IJRTBT | Smart Halal Destination Ecosystem Model: Measurement and Performance in Tourism Village

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Abstract

Purposes - This study examines the application of the Smart Halal Destination (SHD) ecosystem model in Pagerharjo tourism village, Yogyakarta. This model is used to measure the effectiveness, efficiency, and integration through technology systems to discover the performance of destination Muslim-friendly competitiveness.

Methods - This study uses a quantitative approach to assess a destination as a Muslimfriendly tourism destination. This research was conducted in three stages: Desk Research, Focus Group Discussion, Survey, and Interview.

Findings – Based on the results of the assessment of each pillar, element, and attribute, Pagerharjo tourism village has advantages in the product pillar, especially on the attribute of "ambiance" and pillar of policy, especially on the attribute "has a pre-determined superior area". Meanwhile, the attribute that still needs to be improved is the availability of slaughterhouses/poultry. Overall, Pagerharjo tourism village is considered sufficient to meet the criteria in developing a Muslim-friendly tourism village.

Keywords: Smart Halal Destination; Muslim-friendly; Tourism Village

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Introduction

Halal tourism is one of the fastest growing segments in the tourism market (Moshin, Brochado, & Rodrigues, 2020). The global growth of Muslim travelers increased from 25 million in 2000 to 140 million in 2018, or an average yearly increase of 25%. This growth is predicted to increase to 230 million travelers, with a turnover of USD 300 billion (4,200 trillion rupiah) in 2026 (Khullar, 2019). Several factors contributed to this growth, namely; the increase in world's Muslim population, more favorable economic conditions and the desire to travel and to know other places (Vargas-Sanchez & Moral-Moral, 2019). Hence, the increasing number of Muslim tourists travelers must be considered with great consideration (Preko et al. 2020).

Halal tourism has now become a global mainstream market, not just a niche market. Halal tourism is a current and up-and-coming tourism trend. Efforts to meet the need for friendly tourist destinations for Muslim tourists are rational and profitable. Many Islamic and non-Islamic countries believe in this and seek to make halal tourism one of the focuses of their tourism development (Duman, 2011; Shakona et al. 2015), including Indonesia (Paramarta et al. 2021). Until 2018, the Indonesian halal tourism market grew by 15% and attracted 2.6 million foreign Muslim tourists as per Ministry of Tourism's Halal Tourism Development Acceleration Team, 2019.

As the world's largest Muslim country, Indonesia has enormous potential to become a world halal tourism destination (Adinugraha et al. 2021). The strength of halal tourism lies in the readiness of the destination to receive Muslim tourists (Battour & Ismail, 2016; Wall & Mathieson, 2006; Weidenfeld & Ron, 2008). Tourism destinations must be able to meet the specific needs of Muslim tourists during their travels. The development of tourism product components, including amenities, attractions, and accessibility, must to be aligned with Muslim tourists' profiles, needs, expectations, and preferences (Battour, Ismail & Battor, 2011; Morrison, 2013). This is very important to create quality products for halal tourism destinations (Eid & El-Gohary, 2015; Shakona et al. 2015). The quality of tourism destinations influences the attributes of Islamic destinations and can create positive experiences for tourists (Sumaryadi, 2021).

Fulfilling Muslim tourists' needs, expectations, and preferences will make tourists feel satisfied (Rahman et al. 2020; Tribe & Snaith, 1998; Truong & Foster, 2006) and increase the potential for repeat tourist visits (Chang, Backman, & Huang, 2014). The existence of additional specific requirements to fulfil the needs of being a Muslim when travelling requires destinations to understand the profile of Muslim tourists who visit and make this information one of the primary considerations in its development (Eid & El-Gohary, 2014; Pizam, Neumann, & Reichel, 1978; Shakona et al. 2015). The Ministry of Tourism of Republic Indonesia in the year 2017 has determined halal tourism as one of the leading themes of national tourism development. Ten leading halal tourism destinations have been established, namely: Aceh, West Sumatra, Riau and Riau Islands, DKI Jakarta, West Java, Central Java, Yogyakarta, Greater Malang, Lombok, as well as Makassar and its surroundings.

The development of Indonesian halal tourism gained momentum in 2019. Indonesia's halal tourism was ranked first as the world's best halal tourism destination with Malaysia (Khullar, 2019). However, this achievement has not been accompanied by the ability to reach Muslim foreign tourist visits. Indonesia is still far behind Malaysia. Malaysia managed to reach 5.38

million Muslim foreign tourists in 2017 (Statista, 2020), compared to Indonesia, only 2.6 million in 2018. One of Indonesia's strategic steps in encouraging the development of halal tourism is to conduct an Indonesia Muslim Travel Index (IMTI) assessment and rating. IMTI had been carried out in 2018 and 2019. The results of IMTI are as follows:

The existence of IMTI is considered capable of capturing positive growth in Indonesia's ten leading tourism destinations. This can be seen from the positive growth of all leading halal tourism destinations from 2018 to 2019 (Khullar, 2019). The results were carried out using the same criteria as the GMTI (Global Muslim Travel Index). IMTI assessment is also carried out directly by MasterCard – Crescent Rating, the organizer of GMTI. The use of the GMTI criteria, which is designed to assess a country globally, is deemed necessary to adjust the indicators used to be more relevant to the characteristics of tourism destinations in Indonesia.

The positive growth trend can trigger all destinations to improve their leading halal tourism destinations further; Yogyakarta is no exception. Yogyakarta is one of the destinations in Indonesia, which is the leading destination for both domestic and foreign tourists due to its attractiveness. Developing Muslim-friendly tourism destinations is essential to increase further the number of tourists, especially foreign tourists from countries with a majority Muslim population. The development of Muslim-friendly tourism destinations needs to consider all aspects holistically as an ecosystem (Sutono et al. 2021). One of the destinations that will be developed towards a Muslim-friendly tourism destination is Pagerharjo Tourism Village, located in Kulon Progo Regency, Yogyakarta.

The first step in transforming Pagerharjo tourism village into a Muslim-friendly tourism destination is to measure the extent of the village befitting a Muslim-friendly tourism destination. The measurement results can be used as a recommendation in developing Pagerharjo into a Muslim-friendly tourism village. Therefore, the concept of the Smart Halal Destination (SHD) ecosystem model (Sumaryadi *et al.* 2020) is used in determining the assessment criteria for Muslim-friendly tourism destinations that are by the characteristics of Muslim-friendly tourism in Indonesia.

Smart Halal Destination is an "ecosystem that is effective, efficient, and integrated through technology systems, to build a destination Muslim-friendly competitiveness". The halal tourism ecosystem developed through the Smart Halal Destination concept is expected to have the following characteristics: 1) Effective: play the proper role in a fast time, 2) Efficient: use resources wisely for maximum results, 3) Integrated: harmoniously and systematically connected, 4) Technology system: the use of an effective technology system to facilitate and utilize the halal destination ecosystem, 5) Destinations Muslim-friendly: destinations that can impressively meet the specific needs, wants, and experiences of Muslim travellers, 6) Competitive: growing and developing superiorly compared to competitors.

To realize the benefits for improving the quality of human life (quality of life), the application of the Smart halal destination approach mentioned above is directed at creating values that include: economic value, social value, functional value, emotional value, and epistemic/knowledge value. The following is a Smart Halal Destination model for tourism development:



Figure 1: Image of Smart Halal Destination Model

Source: Sumaryadi et al. 2020

The Smart Halal Destination model consists of 4 sub-systems consisting of technology subsystems, environmental sub-systems, destination management sub-systems, and policy subsystems. This research is focused on developing the tourism village of Pagerharjo into a Muslimfriendly tourism village. The SHD concept is used as a guide in determining the criteria for evaluating Muslim-friendly tourism destinations and as a guide in developing Muslim-friendly tourism villages. This research aims to identify and analyze the actual condition of the Pagerharjo tourism village and to develop Pagerharjo tourism village as a Muslim-friendly tourist village (refer to figure 1).

Research Methodology

Using a quantitative approach, this research intended to identify the actual condition of the tourism village of Pagerharjo, Kulon Progo Regency in the Special Region of Yogyakarta (DIY). For this purpose, this study uses a descriptive method to more deeply explore the potential contained in the tourism village of Pagerharjo. This research was conducted through several stages: conduct a concept review and theoretical description of the SHD ecosystem model; identify aspects of the SHD ecosystem model, and assess Muslim-friendly tourist villages in the tourist village of Pagerharjo.

Data collection in this study was carried out in several ways, namely, through literature studies, Focus Group Discussions (FGD), and conducting surveys and interviews. The FGD was carried out by involving all tourism stakeholders in Pagerharjo tourism village, including; Academics (represented by the school and madrasa teachers), Industry (represented by tourism business actors, both accommodation services, food and drink services), Community (represented by Tourism Awareness Group – Pokdarwis - Pagerharjo Village, Community Leaders), and Government (represented by Pagerharjo Village Government). The analysis used to identify potential in this research uses the concept approach of Smart Halal Destination (SHD) Ecosystem Model. At the same time, the assessment of Muslim-friendly tourist villages is carried out through the Muslim Friendly Travel Indicator (MuFTI) model.

The Muslim Friendly Travel Indicator (MuFTI) is a model to assess the readiness of a destination to become a Muslim-friendly destination. The assessment criteria contained in the Muslim Friendly Travel Indicator (MuFTI) model consist of 5 (five) pillars. The five pillars are; Product, Industry, Marketing, Institutional, and Policy. Each of these pillars consists of several elements, so that the total elements in the Muslim Friendly Travel Indicator (MuFTI) model are 17 elements. Like the pillars, each of these elements also consists of several assessment attributes, so that the total assessment attributes in the Muslim Friendly Travel Indicator (MuFTI) model are 50 attributes.

Result and Discussion

The data collected from the FGD were then analyzed by applying the Muslim Friendly Travel Indicator (MuFTI) model to assess Pagerharjo tourist village's readiness in becoming a Muslim-friendly tourist village. Assessment is carried out on each Pillar, Element, and Attribute.

The first assessment is an assessment based on Attributes. This assessment is carried out to see which attributes are the most vital attributes of each Element. The results of the assessment of Pagerharjo village based on the attributes are as follows:

PILLAR	ELEMENT	ATTRIBUTE	VALUE
Product	Attraction Quality	Natural tourist attractions	89
		Cultural tourism attractions	68
		Man-made tourist attractions	79
		Shopping centers (traditional markets)	39
	Amenities and ICT infrastructure	Internet connectivity and wifi facilities	68
		Environmental hygiene and facilities management (food and beverages)	68
		Security and Safety Guarantee for tourists	79
		Digital-Based Information Services (apps and maps)	71
	Accessibility	Intra-regional Transportation in Tourism Villages	75
	Packages and programs/thematic	Tour packages/activity packages	75
	events	National/International/ramadhan/ education scale events	71

Table 1: Assessment of Pagerharjo Village Based on Attributes

		Calendar of Events	36
	Muslim friendly characteristics Religious	Place of worship (Mosque/Mushola)	71
		Clean water for purification	86
		Toilet feasibility	50
		Tourism activities	75
		Tourism facilities	61
		Tourism village information services (signate, online info, etc.)	57
		Ambiance (environmental atmosphere)	93
Industry	Product and industry competitiveness	Accommodation	71
		Restaurants and Food Stalls	64
		Tourism Industry (accommodation and Restaurant/Food Stalls)	50
		Local products/businesses (SME products)	71
	Standardization of products and industry	Slaughterhouses/Poultry	0
	Smart Muslim-friendly Tourism hub (online/offline)	Product and business marketplace	29
		Halal tourism business forums	29
		Food and Beverage Markets	50
Marketing	Marketing Strategy	Formulation Marketing	61
		Internal Marketing (creating business linkages)	50
		Number of reports with different themes in electronic media reports	68
		Number of news with different themes in non-electronic media	61
	Promotion strategies and digital media	Branding for Tourism Villages	75
		Advertising	46
		Sales activities	75
		Print Media Facilities for Tourists	46

	Unique experiential content	Variations in the theme of halal tourism promotion owned by	14
		Social media is used in communicating unique experiential content	54
	Customer engagement	Availability of Destination information/content in digital form	39
		Interaction/response of consumers with sites and social media (popularity)	46
Institutional	Organizing, communicating, and integrase	DMO (Destination Management Organization) focus on business tourism village governance	61
		Tourism village information center	71
	Halal Center of Excellence	Tourism HR professionally certified skills	39
		Tourism guides with English and/or other foreign languages	18
	Research and development	Center for research and development of tourism villages	0
		Integrated Product Development System	11
Policy	Strategic Plan	Regional Government Regulations related to tourism village development	82
		Own strategic development plan	46
		Monitoring and evaluation	43
	Priority for Muslim- friendly tourism development	Have designated priority areas	89
		Implementation of CHSE (Cleanliness, Health, Safety, Environment Sustainability)	82

Source: Processing Results, 2021

The table 1 above shows that the attribute ambiance (environmental atmosphere) has the highest value among the attributes. This indicates that the environmental atmosphere of Pagerharjo tourism village is very supportive and relevant in the effort to develop a Muslim-friendly tourism village (Duman, 2019).

The second assessment is an assessment based on Elements. This assessment is carried out to see which elements are the strongest elements of each Pillar. The results of the assessment of Pagerharjo tourism village based on the elements are as follows:

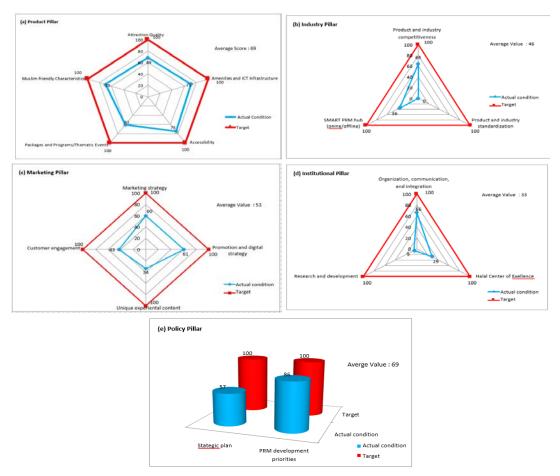


Figure 2: Assessment of Pagerharjo Tourism Village Based on Elements in each Pillar

Source: Processing Results, 2021

As shown in Figure 2, in the product pillar, the accessibility element is the strongest in developing a Muslim-friendly tourist village in Pagerharjo tourism village. While, in the industry, the strongest element in developing a Muslim-friendly tourism village in Pagerharjo tourism village is the element of the product and industrial competitiveness. For the Marketing pillar, the elements considered to be the strongest in developing a Muslim-friendly tourism village in Pagerharjo t

In addition, for the other two pillars, namely the institutional pillar and the policy pillar, the strongest elements in the development of a Muslim-friendly tourism village in Pagerharjo tourism village are the organizing, communication, and integration elements for the institutional pillar and the Muslim-friendly tourism development priority element for the policy.

Meanwhile, the third assessment is an assessment based on pillars. The results of the assessment of Pagerharjo tourism village based on the pillars are as follows:

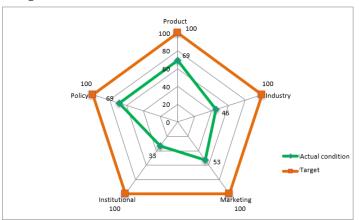
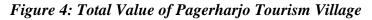
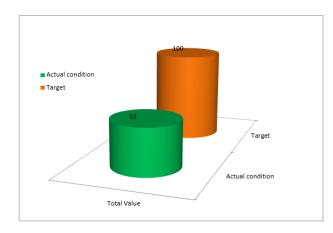


Figure 3: Assessment Based on Pillars

Source: Processing Results, 2021





Source: Processing Results, 2021

Figure 3 shows that Pagerharjo tourism village has good tourism products to serve as Muslimfriendly tourism, in addition to policies from the government that supports the existence of Muslim-friendly tourism activities. The institutional structure in Pagerharjo tourism village is still poorly coordinated. It impacts the presence of the existing tourism industry and marketing strategies that do not support Muslim-friendly tourism activities. Overall, the current condition of Pagerharjo tourism village is considered sufficient to be used as a Muslim-friendly tourist village. This is shown in figure 4, where the overall value of Pagerharjo tourism village as a Muslimfriendly tourism village is 53 (Paramarta et al. 2021).

Conclusion

Pagerharjo tourism village has several potentials that can be developed into a Muslim-friendly tourism village. Some of the potentials found in this research are; natural tourist attractions in the form of tea plantations, where this tea plantation is the only tea plantation in the province of DI Yogyakarta. Community life and the typical food of Pagerharjo tourism village can also be used as cultural attractions for the village. In addition, support in terms of accommodation in the form of homestay and the availability of worship (mosque/mushola) facilities for Muslim tourists have added value in the development of Muslim-friendly tourism villages. Another thing that has become a leading potential in the development of a Muslim-friendly tourism village in Pagerharjo tourism village is ambiance (environmental atmosphere), where the environmental atmosphere in Pagerharjo tourism village is very conducive for tourists. The cool natural environment, the availability of clean water, friendly local people, and a quiet atmosphere illustrate the environmental atmosphere in Pagerharjo tourism village tourism

Based on the assessment results of each pillar, element, and attribute, Pagerharjo tourism village has advantages in the product pillar, especially on the attribute "ambiance" and the pillar of policy, especially on the attribute "has a pre-determined superior area". Meanwhile, the attribute that still needs to be improved is the availability of slaughterhouses/poultry. Overall, Pagerharjo tourism village is considered sufficient to meet the criteria in developing a Muslim-friendly tourism village.

Conflict of Interests

The authors declare that they have no conflict of interests.

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References

- Adinugraha, H. H., Nasution, I. F. A., Faisal, F., Daulay, M., Harahap, I., Wildan, T., ... & Purwanto, A. (2021). Halal Tourism in Indonesia: An Indonesian Council of Ulama National Sharia Board Fatwa Perspective. *The Journal of Asian Finance, Economics and Business*, 8(3), 665-673. https://doi.org/10.13106/jafeb.2021.vol8.no3.0665
- Battour, M., & Ismail, M. N. (2016). Halal tourism: Concepts, practices, challenges, and future. *Tourism Management Perspectives, 19*, 150–154. <u>https://doi.org/10.1016/j.tmp.2015.12.008</u>
- Battour, M., Ismail, M. N., & Battor, M. (2011). The impact of destination attributes on Muslim tourist's choice. *International Journal of Tourism Research*, 13(6), 527–540. <u>https://doi.org/10.1002/jtr.824</u>
- Chang, L. L., Backman, K. F., & Huang, Y. C. (2014). Creative tourism: a preliminary examination of creative tourists' motivation, experience, perceived value and revisit intention.

International Journal of Culture, Tourism and Hospitality Research, 8(4), 401-419. https://doi.org/10.1108/IJCTHR-04-2014-0032

- Duman, T. (2019). Attributes of Muslim-friendly hospitality service in a process-based model. In *The Routledge Handbook of Halal Hospitality and Islamic Tourism* (pp. 53-69). Routledge. https://doi.org/10.4324/9781315150604-3
- Eid, R., & El-Gohary, H. (2015). Muslim Tourist Perceived Value in the Hospitality and Tourism Industry. *Journal of Travel Research*, 54(6), 774–787. https://doi.org/10.1177/0047287514532367
- Khullar, K. (2019). Mastercard-CrescentRating Global Muslim Travel Index (GMTI) 2019: Indonesia and Malaysia Take the Top Positions in the Fast-Growing Muslim Travel Market. Mastercard. <u>https://www.mastercard.com/news/ap/en/newsroom/press-releases/en/2019/april/mastercard-crescentrating-global-muslim-travel-index-gmti-2019-indonesia-and-malaysia-take-the-top-positions/</u>
- Morrison, A. M. (2013). Marketing and managing tourism destinations. Routledge.
- Moshin, A., Brochado, A., & Rodrigues, H. (2020). Halal tourism is traveling fast: Community perceptions and implications. *Journal of Destination Marketing & Management*, 18, 100503. <u>https://doi.org/10.1016/j.jdmm.2020.100503</u>
- Paramarta, V., Dewi, R. R. V. K., Rahmanita, F., Hidayati, S., & Sunarsi, D. (2021). Halal Tourism in Indonesia: Regional Regulation and Indonesian Ulama Council Perspective. International *Journal of Criminology and Sociology*, 10, 497-505. <u>https://doi.org/10.6000/1929-4409.2021.10.58</u>
- Pizam, A., Neumann, Y., & Reichel, A. (1978). Dimensions of Tourist Satisfaction with a Destination Area. Annals of Tourism Research, 5(3), 314–322. <u>https://doi.org/10.1016/0160-7383(78)90115-9</u>
- Preko, A., Mohammed, I., Gyepi-Garbrah, T. F., & Allaberganov, A. (2020). Islamic tourism: travel motivations, satisfaction and word of mouth, Ghana. *Journal of Islamic Marketing*, 12(1), 124-144. <u>https://doi.org/10.1108/JIMA-04-2019-0082</u>
- Rahman, M., Moghavvemi, S., Thirumoorthi, T., & Rahman, M. K. (2020). The impact of tourists' perceptions on halal tourism destination: A structural model analysis. *Tourism Review*, 75(3), 575-594. <u>https://doi.org/10.1108/TR-05-2019-0182</u>
- Shakona, M., Backman, K., Backman, S., Norman, W., Luo, Y., & Duffy, L. (2015). Understanding the traveling behavior of Muslims in the United States. International Journal of Culture, *Tourism and Hospitality Research*, 9(1), 22–35. <u>https://doi.org/10.1108/IJCTHR-05-2014-0036</u>
- Statista. (2020). *Total Muslim tourist arrivals* to Malaysia from 2015 to 2017, in millions*. Travel, Tourism & Hospitality. <u>https://www.statista.com/statistics/976514/total-muslim-tourist-arrivals-to-malaysia/</u>
- Sumaryadi, S., Sutono, A., Rahtomo, W., Rumayar, C. H., & Puksi, F. F. (2020). Smart Halal Destination Ecosystem: The Exploration of Halal Tourism Ecosystem Model. *Masyarakat*

Pariwisata: Journal of Community Services in Tourism, 1(1), 29-48. https://doi.org/10.34013/mp.v1i1.345

- Sumaryadi. Hurriyati. Ratih, Wibowo, Lili A., Gaffar, V. (2021). The Relationship Between the Quality of Destination and Tourist Satisfaction: The Role of Destination Attributes. *Journal of Asian Finance, Economics, and Business, 8*(4), 929-937. https://doi.org/10.13106/jafeb
- Sutono, A., Tahir, S., Sumaryadi, Hernowo, A., & Rahtomo, W. (2021). The Implementation of Halal Tourism Ecosystem Model in Borobudur Temple as Tourism Area. *Indonesian Journal of Halal Research*, *3*(1), 13–20. <u>https://doi.org/10.15575/ijhar.v3i1.11119</u>
- Tribe, J., & Snaith, T. (1998). From SERVQUAL to HOLSAT: holiday satisfaction in Varadero, Cuba. *Tourism management*, 19(1), 25-34. https://doi.org/10.1016/S0261-5177(97)00094-0
- Truong, T. H., & Foster, D. (2006). Using HOLSAT to evaluate tourist satisfaction at destinations: The case of Australian holidaymakers in Vietnam. *Tourism Management*, 27(5), 842–855. https://doi.org/10.1016/j.tourman.2005.05.008
- Vargas-Sánchez, A., & Moral-Moral, M. (2019). Halal tourism: literature review and experts' view. Journal of Islamic Marketing, 11(3), 549-569. <u>https://doi.org/10.1108/JIMA-04-2017-0039</u>

Wall, G., & Mathieson, A. (2006). *Tourism: change, impacts, and opportunities*. Pearson Education.

Weidenfeld, Adi and Amos S. Ron. (2008). Religious Needs in the Tourism Industry. An International Journal of Tourism and Hospitality Research, 19(2), 357-361. https://doi.org/10.1080/13032917.2008.9687080