess kurtosis	Skewness
Distrust Variable (X2)	Low Ability (X2a)	**X2a.1**	1	4	1.645	0.624	0.735	0.681
		X2a.2	1	4	1.630	0.586	1.129	0.609
	Low benevolence (X2b)	**X2b.1**	1	3	1.640	0.575	0.708	0.231
		X2b.2	1	5	2.045	0.783	1.074	0.676
	Low Integrity (X2c)	**X2c.1**	2	4	3.945	0.319	32.630	5.817
		X2c.2	1	4	3.885	0.460	12.905	3.830
Average Distrust					2.465			
Literacy Variable – Z		**Z.1**	1	4	1.755	0.620	0.643	0.475
		Z.2	1	3	1.665	0.602	0.645	0.310
Average Literacy					1.710			

Descriptive analysis shows that Micro and Small Enterprises (MSEs) actors have a relatively high reluctance toward halal certification, as reflected in the average score of 1.644 for the reluctance variable. The main factor driving this reluctance is weak intention, with an average score of 2.088, indicating a tendency to agree with negative indicators such as weak attitudes, weak subjective norms, and low perceived behavioral control. Meanwhile, the distrust variable shows an average score of 2.465, indicating a lower level of agreement with distrust, aligning with the structural analysis results that show its insignificant influence on reluctance. Interestingly, halal literacy has an average score of 1.710, indicating that respondents have a relatively high understanding of halal issues, which can mitigate the negative impact of weak intention. The stable skewness and kurtosis patterns strengthen the validity of the data, suggesting that reluctance is a behavioral trait and can be altered through increased literacy and psychologically based interventions. These findings emphasize the importance of the Theory of Planned Behavior and Mayer's Model of Trust in explaining the dynamics of MSE decision-making regarding halal certification in Indonesia.

4.2 Measurement Model Evaluation (Outer Model)

This evaluation includes measurements such as Average Variance Extracted (AVE), Composite Reliability, and internal consistency reliability, aiming to assess the extent to which the indicators represent the variance of the intended construct, as well as to test the alignment of the indicators in consistently measuring the construct. (Joe F. Hair et al., 2014). Confirmatory Factor Analysis (CFA) is applied to assess the fit between the indicators and the factors assumed in the model, to ensure that the model's validity and reliability have been achieved. This also confirms that the data analysis is conducted using a second order construct approach.

4.2.1 Convergent validity

Convergent validity is part of the Confirmatory Factor Analysis (CFA) that serves to assess the extent to which the indicators used in the study accurately reflect the intended theoretical construct. (Joseph F. Hair et al., 2019). This validity ensures that each developed indicator has the representational ability to reflect the construct being measured, thereby supporting the consistency and credibility of the measurement results in the context of scientific research.

4.2.1.1 First Order Construct

At this stage, the evaluation is focused on the initial dimension level (first order), where each indicator is analyzed to assess its suitability in representing specific constructs individually before moving on to more complex structures.

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Table 5: Outer Loading Values for Convergent Validity Test

Item	Test Stage 1		Test Stage 2		Test Stage 3	
	Outer Loading	Conclusion	Outer Loading	Conclusion	Outer Loading	Conclusion
X1a.1	0.999	Valid	1.000	Valid	1.000	Valid
X1a.2	0.086	Invalid	Eliminated			
X1b.1	0.937	Valid	0.937	Valid	0.937	Valid
X1b.2	0.917	Valid	0.917	Valid	0.917	Valid
X1c.1	0.908	Valid	0.908	Valid	0.908	Valid
X1c.2	0.898	Valid	0.898	Valid	0.898	Valid
X2a.1	0.981	Valid	0.981	Valid	0.981	Valid
X2a.2	0.982	Valid	0.982	Valid	0.982	Valid
X2b.1	0.910	Valid	0.910	Valid	0.910	Valid
X2b.2	0.873	Valid	0.873	Valid	0.873	Valid
X2c.1	0.834	Valid	0.834	Valid	0.834	Valid
X2c.2	0.969	Valid	0.969	Valid	0.969	Valid

The results in Table 5 show that most of the outer loading values are above 0.70, indicating that the indicators are valid in reflecting the first order construct. However, the indicator X1a.2 has a value below this threshold, making it considered invalid. This indicator is then further evaluated or removed from the model. The following figure shows the model after the refinement was made.

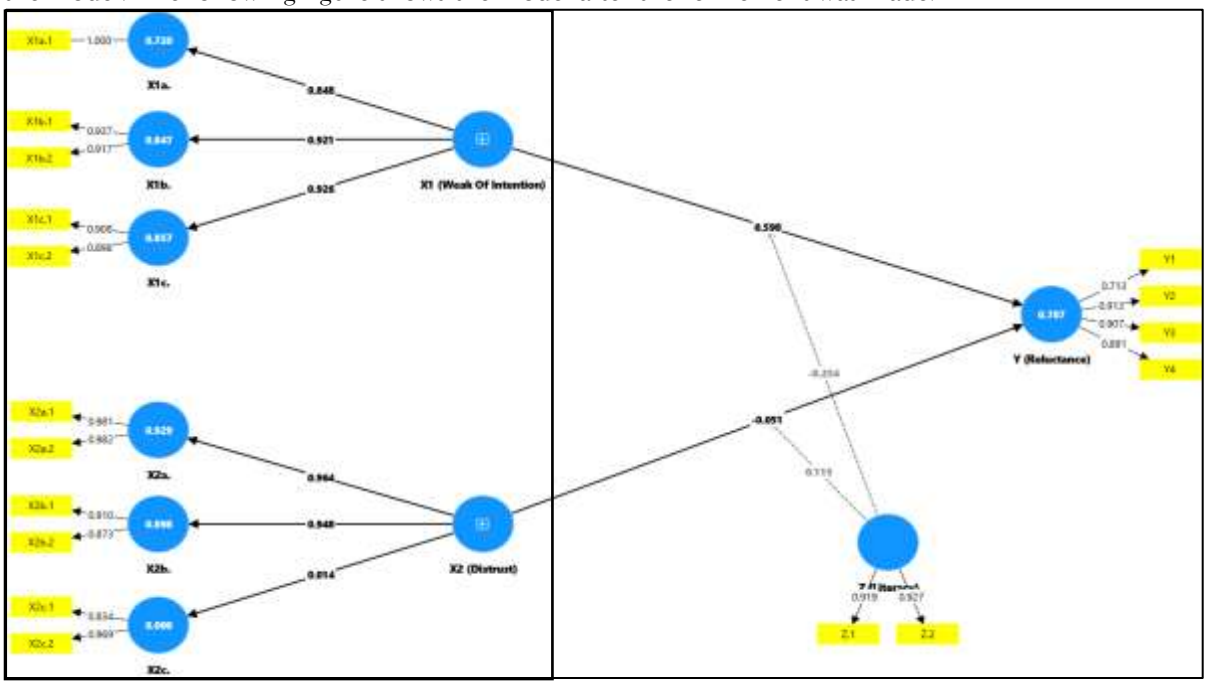

Figure 2: First Order Measurement Model (Dimension)

The figure above shows that all outer loading values for each indicator are above the 0.70 threshold. This indicates that these indicators have a significant and valid contribution in representing the first order construct being studied. This finding confirms that the measurement model at the initial stage has met the requirements for convergent validity. The structure of the measurement model is displayed in the following visualization:

Table 6: Composite Reliability and AVE (First Order)

Dimension/Variable	Cronbach's Alpha	Composite Reli*ability*	*Average Variance Extracted* (AVE)

Weak of Intention (X1)	0.821	0.904	0.595
Distrust (X2)	0.756	0.924	0.535
X1b.	0.838	0.848	0.860
X1c.	0.774	0.776	0.816
X2a.	0.962	0.962	0.963
X2b.	0.743	0.757	0.795
X2c.	0.803	1.198	0.817

Based on the results displayed in the table, all constructs and subdimensions in this study meet the criteria for convergent validity and construct reliability as recommended by methodology experts such as (Joseph F. Hair et al., 2019) and (Fornell, C. and Larcker, 1981). All Cronbach's Alpha and Composite Reliability values are above the minimum threshold of 0.70, indicating that each construct has adequate internal consistency. In addition, the Average Variance Extracted (AVE) values have also exceeded the 0.50 threshold, which indicates that the latent variables are able to explain a significant portion of the indicator variance. Therefore, these results suggest that the measurement model used in the study has proven to be valid and reliable, and is suitable for use in the next stage of structural analysis. Overall, these findings indicate that the research model has an adequate level of validity and reliability, making the latent scores of the first order constructs a legitimate basis for testing the model at the subsequent variable level.

4.2.1.2 Second Order Construct

At this stage, the analysis focus is directed towards the variable level, which includes three main aspects: evaluation of the measurement model, evaluation of the structural model, and assessment of the overall model fit and quality.

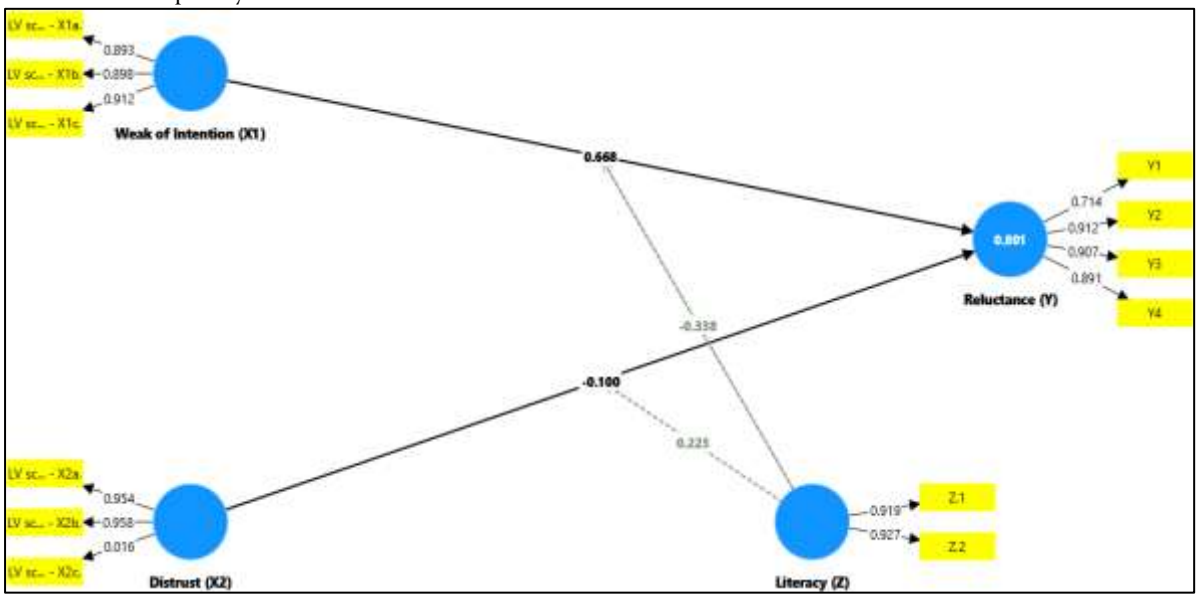

Figure 3: Second Order Construct Measurement Model

Based on Figure 3, it can be seen that the latent factor score for item X2c has a factor loading value below 0.7, indicating that the item does not meet the criteria for convergent validity (Hair et al., 2019). Therefore, the item was eliminated to ensure the overall validity of the measurement model. After its removal, a re evaluation was conducted to obtain more valid and consistent outer loading results to support the structural model analysis in the subsequent stage.

Table 7: Outer Loading Values for Convergent Validity Test (Second Order)

Variable	Indicator	Outer Loading	Remarks
Weak of Intention (X1) *CR: 0.928*	X1a.	0.893	VALID

CA: 0.884 *AVE: 0.812*	X1b. X1c.	0.898 0.912	VALID VALID
Distrust (X2) *CR: 0.955* *CA: 0.906* *AVE: 0.914*	X2a. X2b	0.954 0.958	VALID VALID
Reluctance (Y) *CR: 0.919* *CA: 0.880* *AVE: 0.740*	Y1 Y2 Y3 Y4	0.714 0.912 0.907 0.891	VALID VALID VALID VALID
Literacy (Z) *CR: 0.920* *CA: 0.826* *AVE: 0.852*	Z.1 Z.2	0.919 0.927	VALID VALID

Based on the test results, all indicators for the variables *Weak of Intention*, *Distrust*, *Reluctance*, and *Literacy* have outer loadings greater than 0.70, indicating strong indicator validity. (J. F. Hair et al., 2017). Each construct also meets the criteria for internal reliability, as evidenced by a Composite Reliability value greater than 0.90 and a Cronbach's Alpha above 0.80, as well as convergent validity indicated by an AVE value exceeding 0.50 (Fornell, C. and Larcker, 1981), (Chin et al., 1998). These findings confirm that the measurement model is suitable for further structural analysis using PLS SEM.

4.2.2 Discriminant validity

Discriminant validity in PLS SEM ensures that each construct in the model is distinct and does not overlap with other constructs. Three common approaches to assess this validity are cross loadings, the Fornell Larcker criterion, and the HTMT ratio. Discriminant validity is considered achieved if each indicator has the highest loading on its own construct, and the square root of the AVE exceeds the correlations between constructs (Fornell, C. and Larcker, 1981), and the HTMT value falls below the threshold of 0.85 or 0.90 (Henseler, J., Ringle, C. M., & Sarstedt, 2015) (Joseph F. Hair et al., 2019).

Table 8: Cross Loading Criterion

Item	*Weak of Intention* (X1)	*Distrust* (X2)	*Reluctance* (Y)	*Literacy* (Z)
X1a	0.893	0.775	0.798	0.721
X1b	0.898	0.852	0.732	0.771
X1c	0.912	0.772	0.753	0.751
X2a	0.839	0.954	0.736	0.781
X2b	0.856	0.958	0.763	0.816
Y1	0.593	0.522	0.714	0.488
Y2	0.721	0.721	0.912	0.802
Y3	0.761	0.717	0.907	0.745
Y4	0.815	0.714	0.891	0.796
Z1	0.743	0.797	0.754	0.919
Z2	0.786	0.748	0.789	0.927

Based on the Cross Loading results in Table 8, all indicators show good discriminant validity because they have the highest loading on their original construct compared to other constructs. For example, the indicator X1c has the highest loading on Weak of Intention (0.912), which is higher than its loading on other constructs. A similar pattern is observed across all constructs, supporting the clarity of the indicators' representation of the measured construct. This finding is consistent with (Joseph F. Hair et al., 2019) which emphasizes the importance of cross loading as evidence of discriminant validity in PLS SEM.

Table 9: Fornell – Larcker Criterion

Variable	*Weak of Intention* (X1)	*Distrust* (X2)	Reluctance (Y)	Literacy (Z)
Weak of Intention (X1)	0.905			
Distrust (X2)	0.820	0.924		
Reluctance (Y)	0.861	0.856	0.960	
Literacy (Z)	0.850	0.899	0.835	0.923

Table 10: Heterotrait Monotrait (HTMT) Discriminant Ratio

Variable	*Weak of Intention* (X1)	*Distrust* (X2)	*Environment* (X3)	*Unaffordable Costs* (X4)	*Reluctance* (Y)
Weak of Intention (X1)					
Distrust (X2)	0.719				
Reluctance (Y)	0.766	0.743	0.708	0.73	
Literacy (Z)	0.79	0.73	0.709	0.727	0.767

Based on the discriminant validity test results using the Fornell Larcker Criterion, all constructs have an AVE square root value higher than their correlation with other constructs, indicating good discrimination between the variables (Joseph F. Hair et al., 2019). TMT test also supports this, with all ratio values below the threshold of 0.85, indicating no multicollinearity issues and reinforcing the model's discriminant validity (Henseler et al., 2015).

4.3 Structural Model Evaluation and Hypothesis Testing

Structural model evaluation in PLS SEM aims to assess the relationships between latent variables through path coefficient analysis and coefficient of determination (R^2). The path coefficient measures the strength of the influence between variables, while R^2 indicates the proportion of variance in the endogenous variable explained by the exogenous variables. According to (Joseph F. Hair et al., 2019) An R^2 value ≥ 0.75 is considered substantial, 0.50–0.75 is moderate, and 0.25–0.50 indicates a weak effect, especially in the context of marketing research.

Table 11: Hypothesis Testing Results (First Order)

Hypothesis	Relationship	OS	SM	SD	T statistics	P values	Ket.
H1a	*Weak of Intention* (X1) > X1a.	0.848	0.85	0.019	44.84	0.000	Accepted
H1b	*Weak of Intention* (X1) > X1b.	0.921	0.92	0.022	41.154	0.000	Accepted
H1c	*Weak of Intention* (X1) > X1c.	0.926	0.93	0.014	63.97	0.000	Accepted
H2a	*Distrust* (X2) > X2a.	0.964	0.96	0.007	136.519	0.000	Accepted
H2b	*Distrust* (X2) > X2b.	0.947	0.95	0.011	88.435	0.000	Accepted
H2c	*Distrust* (X2) > X2c.	0.036	0.03	0.124	0.294	0.769	Rejected

The testing results at the dimension level show that all indicators for the Weak of Intention (X1) variable are significant, with t statistic values > 1.96 and p values < 0.05. This indicates that its three dimensions weak attitude, weak subjective norm, and low perceived behavioral control validly and reliably represent the X1 construct. Among the three, the dimension of perceived control (X1c) makes the strongest

contribution to UMK reluctance in obtaining halal certification, reinforcing that perceptions of self control and the ability to manage the certification process play a major role in influencing intention
Meanwhile, for the Distrust (X2) variable, two dimensions low ability (X2a) and low virtue (X2b) are significant, showing a strong contribution to the distrust construct. However, the dimension of low integrity (X2c) is not statistically significant (p value = 0.769), thus not supporting the formation of the construct. This insignificance suggests that UMK actors in the context of this study tend to have a positive perception of the integrity of halal certification bodies. In other words, their reluctance is not caused by a lack of trust in the institution, particularly in terms of integrity, but rather triggered by other factors outside the aspect of distrust.

Table 12: Hypothesis Testing Results (Second Order)

Hypothesis	Relationship	OS	SM	SD	T Statistics	P Values	Ket.
H1	*Weak of Intention → Reluctance*	0.666	0.655	0.091	7.358	0.000	Accepted
H2	*Distrust → Reluctance*	0.098	0.105	0.091	1.077	0.282	Reject

The hypothesis testing results show that the Weak of Intention variable has a positive and significant effect on the reluctance of Micro and Small Enterprises (UMK) to obtain halal certification. This is reflected in the original sample value of 0.666, t statistic of 7.358 (> 1.96), and p value of 0.000 (< 0.05), which statistically confirms that the lower the intention of UMK actors, influenced by personal attitudes, social norms, and perceived behavioral control, the higher their reluctance to engage in the halal certification process. This weak intention appears to be the main psychological factor hindering UMK participation in the certification process.
On the other hand, hypothesis H2, which states that distrust affects reluctance, is rejected, as the testing results show an insignificant effect (original sample = 0.098, t statistic = 1.077, p value = 0.282). This rejection is supported by descriptive analysis, which shows that indicators such as perceptions of low ability, virtue, and integrity are actually viewed positively by UMK actors towards halal certification bodies. The indicator of low integrity (X2c) is even statistically insignificant, which further weakens the overall influence of distrust in the model. Although some previous theoretical models, such as Trust Mayer's Model, emphasize the importance of distrust in shaping reluctance, these findings are more in line with recent research results (Rujalinor, 2025a), (Hamidifani & Karim, 2023), which mentions that the main barriers for UMK lie in structural and practical aspects, rather than in trust related aspects.

Table 13: Results of Moderating Effect Size Testing

Hypothesis	Relationship	OS	SM	SD	T Statistics	P Values	Ket.
H5	*Literacy x Weak of Intention → Reluctance*	0.337	0.344	0.116	2.91	0.004	Accepted
H6	*Literacy x Distrust → Reluctance*	0.222	0.223	0.12	1.847	0.065	Reject

Based on the moderating test results, the role of halal literacy in the relationship between weak intention and reluctance to obtain halal certification is weakening. This is indicated by the original sample value of 0.337, t statistic of 2.910, and a significant p value of 0.004. This negative effect clearly shows that halal literacy weakens the impact of weak intention on reluctance, meaning that the higher the level of literacy among UMK actors, the smaller the impact of weak intention on their reluctance. Therefore, halal literacy acts as a protective (mitigating) factor that reduces the negative impact of low intention.
In contrast, in the relationship between distrust and reluctance, the moderating role of halal literacy is not significant, with an original sample of 0.222, t statistic of 1.847, and a p value of 0.065 (> 0.05).

Although the direction of the effect is positive, theoretically indicating a tendency to strengthen the impact of distrust on reluctance, since it is not significant, halal literacy does not significantly strengthen this relationship statistically. This reinforces the finding that distrust is not the main determinant in the model of UMK reluctance to obtain halal certification.

Table 14: R Square

	R square	R square adjusted
Reluctance Toward Halal Certification	0.801	0.795

Based on the R square result of 0.801 and the adjusted R square of 0.795, this research model has strong predictive ability, as it can explain 80.1% of the variability in the reluctance of UMK actors to obtain halal certification through the independent variables used, including literacy as a moderator. The very small difference between the R square and adjusted R square (0.006) indicates that this model is stable and does not suffer from overfitting, making it reliable for generalization to a larger population.

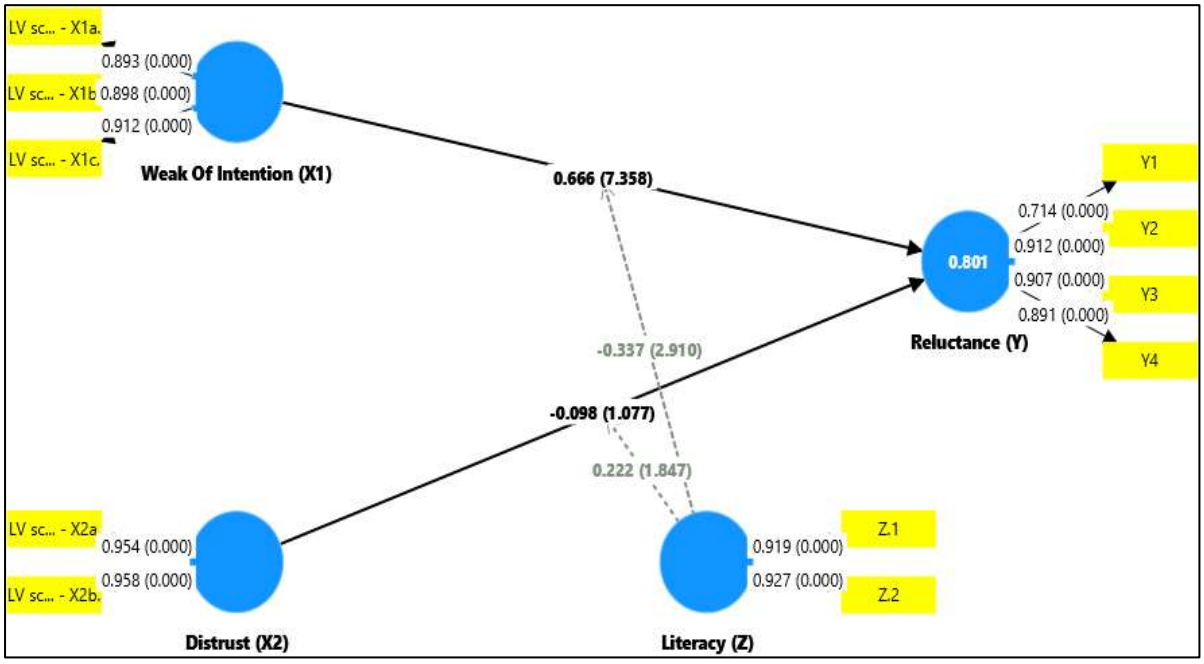

Figure 4: Smart PLS Algorithm Output for Second Order Construct

5. DISCUSSION

The findings of this study confirm that weak of intention has a positive and significant effect on the reluctance of Micro and Small Enterprises (UMK) to undergo the halal certification process. This result strengthens the proposition in the framework of the Theory of Planned Behavior (TPB), where the components of negative attitude, weak subjective norm, and low perceived behavioral control collectively reduce the intention of UMK actors to take planned actions, such as halal certification. The low scores on the attitude dimension (X1a), subjective norm (X1b), and perceived behavioral control (X1c) from the descriptive results reflect the low confidence of UMK actors in the urgency, benefits, and affordability of the certification process. This is consistent with the study (Wahyuningsi, Syaparuddin Razak, 2024), (Solikhah, 2022), which found that weak intention is formed as a result of a lack of halal awareness campaigns, negative attitudes, and weak social norms. Even in a cross country context, such as the study (Koc et al., 2024) di Turki, weak intention remains a determining factor of reluctance, even when high religiosity is present. Meanwhile, the study (Tazlia et al., 2023) and (Septiani & Ridlwan, 2020) emphasizes that weak dimensions of attitude and norm play a significant role in reducing intention, which ultimately impacts the reluctance toward halal certification.

Nevertheless, these findings are not without controversy. Several studies, such as those by (Fatmawati et al., 2023), (Istia et al., 2023) (Rahmanita et al., 2023) argue that the reluctance of UMK actors is more influenced by factors such as limited understanding of regulations, the perception that certification does not bring business benefits, high costs, and procedures perceived as complicated. This is reinforced by the findings of (Maria et al., 2022), as well as (Mya & Handayani, 2023), which position perceived benefits and structural barriers as the dominant causes of reluctance. This difference indicates that although weak intention is a significant variable, it is not the sole determining factor. Therefore, the TPB based approach must be combined with policy interventions that enhance halal literacy, strengthen legal understanding, and eliminate administrative obstacles. These findings underscore the importance of literacy as a strategic moderating factor in overcoming reluctance toward halal certification, suggesting that assistance and education policies should focus on transforming perceptions and empowering MSME actors to develop stronger intentions and greater willingness to undergo halal certification.

Furthermore, another finding in this study is that distrust does not show a significant influence on the reluctance of Micro and Small Enterprises (MSEs) to pursue halal certification. This finding is important as it contradicts the previous common assumption that distrust toward the institutions or the halal certification process is one of the main barriers. Empirical data show that the average scores on indicators such as perceptions of low ability, low benevolence, and low integrity actually reflect a relatively high level of trust among MSE actors toward the certification process. This indicates that the reluctance of MSEs does not stem from distrust, but rather from structural and technical factors that are tangibly encountered during the certification process. In this context, Trust Mayer's Model (TMM) remains relevant, but it reinforces the view that trust is not the dominant factor influencing MSEs' decisions. (Mayer et al., 1995) This finding is reinforced by empirical evidence and previous studies, such as a report from the Indonesian Ombudsman (Ombudsman RI) which revealed that MSE actors often face obstacles such as complex document requirements, time consuming manual processes, and limited understanding of the urgency and benefits of halal certification (Rujalinor, 2025b). Research published by the *International Journal Mathla'ul Anwar of Halal Issues* also noted that lack of internal knowledge and high external costs are major inhibiting factors. In line with this, a study by (Ginantaka et al., 2024), (Fawaid et al., 2024), (Winarto & Santoso, 2024), (Islam et al., 2023), as well as (Hamidifani & Karim, 2023) emphasize that cost, information, and procedural complexity factors play a greater role compared to distrust. Although some literature such as (McKnight & Chervany Norman, 2001) as well as (Aslan, 2023) "While some literature emphasizes the strong relationship between distrust and reluctance in a socio psychological context, the findings of this study indicate that, in the context of Micro and Small Enterprises (MSEs) in Indonesia, practical challenges are more dominant. Therefore, the second hypothesis (H2), which posited a significant influence of distrust on the reluctance of MSEs to pursue halal certification, is statistically rejected in this study.

Furthermore, an important finding in this study is the identification of the moderating role of halal literacy on the relationship between weak intention and distrust toward the reluctance of Micro and Small Enterprises (MSEs) in obtaining halal certification. Statistical test results show that halal literacy significantly moderates the relationship between weak intention and reluctance ($\beta = 0.337$, $p = 0.004$), indicating that an increase in halal literacy can reduce the negative impact of weak intention in pursuing halal certification. This finding reinforces the position of the Theory of Planned Behavior (TPB) (Ajzen, 1991) which emphasizes that behavior is influenced not only by intention, but also by perceived behavioral control and knowledge. In this context, halal literacy serves as a form of behavioral control that strengthens internal motivation and provides procedural clarity for MSE actors in facing the certification process. This study is in line with the findings of (Alqudsi, 2014), which emphasizes the importance of halal knowledge in shaping perceptions and compliance behavior toward the halal assurance system.

However, the moderation of halal literacy on the relationship between distrust and reluctance was not significant ($\beta = 0.222$, $p = 0.065$), leading to the rejection of hypothesis H6. Although literacy helps in understanding the procedures, it is not sufficient to reduce distrust. In the framework of Mayer's Trust Model, distrust arises from negative perceptions of integrity and ability, which cannot be easily changed through knowledge alone. This finding aligns with (McKnight & Chervany Norman, 2001) who state

that distrust requires an affective and relational approach. Therefore, social and institutional interventions, such as transparency, public communication, and strengthening the legitimacy of halal certification bodies, are necessary.

6. RESEARCH IMPLICATIONS

This study provides significant theoretical and practical implications in understanding the reluctance of micro and small enterprises (MSEs) in the Indonesian food and beverage sector towards halal certification. Theoretically, integrating the Theory of Planned Behavior (TPB), Mayer's Trust Model (TMM), and Reluctance Theory enriches the multidimensional understanding of the psychological, cognitive, and structural factors influencing business decision making. The research findings show that weak intention is the primary determinant of reluctance, and the role of halal literacy as a moderating variable significantly reduces this negative influence. Therefore, improving halal literacy is relevant as an educational effort and a strategic intervention that can strengthen business owners' intentions to engage in halal certification. In the policy realm, these findings can serve as a foundation for authoritative bodies like BPJPH and the Ministry of Cooperatives and MSEs to develop a literacy-based approach that focuses on simplifying information, digitalizing services, and providing experience-based training.

7. RESEARCH LIMITATIONS

This study has several limitations that must be considered before interpreting the results and developing further studies. First, the geographical scope is limited to a specific area in Indonesia, which may not represent the diversity of characteristics of MSEs on a national scale. Second, the quantitative approach provides a portrait of the relationships between variables but does not deeply explore the socio-cultural motives hidden behind the reluctance. Additionally, the indicators for the distrust variable in Mayer's model (ability, virtue, and integrity) show a high tendency, but the results did not contribute significantly to reluctance. This suggests the possibility of other constructs that have not been adequately observed in the proposed theoretical model.

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REFERENCES

1. Aam Slamet Rusydiana, Akmal Salim, A. A. S. (2023). Problematika Penerapan Jaminan Produk Halal Di Indonesia: Analisis Tata Kelola Halal. *Harmoni : Jurnal Multikultural & Multireligius*, *22*(1), 167–186.
2. Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.
3. Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, *2*(4). https://doi.org/10.1002/hbe2.195
4. Alqudsi, S. G. (2014). Awareness and Demand for 100% Halal Supply Chain Meat Products. *Procedia Social and Behavioral Sciences*, *130*, 167–178. https://doi.org/10.1016/j.sbspro.2014.04.021
5. 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 costumers in Turkey. *International Journal of Gastronomy and Food Science*, *32*. https://doi.org/10.1016/j.ijgfs.2023.100726
6. Aziz, Y. A., & Vui, C. N. (2012). The role of halal awareness and halal certification in influencing non muslims' purchase intention. *International Conference on Business and Economic Research (ICBER)*, *In 3rd*, 245–272.
7. Aziz, Y. A., & Chok, N. V. (2013). The Role of Halal Awareness, Halal Certification, and Marketing Components in Determining Halal Purchase Intention Among Non Muslims in Malaysia: A Structural Equation Modeling Approach. *Journal of International Food and Agribusiness Marketing*, *25*(1), 1–23. https://doi.org/10.1080/08974438.2013.723997
8. Bashir, A. M. (2019). Halal food consumption: A comparative study on Muslim and non Muslim consumers in Malaysia. *Journal of Islamic Marketing*, *10*(2), 507–524.
9. Bentler, P. M., & Chou, C. P. (1987). Practical Issues in Structural Modeling. *Sociological Methods & Research*, *16*(1), 78–117. https://doi.org/10.1177/0049124187016001004
10. Beran, T. N., & Violato, C. (2010). Structural equation modeling in medical. *BMC Research Notes*, *3*(267), 1–10. http://www.biomedcentral.com/1756 0500/3/267
11. Bidang UMKM. (n.d.). *Laporan Dinas Koperasi Kab. Bone 2024*.
12. Bonne, K., & Verbeke, W. (2008). Religious values informing halal meat production and the control and delivery of halal credence quality. *Agriculture and Human Values*, *25*, 35–47.
13. Chin, W. W., Chinn, W. W., & Chin, W. W. (1998). The partial least squares approach to structural equation modelling. In Marcoulides G. A. (Ed.). *Modern Methods for Business Research*, *295*(2), 295–336.

14. Devid, F. A. S., Fahmi, A. S. R., Hilal, F. N., & Firdaus, M. I. (2020). Dinamika Regulasi Sertifikasi Halal di Indonesia. *JESI (Jurnal Ekonomi Syariah Indonesia)*, *10*(1), 36–44. https://doi.org/10.21927/jesi.2020.10(1).36 44
15. Dewianggraeni, R. R., Rohimyunus, N., & Rezki, A. (2020). Politics of consumer protection law in the form of halal labeling on home industry products. *International Journal of Advanced Science and Technology*, *29*(7 Special Issue), 719–729.
16. Edeh, E., Lo, W. J., & Khojasteh, J. (2023). Review of Partial Least Squares Structural Equation Modeling (PLS SEM) Using R: A Workbook. *Structural Equation Modeling: A Multidisciplinary Journal*, *30*(1). https://doi.org/10.1080/10705511.2022.2108813
17. Fatmawati, P., Setiawan, F., & Nasik, K. (2023). Analysis Of Religiosity , Halal Awareness , Halal Literacy , and Behavioral Intentions in Predicting Msme Actors to Carry Out Halal Certification in Bangkalan Regency. *Maro; Jurnal Ekonomi Syariah Dan Bisnis*, *6*(1), 76–88.
18. Fawaid, A., Istiadah, Farida, U. C., Nur Azizatul Luthfiyah, S., & Zainul Haq Jefriyadi, W. (2024). Analisis Persepsi Pelaku Usaha Mikro Dan Kecil (UMK) Atas Kebijakan Sertifikasi Halal (Studi Kasus Pada Pengusaha Kuliner Di Kelurahan Sumbersari Jember). *Iqtishodiyah: Jurnal Ekonomi Dan Bisnis Islam*, *10*(2), 191–205. https://doi.org/10.55210/iqtishodiyah.v10i2.1672
19. Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 39–50. In *American Marketing Association* (Vol. 18).
20. Ginantaka, A., Awalia, R. S., & Delfitriani. (2024). Analisis Pemahaman Masyarakat Terhadap Kewajiban Sertifikasi Halal pada Produk Makanan dan Minuman Skala UMK di Kabupaten Sukabumi. *Jurnal Ilmiah Pangan Halal*, *6*(2), 13–34.
21. Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai Archives of Psychiatry*, *25*(6), 390–394. https://doi.org/10.3969/j.issn.1002 0829.2013.06.009
22. Hair, J. F., Hult M., G. T., Ringle, C. M., &, & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS SEM). In *Sage Publications* (Second Edi).
23. Hair, Joe 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
24. Hair, Joseph F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR 11 2018 0203
25. Hamidifani, S., & Karim, B. (2023). Analysis of the Application of Halal Certification in the Maqhasid Sharia Perspective on Consumer Confidence in Halal Certified Msme Products in Bangkalan Regency. *Proceeding of Annual Conference on Islamic Economy and Law*, *2*(2), 101–114. https://doi.org/10.21107/aciel.v2i2.251
26. Hanzaee, K. H., & Ramezani, M. R. (2011). (2011). Intention to halal products in the world markets. *Interdisciplinary Journal of Research in Business*, *1*(5), 1–7.
27. Hassan, S. H. (2016). Factors affecting Muslim consumers' perception towards purchasing halal food products in Malaysia. *Journal of Islamic Marketing*, *7*(3), 361–372.
28. 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/https://doi.org/10.1007/s11747 014 0403 8
29. Islam, M. M., Ab Talib, M. S., & Muhamad, N. (2023). Challenges of Halal Standards and Halal Certification for Islamic Marketing. *Muslim Business and Economic Review*, *2*(1), 105–124. https://doi.org/10.56529/mber.v2i1.156
30. Istia, D., Fidhya, N., & Nisrina, L. (2023). Analisis Pemahaman Sertifikasi Halal pada Usaha Mikro Kecil dan Menengah (UMKM). *JIESP : Journal of Islamic Economics Studies and Practices*, *2*(2), 96.
31. Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies The Endowment Effect , Loss Aversion , and Status Quo Bias. *Journal of Economic Perspectives*, *5*(1), 193–206.
32. Kahneman, D., & Tversky, A. (1986). Prospect Theory : An Analysis Of Decision Under Risk. *Econometrica*, *47*(2), 263–291.
33. Kholid Hazmi. (2023). *Bank Indonesia Tingkatkan Literasi Ekonomi Syariah dan Penerapan Halal Lifestyle*. Radar Kudus Jawa Pos. https://radarkudus.jawapos.com/jateng/691655871/bank indonesia tingkatkan literasi ekonomi syariah dan penerapan halal lifestyle
34. Kline, R. B. (2023). *Principles and Practice of Structural Equation Modeling (Methodology in the Social Sciences Series)* (Todd D. Little (ed.); 5th ed.). The Guilford Press.
35. Koc, F., Ozkan, B., Komodromos, M., Halil Efendioglu, I., & 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
36. Lada, S., Harvey Tanakinjal, G., & Amin, H. (2009). Predicting intention to choose halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance and Management*, *2*(1), 66–76. https://doi.org/10.1108/17538390910946276
37. Lindley, L., Frost, N., Barr, S., & Budge, S. (2024). The Modified Gender Minority Stress Measure: A Psychometric Validation Study. In *Psychology of Sexual Orientation and Gender Diversity*. Online First Publication. https://doi.org/10.1037/sgd0000743
38. Malini, H. (2021). Small and Medium Enterprises Halal Literacy Measurement During Covid 19 Pandemic. *Journal of Islamic Economics and Finance Studies*, *2*(2), 110. https://doi.org/10.47700/jiefes.v2i2.3345
39. Maria, F. L., Saidin, O., Agusmidah, & Detania, S. (2022). Kesadaran Hukum Pelaku UMKM di Kabupaten Labuhanbatu Selatan terhadap Sertifikasi Halal Pasca Undang Undang Nomor 11 Tahun 2020 Tentang Cipta Kerja. *Locus Journal of Academic Literature Review*, *1*(5), 322–332. https://doi.org/10.56128/ljoalr.v1i6.83

40. Masyhuri, M., & Risdiyanti, A. (2022). Halal Certification Challenges for Javanese Muslim Entrepreneurs in a Phenomenological Perspective. *IQTISHODUNA: Jurnal Ekonomi Islam*, *11*(2), 181–194.
41. Mayer, R. C., Davis, J. H., & Schoorman, D. F. (1995). An Integrative Model of Organizational Trust Author (s): Roger C . Mayer , James H . Davis and F . David Schoorman Source : *The Academy of Management Review*, *20*(3).
42. McKnight, D. H., & Chervany Norman, L. (2001). Trust and distrust definitions: One bite at a time. *Lecture Notes in Artificial Intelligence (Subseries of Lecture Notes in Computer Science)*, *2246*(May), 27–54. https://doi.org/10.1007/3 540 45547 7_3
43. McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e commerce: An integrative typology. *Information Systems Research*, *13*(3), 334–359. https://doi.org/10.1287/isre.13.3.334.81
44. Mohd Anuar Ramli, M. A. A. R. and M. H. J. (2023). Understanding non Muslims' reluctance to halal food: a systematic review. *Journal of Islamic Marketing*, *14*(2), 544–561. https://doi.org/https://doi.org/10.1108/JIMA 05 2021 0134
45. Mukhtar, A., & Butt, M. M. (2012). Intention to choose Halal products: the role of religiosity. *Journal of Islamic Marketing*, *3*(2), 108–120.
46. Mya, V. A. N., & Handayani, T. (2023). Minat Pelaku Usaha Mikro Bidang Makanan dan Minuman di DKI Jakarta Terhadap Program Sertifikasi Halal Gratis. *Islamic Economics and Business Review*, *2*(2), 235–249. https://doi.org/10.59580/iesbir.v2i2.6240
47. Noval Kurniawan. (2023). Kenapa UMKM Harus Punya NIB? Di Bone, Masih Banyak Pelaku Usaha Tak Miliki Nomor Induk Berusaha. *Ribun Timur.Com*. https://makassar.tribunnews.com/2023/06/24/kenapa umkm harus punya nib di bone masih banyak pelaku usaha tak miliki nomor induk berusaha.
48. Nurhasanah, E., Shonia, Q., & Zahra, A. (2023). *Analysis Of Halal Literacy Level Of MSMEs in Tasikmalaya*. *14*(1), 117–127.
49. Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, *15*(3), 259–267. https://doi.org/10.1093/heapro/15.3.259
50. Rahman, A., A., Asrarhaghighi, E., &, & Ab Rahman, S. (2015). Consumers and Halal cosmetic products: knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, *6*(1), 148–163.
51. Rahmanita, Nurul, F. D., & Nida, S. N. (2023). Faktor Faktor Yang Mempengaruhi Minat Umkm Dalam Melakukan Sertifikasi Halal. *International Journal Mathla'ul Anwar of Halal Issues*, *3*(2), 91–99. https://doi.org/10.30653/ijma.202332.92
52. Rezai, G., Mohamed, Z., &, & Shamsudin, M. N. (2012). Non-Muslim consumers' understanding of Halal principles in Malaysia. *Journal of Islamic Marketing*, *3*(1), 35–46.
53. Riaz, M. N., & Chaudry, M. M. (2003). Halal food production. *CRC Press*.
54. Roger C Mayer, J. H. D. and F. D. S. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, *20*(3), 709–734.
55. Rujalinor. (2025a). Determinants of Halal Certification Reluctance among Small Enterprises: Reassessing the Role of Trust in Modern Contexts. *Jurnal Ekonomi Dan Perilaku UMKM*, *12*(1), 45–60.
56. Rujalinor. (2025b). *Kendala Sertifikasi Halal Produk UMKM*. Ombudsman RI. https://ombudsman.go.id/artikel/r/pwkinternal kendala sertifikasi halal produk umkm?utm_source=chatgpt.com
57. Schriesheim, C. A., & Hill, K. D. (1981). Controlling Acquiescence Response Bias by Item Reversals: The Effect on Questionnaire Validity. *Educational and Psychological Measurement*, *41*(4), 1101–1114. https://doi.org/10.1177/001316448104100420
58. Septiani, D., & Ridlwan, A. A. (2020). The Effects of Halal Certification and Halal Awareness on Purchase Intention of Halal Food Products in Indonesia. *Indonesian Journal of Halal Research*, *2*(2), 55–60. https://doi.org/10.15575/ijhar.v2i2.6657
59. Shah Alam, S., & Mohamed Sayuti, N. (2011). Applying the Theory of Planned Behavior (TPB) in halal food purchasing. *International Journal of Commerce and Management*, *21*(1), 8–20.
60. Soeherman, A. D. G., & Panjaitan, R. (2022). Religio centric Product Strategic: Halal Literacy and Brand Management Capabilities Towards Business Performance. *Jurnal Siasat Bisnis*, *27*(1), 86–105. https://doi.org/10.20885/jsb.vol27.iss1.art7
61. Solikhah, I. (2022). Pengaruh Pengungkapan Corporate Social Responsibility (CSR) Terhadap Profitabilitas dan Manajemen Laba (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2015 2017). *Jurnal Akuntansi AKUNESA*, *10*(2), 94–106. https://doi.org/10.26740/akunesa.v10n2.p94 106
62. Sujibto, B. J., & Fakhruddin, M. (2023). Non Muslim Voices on Halal Certification : From Sectoral Religious Tendencies to State Mandated Regulations. *Jurnal Ilmu Sosial Dan Ilmu Politik*, *26*(3), 258–270. https://doi.org/10.22146/jsp.67792
63. Tazlia, I., Nurfadilah, D., & Pratama, S. (2023). Purchase Intention of Halal Local Beauty Brand During Covid 19: the Role of Influencers' Credibility and Halal Awareness. *Journal of Islamic Monetary Economics and Finance*, *9*(3), 397–418. https://doi.org/10.21098/jimf.v9i3.1623
64. Tieman, M., Che Ghazali, M., & Van Der Vorst, J. G. (2013). Consumer perception on halal meat logistics. *British Food Journal*, *115*(8), 1112–1129.
65. Tieman, M. (2011). The application of Halal in supply chain management: in-depth interviews. *Journal of Islamic Marketing*, *2*(2), 186–195.
66. Ulfa, M. (2022). Halal Regulation: Halal Self Declare in Halal Certification. *Journal of Islamic Business Law*, *6*(2), 1–14. https://doi.org/10.33751/palar.2
67. Vizano, N. A., Khamaludin, K., & Fahlevi, M. (2021). The Effect of Halal Awareness on Purchase Intention of Halal Food: A Case Study in Indonesia. *Journal of Asian Finance, Economics and Business*, *8*(4), 441–453. https://doi.org/10.13106/jafeb.2021.vol8.no4.0441
68. Wahyuni et. al. (2021). The effect of halal literacy on purchase intention: A study of Muslim consumers. *Journal of Islamic*

Marketing, *12*(9), 1791–1805. https://doi.org/https://doi.org/10.1108/JIMA 10 2020 0303
69. Wahyuningsi, Syaparuddin Razak, D. (2024). Micro and Small Business Owners ' Reluctance towards Halal Certification in Culinary Sector. *Journal of Research and Multidisciplinary*, *7*(2), 930–950.
70. Wilson, J. A. J., & Liu, J. (2010). Shaping the Halal into a brand? *Journal of Islamic Marketing*, *1*(2), 107–123. https://doi.org/10.1108/17590831011055851
71. Winarto, & Santoso, H. B. (2024). Sertifikasi Halal Produk UMK dalam Meningkatkan Kepercayaan Konsumen. *Harmoni Sosial : Jurnal Pengabdian Dan Solidaritas Masyarakat*, *1*(4), 1–16.
72. Wordometer. (2024). *Populasi Indonesia (Live)*. Wordometer. https://www.worldometers.info/world population/indonesia population/
73. Yamin, S. (2023). SmartPLS 3, SmartPLS4, Amos & Stata. In *PT Dewangga Energi Internasional*. https://www.smartpls.com/
74. Zailani, S., Arrifin, Z., Abd Wahid, N., Othman, R., &, & Fernando, Y. (2010). Halal traceability and halal tracking systems in strengthening halal food supply chain for food industry in Malaysia (a review). *Journal of Food Technology*, *8*(3), 74–81.
75. Zulfakar, M. H., Anuar, M. M., & Talib, M. S. A. (2014). Conceptual Framework on Halal Food Supply Chain Integrity Enhancement. *Procedia Social and Behavioral Sciences*, *121*, 58–67. https://doi.org/10.1016/j.sbspro.2014.01.1108