

The impact of Islamic attributes and motivations on visitor satisfaction and word of mouth in halal supply chain management

T. Teviana^{a*}, Haikal Rahman^a, Zulkarnain Siregar^a and Dina Sarah Syahreza^a

^aDepartment of Management, Faculty of Economics, Universitas Negeri Medan, Medan, Sumatera Utara, Indonesia

ABSTRACT

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Halal supply chain management, with its focus on Islamic values in tourism, is increasingly recognized for enhancing destination competitiveness and visitor satisfaction. This study examines how Islamic attributes, motivations, and norms influence visitor satisfaction and word of mouth in Medan City's tourism sector. In the halal tourism industry, supply chain management plays a crucial role in ensuring that every stage from procurement, production, distribution, to service delivery complies with halal standards. The research aims to evaluate the impact of Islamic Physical Attributes, Islamic Non-Physical Attributes, Push Motivation, Pull Motivation, and Islamic Norms on visitor satisfaction and their subsequent effect on word of mouth. By employing a quantitative approach, the study utilizes structured questionnaires based on previous research and applies Structural Equation Modeling (SEM) for analysis. Data were collected from 300 tourists in Medan City, including both local and international visitors. The study finds that Islamic Non-Physical Attributes and Pull Motivation significantly enhance visitor satisfaction. Islamic Physical Attributes also positively affect satisfaction, while Push Motivation does not. Satisfaction strongly influences word of mouth, but Islamic Norms negatively moderate this relationship. Islamic attributes and motivations play a crucial role in shaping visitor satisfaction in the tourism context. Islamic norms, however, may complicate the satisfaction-word of mouth link. The implementation of effective halal supply chain management can ensure that all aspects of supply chain management in halal tourism, from products to services, meet the expected halal standards. Practically, destination managers should emphasize Islamic attributes and motivational factors to improve visitor satisfaction. Theoretically, the study contributes to understanding the complex dynamics between satisfaction, norms, and word of mouth in halal tourism.

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1. Introduction

North Sumatra is one of the largest provinces in Indonesia. Positioned strategically, its capital city, Medan, serves as a gateway to Asian countries due to its proximity to Kuala Lumpur, Bangkok, and Singapore. This advantageous location provides North Sumatra Province with opportunities to develop its existing tourist areas. Known for its culinary delights, especially in Medan City, North Sumatra saw an 11.95% increase in visitors arriving via Kualanamu Airport, Silangit, Belawan Port, and Tanjung Balai in December 2017 compared to November 2017 (BPS, 2018). The development of halal supply chain management in the current tourism industry is a strategic step to meet the growing needs of Muslim visitors (Qaddahat et al., 2016). According to Agustina et al. (2022), the concept of halal ensures that the products and services offered at tourist destinations comply with Islamic religious guidelines, allowing Muslim visitors to feel safe and comfortable when consuming them. In halal tourism, supply chain management plays a crucial role in ensuring that every stage from procurement, production, distribution, to service delivery adheres to halal standards (Nafiah et al., 2020; Khan et al., 2022). Despite the overall increase in visitors, the number of foreign tourists in December 2017 decreased by 3.36% compared to December 2016, from 28,950 visits to 27,978 visits (BPS, 2018).

* Corresponding author
E-mail address teviana@unimed.ac.id (T. Teviana)

The halal promotion strategy aims to address the challenges faced by tourists entering Medan City, with the use of word-of-mouth (WOM) being particularly important. Medan City is well-known for its culinary scene, offering many traditional foods that reflect its rich Malay culture. North Sumatra, especially Medan City, plays a significant role in the tourism sector, which contributes to economic growth (Jaelani, 2017). However, implementing supply chain management in the context of halal tourism in Indonesia, particularly in Medan City, is not without its difficulties. The population in Medan City consists of nearly equal numbers of Muslims and non-Muslims, posing a significant challenge for planning and marketing halal supply chain management locations (Battour & Ismail, 2016).

These challenges can be addressed through several strategic steps in the context of supply chain management. According to Prayag (2020), it is important to ensure that all products offered at halal tourism destinations meet halal standards, from the procurement of raw materials to the final presentation. This includes collaborating with certified halal suppliers who have a good understanding of Sharia compliance. Halal supply chain management also plays a role in enhancing the quality of service. With adequate staff training on halal products and Islamic norms, Muslim visitors will feel more comfortable and secure while enjoying the services (Mohamed et al., 2020). This can contribute to customer satisfaction and encourage the sharing of positive experiences through word of mouth (Khan et al., 2022). Additionally, it is essential to effectively communicate the commitment to the halal of products and services. Through the right marketing strategies, information about halal compliance can be conveyed clearly, thus attracting the attention of both Muslim and non-Muslim visitors. This will also help create a positive image of Medan City as a welcoming tourism destination (Sarwar et al., 2021; Suseno et al., 2023).

Successful halal supply chain management planning can be developed through the products and services offered. In practice, the implementation of Islamic-based products is not universally rejected (Carboni et al., 2014; Sofiani & Suhendar, 2024). Muslim tourists are motivated by the products and experiences they encounter when visiting (Oktadiana & Pearce, 2018). Satisfying products in tourism areas are key to enhancing tourist satisfaction (Magatef, 2015). Tourist satisfaction is crucial for increasing the number of visitors to a tourist area. Halal supply chain management must create satisfaction for Muslim visitors, as Islamic values significantly influence customer satisfaction (Eid & El-Gohary, 2015). These Islamic values are divided into two dimensions: Islamic Physical Attributes and Islamic Non-Physical Attributes (Eid & El-Gohary, 2015).

In addition, Muslim customer satisfaction is influenced by both Push Motivation and Pull Motivation (Battour et al., 2017). Furthermore, Islamic norms play a significant role in shaping Muslim customer satisfaction (Battour et al., 2017; Eid & El-Gohary, 2015). The novelty of this study lies in its comprehensive examination of factors influencing visitor satisfaction within supply chain management in the context of halal tourism in Medan City and its subsequent effect on Word of Mouth (WOM). While previous research has explored Push and Pull Motivations (Battour et al., 2017; Caber & Albayrak, 2016; Elaziz & Kurt, 2017; Haque & Momen, 2017) and the influence of Islamic Physical and Non-Physical Attributes as dimensions of Islamic Value on tourist satisfaction (Eid, 2015; Wardani et al., 2018), this study introduces a novel aspect by incorporating Islamic Norms as a moderating variable. By examining how Islamic Norms moderate the relationship between these attributes, motivations, and Muslim customer satisfaction (Battour et al., 2017; Elaziz & Kurt, 2017; Shafaei & Mohamed, 2015), this research provides a unique contribution to the understanding of how these factors collectively influence tourist satisfaction and WOM in the halal supply chain management context of Medan City.

The Ministry of Tourism's program to promote halal supply chain management in Indonesia has been initiated by the government, which issued the Ministerial Decree KM.40/OT.001/MP/2018 concerning the Indonesian halal supply chain management logo. North Sumatra, known for its Malay customs in Medan City, has not yet implemented halal supply chain management. This presents a challenge, especially considering that Medan City is very close to Kuala Lumpur and Singapore, both of which serve as direct international entry points from various countries around the world. It has been suggested that the implementation of halal supply chain management in tourism could lead to a decline in non-Muslim visitors (Winarti, 2017). However, this claim needs further examination, as several studies have found the opposite and have shown that halal supply chain management can be beneficial for a country by increasing its income (Marwa et al., 2023). This study aims to explore how Islamic Physical and Non-Physical Attributes, Push and Pull Motivations, and Islamic norms affect the satisfaction of Muslim tourists in Medan City. It also examines whether Islamic norms moderate the relationship between these attributes and motivations and tourist satisfaction. Additionally, the study investigates the impact of tourist satisfaction on word-of-mouth promotion for supply chain management of halal tourism in Medan City.

2. Literature Review and Hypotheses

The implementation of the halal supply chain management in tourism concept can enhance the competitiveness of tourism destinations by providing experiences that meet the needs of Muslim visitors. This concept has the potential to increase customer satisfaction, which in turn encourages them to return and recommend the destination (Henderson, 2016). In supply chain management in the context of halal tourism, this is highly relevant, as visitor satisfaction heavily depends on a supply chain that guarantees halal compliance (Jaelani, 2017). Halal supply chain management ensures that every product and service received by customers, from food to facilities, meets Sharia standards. In Medan City, known for its culinary specialties, the success of halal supply chain management is greatly influenced by the fulfillment of halal standards at all stages of the supply chain from the procurement of food ingredients, the production process, to the presentation to visitors. Therefore, tourism

destinations must establish close partnerships with suppliers who are halal-certified and committed to Sharia compliance (Olya & Al-Ansi, 2018). In addition to the procurement of halal products, supply chain management also encompasses the governance of other halal services, such as hotels with prayer facilities, restaurants that serve halal food, and transportation that adheres to Islamic ethics (Jaelani et al., 2020; Adnani et al., 2023). The effective implementation of halal supply chain management ensures that all the needs of Muslim visitors are well met, directly contributing to their increased satisfaction. This satisfaction, as stated by Eid & El-Gohary (2015), can encourage visitors' desire and intention to continue consuming halal products, increase their loyalty to the destination, and spread positive recommendations through word-of-mouth (Shafaei & Mohamed, 2015). Previous studies have indicated that customer satisfaction is determined by the attitude toward and the image of the destination to be visited (Lubis et al., 2016). Islamic values include dimensions such as Islamic Physical Attributes and Islamic Non-Physical Attributes (Eid, 2015). The image of a destination is largely influenced by these attributes. This study also incorporates Push Motivation and Pull Motivation, as both variables significantly affect visitor satisfaction (Battour et al., 2017; Caber & Albayrak, 2016; Lim et al., 2015; Gaol & Hutagalung, 2017; Rajesh, 2013). Therefore, measuring these variables is crucial for determining customer satisfaction in supply chain management in the context of halal tourism areas. Additionally, Islamic norms (Battour et al., 2017; Oktadiana & Pearce, 2018; Shafaei & Mohamed, 2015) can further enhance the impact of Islamic Physical Attributes, Islamic Non-Physical Attributes (Eid & El-Gohary, 2014; Wardi, Abror, & Trinanda, 2018), Push Motivation, and Pull Motivation (Battour et al., 2017; Caber & Albayrak, 2016; Haque & Momen, 2017; Michael, James, & Michael, 2018). The conceptual framework of this research was developed based on previous studies (Battour et al., 2017; Eid & El-Gohary, 2015; Lubis et al., 2016). The framework incorporates Islamic Physical Attributes, Islamic Non-Physical Attributes, Push Motivation, Pull Motivation, and Islamic norms as key variables to create customer satisfaction in the implementation of halal supply chain management in Medan City, North Sumatra. The research by Lubis et al. (2016), which focuses on location image and visitor attitudes that influence tourist satisfaction, has been further developed in this study. The concept of destination image is expanded into Islamic attributes, including Islamic Physical Attributes and Islamic Non-Physical Attributes (Eid & El-Gohary, 2014; Wardi et al., 2018). Meanwhile, visitor attitudes have been developed into Push Motivation and Pull Motivation (Battour et al., 2017; Caber & Albayrak, 2016; Haque & Momen, 2017; Michael et al., 2018). To reinforce these variables, this study also includes Islamic norms (Battour et al., 2017; Oktadiana & Pearce, 2018; Shafaei & Mohamed, 2015). Furthermore, customer satisfaction is expected to influence word of mouth (Wardi et al., 2018).

Previous literature suggests that both physical and non-physical attributes of a destination play critical roles in shaping visitor satisfaction. Islamic Physical Attributes and Islamic Non-Physical Attributes are recognized as essential components that influence tourist experiences, particularly in halal supply chain management contexts (Eid & El-Gohary, 2015; Wardi et al., 2018). Similarly, Push Motivation and Pull Motivation have been identified as significant factors impacting visitor satisfaction, highlighting how intrinsic and extrinsic drivers affect tourists' overall experiences (Battour et al., 2017; Caber & Albayrak, 2016). Additionally, satisfaction is crucial for generating positive Word of Mouth, which can amplify the attractiveness of halal tourism destinations (Wardi et al., 2018). Islamic Norms are proposed to moderate these relationships, potentially strengthening the effects of Islamic Physical Attributes, Islamic Non-Physical Attributes, Push Motivation, and Pull Motivation on visitor satisfaction (Battour et al., 2017; Oktadiana & Pearce, 2018). Based on these insights, the following hypotheses are posited:

H1: *Islamic Physical Attributes have a significant and positive effect on visitor satisfaction.*

H2: *Islamic Non-Physical Attributes have a significant and positive effect on visitor satisfaction.*

H3: *Push Motivation has a significant and positive effect on visitor satisfaction.*

H4: *Pull Motivation has a significant and positive effect on visitor satisfaction.*

H5: *Visitor Satisfaction has a significant and positive effect on Word of Mouth.*

H6: *Islamic Norms moderate the effect of Islamic Physical Attributes, Islamic Non-Physical Attributes, Push Motivation, and Pull Motivation on visitor satisfaction.*

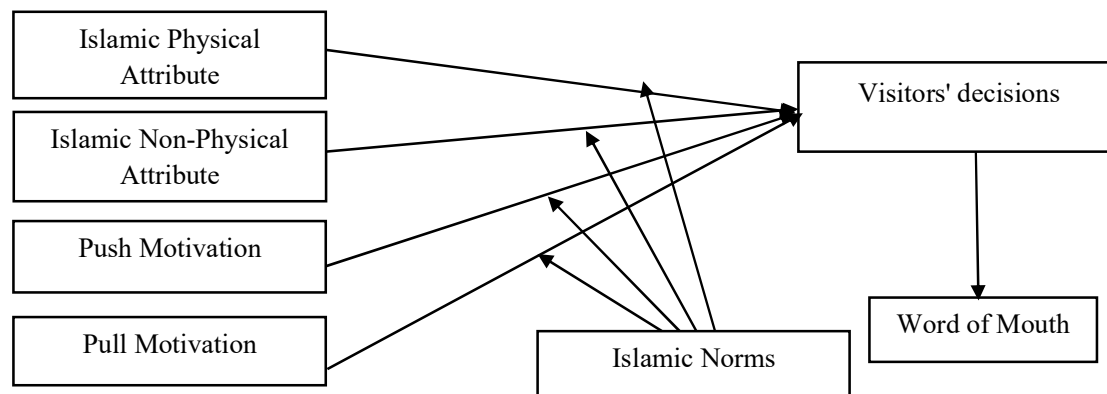


Fig. 1. Conceptual Model

This study examines the role of Islamic Physical Attributes, Islamic Non-Physical Attributes, Push Motivation, Pull Motivation, and Islamic norms as key variables influencing customer satisfaction in supply chain management in the context of halal tourism in Medan City, North Sumatra. These variables are explored to understand their collective impact on enhancing customer satisfaction within this specific tourism framework. For a detailed depiction of the conceptual relationships between this research and previous studies, refer to Fig. 1.

3. Research Methods

This study employed both quantitative and qualitative approaches. The quantitative approach utilized scaled statements. The questions for the Islamic Non-Physical Attributes and Islamic Physical Attributes variables were adopted from Eid & El-Gohary (2015). Additionally, the Pull Motivation and Push Motivation variables were adapted from Battour et al. (2017) and Caber & Albayrak (2016). The moderation variable of Islamic norms was measured using the questionnaire from Eid & El-Gohary (2015), while the Word of Mouth (WOM) questionnaire followed Wardi et al. (2018). The research method used was the Correlational Method, which examined the influence between variables. Respondents completed a questionnaire to determine whether Islamic Non-Physical Attributes, Islamic Physical Attributes, Pull Motivation, Push Motivation, and Islamic norms affected visitor satisfaction. The study population consisted of tourists or travelers visiting Medan City. Visitors completed the questionnaire at the Garuda Plaza Hotel. The sampling method employed was Accidental Sampling, due to the unknown sample size. The maximum sample size was 300 individuals, including 100 foreign tourists and 200 local tourists. Data collection involved trained students who interviewed visitors arriving at Kualanam. The students used both open and closed questions with predefined scales.

This study utilized a questionnaire divided into three parts. The first part collected data on the respondents' characteristics and demographics. The second part included open-ended questions, allowing consumers to express their opinions. The third part featured statements answered using a semantic differential scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Prior to distribution, the questionnaire was tested for validity and reliability. Following these tests, the questionnaire was distributed for completion. After data collection, the research data were categorized into two parts: qualitative and quantitative data. Quantitative data were analyzed using cross-tabulation to determine the relationships between variables such as gender, education, occupation, religion, and the number of visits to Medan City. These variables were explained descriptively. Further analysis was conducted using the Structural Equation Model (SEM) method based on Partial Least Squares (PLS), known as PLS-SEM. This method was employed to predict and develop theories within the conceptual framework. PLS-SEM was used to predict endogenous latent variables, considering criteria such as Composite Reliability (values > 0.6), the Reliability of outer absolute standard loading indicators (values > 0.7), Average Variance Extracted (AVE > 0.5) to assess convergent validity, and the Fornell-Larcker Criteria and Cross-loading.

4. Results

The results of the study indicate that in the measurement of cross-loading, the outer loading value of an indicator on the related construct must be greater than its cross-loading value on other constructs. In cross-loading analysis, researchers examine various items to identify those with high loadings on the same construct. Cross-loading is useful for assessing whether the construct has adequate discriminant validity. The expected cross-loading value is greater than 0.7. Researchers must decide whether to remove items with cross-loadings that do not meet this threshold, especially if there are several items with adequate to strong cross-loadings.

The cross-loading results, as shown in Table 1, reveal that Islamic Non-Physical Attributes (INPA) exhibit strong correlations with their own indicators (ranging from 0.823 to 0.858) and moderate correlations with Islamic Physical Attributes (ranging from 0.575 to 0.709). Islamic Norms (ISNM) also demonstrate significant relationships, with high loadings on Islamic Non-Physical Attributes (ranging from 0.751 to 0.794). Satisfaction shows a strong correlation with Islamic Physical Attributes (0.883) and a moderate correlation with INPA (ranging from 0.816 to 0.832). Pull Motivation and Push Motivation have notable correlations with Islamic Norms (0.803 and 1.000, respectively), while Word of Mouth (WOM) indicators exhibit correlations ranging from moderate to strong with other constructs, reflecting their overall influence.

The construct reliability and validity as presented in Table 2 highlights the following findings: Islamic Non-Physical Attribute has a Cronbach's Alpha of 0.799 and a Composite Reliability of 0.882, with an Average Variance Extracted (AVE) of 0.714, indicating good reliability and validity. Islamic Norms show a Cronbach's Alpha of 0.746 and an AVE of 0.566, suggesting moderate reliability. Islamic Physical Attribute demonstrates strong reliability with a Cronbach's Alpha of 0.817 and an AVE of 0.732. Satisfaction has high reliability and validity with a Cronbach's Alpha of 0.822 and an AVE of 0.652. Moderating Effects 1, 2, and 3 each show perfect scores in all metrics. Pull Motivation and Push Motivation exhibit reliable metrics, with AVEs of 0.609 and 0.678, respectively. Word Of Mouth has a Cronbach's Alpha of 0.761 and an AVE of 0.580, indicating good reliability and validity.

Table 1
Cross Loading

Indicator	ISNP PSM	INPA	Norms	IPA	Satisf.	Mod. Effect 1	Mod. Effect 2	Mod. Effect 3	Pull Mot.	Push Mot.	WOM
INPA1	-.362	.823	.575	.709	.832	-.578	-.574	-.494	.600	.386	.644
INPA2	-.454	.858	.559	.575	.816	-.451	-.556	-.434	.536	.560	.548
INPA3	-.403	.854	.580	.548	.806	-.425	-.549	-.409	.520	.479	.555
IP4	-.337	.674	.644	.845	.721	-.591	-.468	-.465	.642	.377	.693
IPA1	-.304	.592	.592	.883	.774	-.566	-.445	-.503	.848	.362	.679
IPA2	-.245	.593	.604	.836	.660	-.425	-.366	-.358	.621	.322	.809
ISNM1	-.373	.445	.751	.433	.456	-.366	-.382	-.450	.558	.401	.543
ISNM2	-.237	.582	.794	.721	.648	-.491	-.407	-.440	.640	.285	.817
ISNM3	-.210	.493	.727	.480	.505	-.299	-.304	-.311	.506	.337	.552
ISNM4	-.408	.497	.735	.465	.508	-.410	-.419	-.488	.613	.491	.580
Islamic Non-Physical Attribute × Islamic Norms_	.833	-.662	-.503	-.501	-.658	.872	1.000	.845	-.503	-.493	-.488
Islamic Physical Attribute × Islamic Norms_	.744	-.575	-.529	-.620	-.628	1.000	.872	.917	-.570	-.409	-.540
KP1	-.362	.823	.575	.709	.832	-.578	-.574	-.494	.600	.386	.644
KP2	-.403	.854	.580	.548	.806	-.425	-.549	-.409	.520	.479	.555
KP3	-.454	.858	.559	.575	.816	-.451	-.556	-.434	.536	.560	.548
KP4	-.304	.592	.592	.883	.774	-.566	-.445	-.503	.848	.362	.679
PHM1	-.646	.561	.464	.410	.549	-.449	-.511	-.491	.492	.875	.441
PHM2	-.360	.363	.340	.272	.360	-.212	-.284	-.235	.337	.758	.281
PHM3	-.535	.430	.396	.318	.423	-.307	-.385	-.373	.456	.833	.386
PLM1	-.304	.592	.592	.883	.774	-.566	-.445	-.503	.848	.362	.679
PLM2	-.399	.466	.630	.466	.486	-.371	-.392	-.483	.735	.457	.711
PLM3	-.337	.447	.624	.478	.483	-.345	-.327	-.425	.754	.469	.551
Pull Motivation × Islamic Norms_	.803	-.528	-.560	-.521	-.571	.917	.845	1.000	-.602	-.463	-.532
Push Motivation × Islamic Norms_	1.000	-.481	-.399	-.347	-.471	.744	.833	.803	-.430	-.642	-.384
WOM1	-.341	.437	.531	.475	.462	-.341	-.325	-.360	.541	.379	.703
WOM2	-.237	.582	.794	.721	.648	-.491	-.407	-.440	.640	.285	.817
WOM3	-.399	.466	.630	.466	.486	-.371	-.392	-.483	.735	.457	.711
WOM4	-.245	.593	.604	.836	.660	-.425	-.366	-.358	.621	.322	.809

Table 2
Construct Reliability and Validity

Indicator	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
ISNP PSM	1.000	1.000	1.000	1.000
Islamic Non Physical Attribute	0.799	0.799	0.882	0.714
Islamic Norms_	0.746	0.757	0.839	0.566
Islamic Physical Attribute	0.817	0.822	0.891	0.732
Satisfaction	0.822	0.822	0.882	0.652
Moderating Effect 1	1.000	1.000	1.000	1.000
Moderating Effect 2	1.000	1.000	1.000	1.000
Moderating Effect 3	1.000	1.000	1.000	1.000
Pull Motivation	0.691	0.742	0.823	0.609
Push Motivation	0.766	0.802	0.863	0.678
Word Of Mouth	0.761	0.780	0.846	0.580

Table 3
Fornell Larcker

Indicator	ISNP PSM	Islamic Non Physical Attribute	Islamic Norms_	Islamic Physical Attribute	Satisfaction	Moderating Effect 1	Moderating Effect 2	Moderating Effect 3	Pull Motivation	Push Motivation	Word Of Mouth
ISNP PSM	1.000										
Islamic Non-Physical Attribute		1.000									
Islamic Norms_	-0.399	0.677	0.752								
Islamic Physical Attribute	-0.347	0.724	0.716	0.855							
Satisfaction	-0.471	0.968	0.714	0.842	0.807						
Moderating Effect 1	0.744	-0.575	-0.529	-0.620	-0.628	1.000					
Moderating Effect 2	0.833	-0.662	-0.503	-0.501	-0.658	0.872	1.000				
Moderating Effect 3	0.803	-0.528	-0.560	-0.521	-0.571	0.917	0.845	1.000			
Pull Motivation	-0.430	0.654	0.774	0.828	0.776	-0.570	-0.503	-0.602	0.781		
Push Motivation	-0.642	0.562	0.493	0.414	0.551	-0.409	-0.493	-0.463	0.529	0.824	
Word Of Mouth	-0.384	0.690	0.845	0.845	0.753	-0.540	-0.488	-0.532	0.826	0.458	0.762

The Fornell-Larcker as described in Table 3 evaluates discriminant validity, showing that each construct's square root of the Average Variance Extracted (AVE) is greater than its correlations with other constructs. For example, Islamic Non-Physical Attribute has an AVE square root of 0.845, which exceeds its correlations with other constructs, such as Islamic Norms (-0.399) and Satisfaction (-0.471). Satisfaction shows a high AVE square root of 0.807, surpassing its correlations with Pull Motivation (-0.430) and Push Motivation (-0.642). Word of Mouth has an AVE square root of 0.762, indicating strong validity as its correlations with other constructs are lower. This confirms that each construct is distinct from the others.

The R Square indicates the explanatory power of the model for each dependent variable (Table 4). Satisfaction has an R Square value of 0.987, suggesting that the model explains 98.7% of the variance in satisfaction, with an adjusted R Square of 0.987, confirming the model's robustness. Word of Mouth has an R Square value of 0.567, meaning that 56.7% of the variance in word of mouth is explained by the model, with a slightly lower adjusted R Square of 0.566, indicating a moderate fit. Overall, the model shows a high explanatory power for satisfaction and a moderate one for word of mouth.

Table 4
R Square

Variable	R Square	R Square Adjusted
Satisfaction	0.987	0.987
Word Of Mouth	0.567	0.566

Table 5
Hypothesis testing

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Hypothesis Result
Islamic Physical Attribute → Satisfaction	0.197	0.196	0.018	11.020	0.000	Accepted
Islamic Non Physical Attribute → Satisfaction	0.758	0.758	0.016	46.876	0.000	Accepted
Push Motivation → Satisfaction	-0.003	-0.004	0.010	0.294	0.769	Rejected
Pull Motivation → Satisfaction	0.171	0.173	0.017	10.054	0.000	Accepted
Satisfaction → Word Of Mouth	0.753	0.753	0.024	30.820	0.000	Accepted
ISNP PSM → Satisfaction	0.022	0.020	0.008	2.680	0.008	Accepted
Moderating Effect 1 → Satisfaction	-0.011	-0.009	0.014	0.779	0.437	Rejected
Moderating Effect 2 → Satisfaction	-0.016	-0.016	0.011	1.527	0.127	Rejected
Moderating Effect 3 → Satisfaction	-0.002	-0.003	0.012	0.177	0.860	Rejected

The hypothesis testing results (Table 5) provide insights into the relationships between various constructs and visitor satisfaction. The first hypothesis stated that Islamic Physical Attribute (H1) has a significant and positive effect on visitor satisfaction, with an original sample value of 0.197, a t-statistic of 11.020, and a p-value of 0.000. This indicates that higher levels of Islamic Physical Attributes positively impact visitor satisfaction. The second hypothesis testing showed that Islamic Non-Physical Attribute (H2) shows a strong and significant positive effect on visitor satisfaction, with an original sample value of 0.758, a t-statistic of 46.876, and a p-value of 0.000. This suggests that Islamic Non-Physical Attributes are a major contributor to visitor satisfaction. The third hypothesis revealed that Push Motivation (H3) does not significantly affect visitor satisfaction, with an original sample value of -0.003, a t-statistic of 0.294, and a p-value of 0.769. This indicates that push motivation does not have a meaningful impact on satisfaction. The fourth hypothesis testing demonstrated that Pull Motivation (H4) has a positive and significant effect on visitor satisfaction, with an original sample value of 0.171, a t-statistic of 10.054, and a p-value of 0.000. This implies that pull motivation contributes positively to visitor satisfaction.

The fifth hypothesis testing revealed that Satisfaction (H5) has a significant and positive effect on Word of Mouth, with an original sample value of 0.753, a t-statistic of 30.820, and a p-value of 0.000. This strong relationship indicates that higher levels of satisfaction lead to more positive word of mouth. The hypothesis testing for moderating effects reveals that Islamic Norms significantly moderate the relationship between Satisfaction and Word of Mouth, with an original sample value of -0.061, a t-statistic of 7.674, and a p-value of 0.000 (Table 6). This indicates that Islamic Norms negatively influence how satisfaction translates into word of mouth. In the relationship between ISNP PSM → Satisfaction → Word of Mouth, the moderating effect testing shows a positive result, with an original sample value of 0.017, a t-statistic of 2.631, and a p-value of 0.009. This shows a significant moderation effect on the satisfaction-word of mouth relationship. In the relationship between Islamic Non-Physical Attribute → Satisfaction → Word of Mouth, the path shows a strong positive moderating effect

with an original sample value of 0.571, a t-statistic of 31.899, and a p-value of 0.000, highlighting that Islamic Non-Physical Attributes enhance the positive impact of satisfaction on word of mouth. Lastly, in testing the relationship between Islamic Physical Attribute → Satisfaction → Word of Mouth, the moderation effect is positive, with an original sample value of 0.148, a t-statistic of 9.547, and a p-value of 0.000. This indicates that Islamic Physical Attributes positively influence the relationship between satisfaction and word of mouth.

Table 6
Moderating Effect

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Hypothesis Result
ISNP PSM → Satisfaction → Word Of Mouth	0.017	0.015	0.006	2.631	0.009	Accepted
Islamic Non Physical Attribute → Satisfaction → Word Of Mouth	0.571	0.571	0.018	31.899	0.000	Accepted
Islamic Norms → Satisfaction → Word Of Mouth	-0.061	-0.061	0.008	7.674	0.000	Accepted
Islamic Physical Attribute → Satisfaction → Word Of Mouth	0.148	0.148	0.016	9.547	0.000	Accepted
Moderating Effect 1 → Satisfaction → Word Of Mouth	-0.008	-0.007	0.010	0.775	0.439	Rejected
Moderating Effect 2 → Satisfaction → Word Of Mouth	-0.012	-0.012	0.008	1.521	0.129	Rejected
Moderating Effect 3 → Satisfaction → Word Of Mouth	-0.002	-0.002	0.009	0.176	0.860	Rejected
Pull Motivation → Satisfaction → Word Of Mouth	0.129	0.130	0.012	0.658	0.000	Accepted
Push Motivation → Satisfaction → Word Of Mouth	-0.002	-0.003	0.008	0.293	0.769	Rejected

Table 7
Total Effect

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Hypothesis Result
ISNP PSM → Satisfaction	0.022	0.020	0.008	2.680	0.008	Accepted
ISNP PSM → Word Of Mouth	0.017	0.015	0.006	2.631	0.009	Accepted
Islamic Non Physical Attribute → Satisfaction	0.758	0.758	0.016	46.876	0.000	Accepted
Islamic Non-Physical Attribute → Word Of Mouth	0.571	0.571	0.018	31.899	0.000	Accepted
Islamic Norms → Satisfaction	-0.081	-0.081	0.011	7.494	0.000	Accepted
Islamic Norms → Word Of Mouth	-0.061	-0.061	0.008	7.674	0.000	Accepted
Islamic Physical Attribute → Satisfaction	0.197	0.196	0.018	11.020	0.000	Accepted
Islamic Physical Attribute → Word Of Mouth	0.148	0.148	0.016	9.547	0.000	Accepted
Satisfaction → Word Of Mouth	0.753	0.753	0.024	30.820	0.000	Accepted
Moderating Effect 1 → Satisfaction	-0.011	-0.009	0.014	0.779	0.437	Rejected
Moderating Effect 1 → Word Of Mouth	-0.008	-0.007	0.010	0.775	0.439	Rejected
Moderating Effect 2 → Satisfaction	-0.016	-0.016	0.011	1.527	0.127	Rejected
Moderating Effect 2 → Word Of Mouth	-0.012	-0.012	0.008	1.521	0.129	Rejected
Moderating Effect 3 → Satisfaction	-0.002	-0.003	0.012	0.177	0.860	Rejected
Moderating Effect 3 → Word Of Mouth	-0.002	-0.002	0.009	0.176	0.860	Rejected
Pull Motivation → Satisfaction	0.171	0.173	0.017	10.054	0.000	Accepted
Pull Motivation → Word Of Mouth	0.129	0.130	0.012	10.658	0.000	Accepted
Push Motivation → Satisfaction	-0.003	-0.004	0.010	0.294	0.769	Rejected
Push Motivation → Word Of Mouth	-0.002	-0.003	0.008	0.293	0.769	Rejected

The hypothesis testing of total effect (Table 7; Fig. 2) reveals significant findings in the relationships between various attributes and visitor outcomes. Islamic Non-Physical Attributes strongly influence both satisfaction and word of mouth, with high significance (p-values of 0.000). Islamic Physical Attributes positively impact satisfaction and word of mouth, though to a lesser extent, also with significant results. Conversely, Islamic Norms negatively affect both satisfaction and word of mouth, indicating a detrimental influence. Pull Motivation significantly boosts both satisfaction and word of mouth, while push

motivation shows no significant effect on either outcome. Moreover, moderating effects related to Islamic norms and other moderating variables were generally insignificant, suggesting these variables do not significantly alter the relationships between satisfaction and word of mouth. The analysis underscores that while Islamic Non-Physical and Physical Attributes and Pull Motivation are crucial for enhancing visitor satisfaction and promoting positive word of mouth, Islamic Norms may hinder these outcomes. Overall, understanding these dynamics can help tailor strategies to improve visitor experiences and engagement.

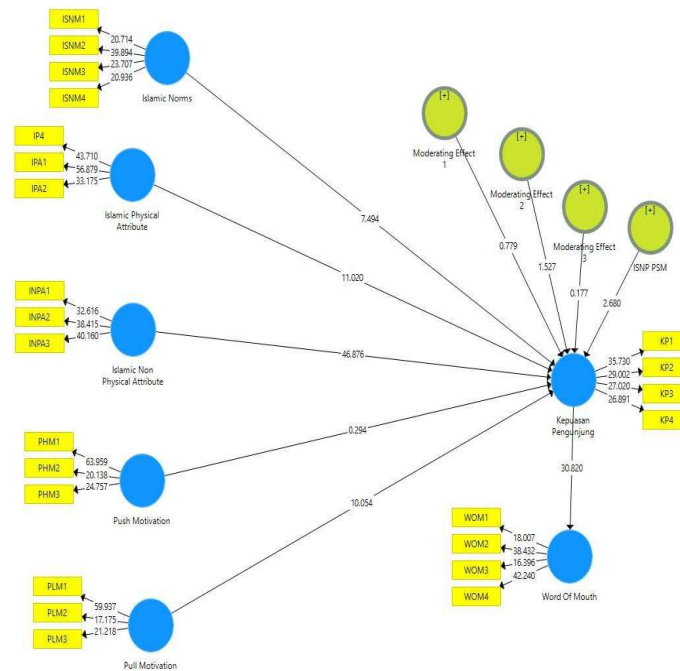


Fig. 2. Bootstrapping Results

The study aligns with previous research highlighting the role of Islamic attributes and motivations in enhancing tourist satisfaction within halal supply chain management frameworks. Henderson (2016) underscores the potential for halal supply chain management to boost destination competitiveness, a concept supported by the study's findings that Islamic Physical and Non-Physical Attributes significantly impact visitor satisfaction. Jaelani (2017) and Olya and Al-ansi (2018) reinforce the notion that halal supply chain management can increase regional income and consumer intent, respectively, reflecting the study's results where Islamic Non-Physical Attributes strongly influence satisfaction and, subsequently, word of mouth. Building on the research of Lubis et al. (2016) and Eid & El-Gohary (2015), the study confirms that both Islamic Physical and Non-Physical Attributes shape the destination's image, crucial for visitor satisfaction. The inclusion of Push and Pull Motivations, as suggested by Battour et al. (2017), Wu and Pearce (2014) and Caber and Albayrak (2016), further elucidates their role in shaping visitor experiences, with Pull Motivation showing a positive effect on satisfaction, contrary to Push Motivation's negligible impact. Moreover, Islamic norms, as discussed by Battour et al. (2017) and Oktadiana & Pearce (2018), are crucial in moderating the relationship between satisfaction and word of mouth. The study's findings indicate that Islamic norms negatively influence this relationship, suggesting that adherence to these norms may complicate the direct link between satisfaction and positive word-of-mouth promotion. Overall, this research enhances the understanding of how specific attributes and motivations affect visitor satisfaction and provides practical insights for optimizing halal supply chain management strategies in Medan City.

5. Conclusion

In the context of halal tourism, supply chain management plays an important role in ensuring that all products and services provided in tourist destinations comply with halal standards. The concept of halal supply chain management not only includes aspects of services that are in accordance with Islamic values but also touches the entire supply chain, from procurement, production, to distribution of halal products expected by Muslim tourists. The hypothesis testing results provide valuable insights into how various constructs impact visitor satisfaction and subsequent word of mouth. The findings confirm that Islamic Physical Attributes (H1) and Islamic Non-Physical Attributes (H2) significantly enhance visitor satisfaction. Islamic Physical Attributes contribute positively but to a lesser extent, while Islamic Non-Physical Attributes have a strong and substantial effect. Conversely, Push Motivation (H3) does not significantly influence visitor satisfaction, indicating its minimal impact compared to Pull Motivation (H4), which positively affects satisfaction. Furthermore, the analysis reveals that higher levels of visitor satisfaction led to more positive word of mouth (H5), highlighting the importance of satisfaction in driving favorable recommendations. The moderating effects of Islamic Norms on the satisfaction-word of mouth

relationship show a negative influence, suggesting that these norms may diminish the positive effects of satisfaction on word of mouth. However, Islamic Non-Physical Attributes significantly enhance this relationship, indicating their crucial role in amplifying the impact of satisfaction on word of mouth. Islamic Physical Attributes also positively influence this relationship, though to a lesser degree. Overall, Islamic Non-Physical Attributes and Pull Motivation are key drivers of both visitor satisfaction and positive word of mouth. In contrast, Islamic Norms appear to impede these outcomes, while Push Motivation has no significant effect. These findings emphasize the need to focus on attributes and motivations that significantly enhance visitor experiences and engagement while addressing factors that may undermine these effects. The implementation of effective halal tourism should ensure that all aspects of halal supply chain management from products to services meet the expected halal standards, thereby increasing the competitiveness of tourist destinations, creating visitor satisfaction, and generating positive WOM.

This study's reliance on pre-adopted scales for Islamic Non-Physical Attributes, Islamic Physical Attributes, Pull and Push Motivation, and Islamic Norms may limit the contextual specificity and relevance of the findings to the Medan City context. The use of accidental sampling from a single location, the Garuda Plaza Hotel, might introduce sampling bias and limit generalizability. Additionally, the method of data collection through trained students and the use of a semantic differential scale may affect the accuracy of responses.

Future research should address these limitations by employing a more diverse sampling method and testing the scales in different contexts. Expanding the study to include various tourist destinations and using a randomized sampling approach could enhance the generalizability of the results. Moreover, incorporating mixed-methods research to further explore the qualitative aspects of visitor experiences and the impact of Islamic norms on satisfaction and word of mouth could provide a more comprehensive understanding.

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