THE RELATIONSHIP BETWEEN HUMAN CAPITAL, HALALPRENEURS’ DESIRE, AND HALAL AWARENESS: EMPIRICAL EVIDENCE FROM INDONESIA’S MICRO-ENTREPRENEURS

Dwi Nur’aini
Ihsan
Reni Kristiana
Ashuri
M. Nur Rianto Al
Ari
Zulpawati

†Universitas Islam Negeri Syarif Hidayatullah, Jakarta, Indonesia.
1Email: dwinuraini@uinjkt.ac.id Tel: +62818710289
2Email: Reni.kristiana20@mhs.uinjkt.ac.id Tel: +628129008400
3Email: nur.rianto@uinjkt.ac.id Tel: +62818118746
4Universitas Islam Negeri Mataram, Indonesia.
4Email: zulpawati@uinmataram.ac.id Tel: +6287880282338
(+ Corresponding author)

ABSTRACT

Awareness of halal products among consumers in Indonesia is increasing rapidly. Producers, especially micro-entrepreneurs, must address this to be ready to become halalpreneurs. This study examines the relationship between human capital and the desire to become halalpreneurs, with halal awareness as a moderating variable, using the partial least squares (PLS) method. A sample of 141 micro-entrepreneurs in the food sector from five provinces in Indonesia (Jakarta, Banten, West Java, Central Java, and East Java) was used. The results indicate a direct relationship between human capital and the decision of micro-entrepreneurs to become halalpreneurs. In addition, halal awareness is proven to moderate the relationship between human capital and the decision to become halalpreneurs. This result implies the importance of government support and policies in improving the competence, expertise, and knowledge of micro-enterprises about halal products.

Contribution/Originality: Research that discusses halalpreneurs is still very limited, especially in micro-enterprises. Therefore, this study makes a significant contribution to the literature by analyzing the factors that influence the desire of micro-entrepreneurs to become halalpreneurs.

1. INTRODUCTION

Law No. 33 of 2014 concerns halal product assurance and its derivative regulations. PP No. 31 of 2019 regarding the procedure and registration of halal certification is a law that requires MSMEs to have halal certification starting from October 17, 2019. This halal certification is required, especially in the food and beverage industry, with a transition period of five years, so from October 17, 2024, businesses should already have a certificate. This rule will mean that MSMEs are halalpreneurs. However, implementing this law will undoubtedly face many problems, especially for small entrepreneurs. Strengthening micro, small and medium enterprises is one of the efforts needed to develop the halal industry in Indonesia. MSMEs have a strategic role in the Indonesian economy. They are the most significant economic sector in Indonesia in terms of quantity, although the individual economic scale of MSME actors is still very small. The MSME sector can absorb more than 80% of the national
workforce, so this sector has significant capacity to strengthen the halal value chain (Anwari & Hati, 2020). As the most prominent business actor in the halal value chain, strengthening the MSME sector directly strengthens the halal industry and encourages the achievement of critical indicators or achievements, equity, welfare (welfare effect), and economic independence. SMEs have increasingly contributed to gross domestic product (GDP) year on year. Based on data released by the Ministry of Cooperatives and SMEs, the contribution of SMEs to GDP was Rp 5,721.1 trillion in 2018 and Rp 7,034.1 trillion in 2019, up 22.9% from 2018. Meanwhile, MSMEs contributed Rp 9,580.8 trillion to GDP in 2019, an increase of 5.7% compared to Rp 9,062.6 trillion in 2018. This substantial contribution is because most business units in Indonesia are MSMEs. The number of MSMEs in Indonesia reached 64.2 million, or 99.99% of business units. This includes 63.4 million micro-enterprises, 783.1 thousand small enterprises, and 60.7 thousand medium enterprises. In contrast, there are only 5.5 thousand large enterprises, or 0.01% of the total business units, in Indonesia.

However, as Indonesia's most significant economic sector, MSMEs have not made a significant contribution to the halal industry. Of the 1.6 million SMEs, only 10% have a halal certificate, which is necessary to build awareness of the production of halal products and is an obligation that must be carried out by entrepreneurs as an effort to protect both entrepreneurs and consumers. As a country with the largest Muslim population (87.18%), Indonesia has the potential to be a country with the largest halal industry in the world (Anwari & Hati, 2020). Although Indonesia has not been able to play a leading role in the development of the halal industry, the process and potential to become a center for the halal industry continues to be pursued, starting with halal certification. This certification indicates concern for Muslim-friendly products, services that make it easier for Muslims to practice their beliefs and showcases the government's attention to the halal industry development in Indonesia. One of the government's efforts is to produce the Indonesian Sharia Economic Masterplan for 2019–2024, which was implemented to drive sharia economic development, especially the halal industry, in the country (Ministry of National Development Planning, 2018). Indonesia is listed in fifth position as the world's producer of halal products in the category of halal tourism and Muslim fashion based on the Global Islamic Economy Report 2019/2020. Indonesia has gaps in the halal industry, including the generation gap, technology gap, ecosystem gap, leadership gap and human capital gap. Human capital problems faced by MSMEs to become halalpreneurs are partly due to the low skill and knowledge of human resources (Sudarmiatin, Anam, & Wafaretta, 2020; Unger, Rauch, Frese, & Rosenbusch, 2011; Wahab, 2004), the lack of technology used to manufacture products that comply with halal standards (Antara, Musa, & Hassan, 2016; Gunawan, 2020), and low literacy and awareness of halal product knowledge among small business actors (Pujono, Setyawati, & Idris, 2018; Widiastuti, Rusyidiana, Robani, Insani, & Muryani, 2020).

Sudarmiatin et al. (2020) explains that only about 10% of all micro-enterprises in Indonesia have been certified halal. This study found that halal awareness, halal knowledge, and challenges in obtaining certification did not affect intentions. Respondents know about and understand the halal certification process, but this knowledge does not guarantee that they will certify their products. However, internal and external pressures, such as the desire to have standardized products, encouragement from the government, and consumer expectations for halal products, can foster intentions to achieve halal certification. According to Soltanian, Zailani, Iranmanesh, and Aziz (2016), several factors influence halalpreneurial tendencies among SME entrepreneurs: halal entrepreneurship, intrinsic motivation, seeking opportunities, perceived desire, peer influence, perceived feasibility, and perceived government support. On the other hand, creativity and innovation, honesty and integrity, a risk-taking attitude, profit, and family do not support the desire to become halalpreneurial. Human capital indicators consisting of education, experience, knowledge, and skills have become a significant concern in developing successful MSMEs (Florin, Lubatkin, & Schulze, 2003; Sexton & Bowman, 1985). Halal awareness related to the knowledge possessed by producers to produce halal products according to Islamic law is also a concern in this study. Sudarmiatin et al. (2020) found that halal awareness, halal knowledge, and challenges in obtaining certification did not affect the intention to strive for halal certification. Knowledge of the halal process does not guarantee that they will certify...
their products. However, internal and external pressures, such as the desire to have standard products, encouragement from the government, and consumer expectations for halal products can foster intentions to become halal certified. Anwari and Hati (2020) explained that in awareness of halalpreneurship, intrinsic factors (motivation, looking for opportunities, relative advantages, perceived desire, family support, and perceived feasibility positively) have a positive effect on halalpreneurial tendencies. Meanwhile, creativity and innovation, honesty and integrity, perceived government support, peer influence, risk-taking attitudes, and religiosity do not affect the halalpreneurial tendencies of MSME entrepreneurs. The halal concept for entrepreneurs is not only on sharia terms, but they must also know the elements of raw materials, cleanliness, and safety in the production process (Baharuddin, Kassim, Nordin, & Buyong, 2015; Golnaz, Zainalabidin, Mad Nasir, & Eddie, 2010; Nassir & Shahira, 2009; Salaheldeen, Battour, Nazri, Bustamam, & Hashim, 2022; Widiastuti et al., 2020).

The explanation above shows that there are still gaps in the understanding of micro, small and medium enterprises regarding halal industry development. This shows that research gaps are still relevant to the desire to become halalpreneurs. Currently, there is no research that discusses halalpreneurs in micro-enterprises. This research contributes to at least two aspects: the obstacles to human capital in MSMEs, and how halal awareness in MSMEs can help them to become halalpreneurs.

2. METHODS

This study uses two data sources, primary data and secondary data. Primary data is obtained through interviews, focus group discussions, and questionnaires. Secondary data is obtained by searching journals and textbooks related to the research theme. The respondents comprised 141 business actors (MSMEs) in the food and beverage business in DKI Jakarta, Banten, West Java, Central Java, and East Java. This study uses descriptive methods for analysis and verification by testing the research hypotheses using the partial least squares (PLS) structural model. This method is used to determine the significant relationship between the variables studied to produce conclusions that will describe the object under study. In general, the explanatory research method is used in the PLS approach. The reason is that the PLS method has hypothesis testing. Looking at the probability value and t-statistics does hypothesis testing. This study uses the t-test values and p-values to measure the significance of the hypothesized relationship between the variables, which can be seen from the path coefficient. The path coefficient can be obtained from the t-test value (critical ratio), which is obtained from the bootstrapping process (resampling method). The p-value with 5% alpha, is less than 0.05. The t-table value for 5% alpha is 1.96. So, the criteria for accepting or rejecting the hypotheses are when Ha is accepted, and H0 is rejected, i.e., t-statistic > t-table.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Criterion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>66</td>
</tr>
<tr>
<td>Age</td>
<td>&lt; 20 years</td>
<td>12.8</td>
</tr>
<tr>
<td></td>
<td>21 – 35 years</td>
<td>24.8</td>
</tr>
<tr>
<td></td>
<td>36 – 55 years</td>
<td>58.9</td>
</tr>
<tr>
<td></td>
<td>&gt; 56 years</td>
<td>3.5</td>
</tr>
<tr>
<td>Education</td>
<td>Junior high school</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Senior high school</td>
<td>36.2</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
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</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>9.2</td>
</tr>
<tr>
<td>Province</td>
<td>DKI Jakarta</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Banten</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>West Java</td>
<td>55.3</td>
</tr>
<tr>
<td></td>
<td>Central Java</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>East Java</td>
<td>2.8</td>
</tr>
</tbody>
</table>
3. RESULTS AND DISCUSSION

Table 1 shows the descriptive data of the respondents in this study. The majority (66%) of the respondents were women. In terms of age, 58.9% were in the 36–55 age range. The second highest (24.8%) is in the 21–35 age range. Furthermore, in terms of education, the highest numbers of respondents were in both the senior high school and undergraduate categories with 36.2%. The distribution of respondents by province found the largest proportions to be in West Java and Jakarta, with 55.3% and 27%, respectively.

In designing the inner model for the relationship between constructs, this is based on the formulation of the problem or research hypotheses. Figure 1 shows the design view of the inner model using the SmartPLS software.

![Inner model design](image1)

**Figure 1.** Inner model design.

The outer model explains the relationship of each part of the indicator with the latent variable. Figure 2 shows the outer model design display using SmartPLS software.

![Outer model design](image2)

**Figure 2.** Outer model design.
In this study, the estimation of the model is carried out using the PLS algorithm in the SmartPLS application software. Provisions for testing the unidimensionality of each construct is done by looking at the convergent validity. The metrics of a construct must be highly correlated with the value of the rule of thumb used to assess convergent validity, with the loading factor value having to be more than 0.7 (Ghozali & Latan, 2015). According to Chin (1998) and Ghozali and Latan (2015) research in the early stages of developing a loading factor value of 0.5–0.6 is still considered sufficient.

Figure 3. Loading factor estimation for first model.

Figure 3 shows that there are indicators that have a loading factor below 0.50. The indicators are X1.5 (0.025), X1.6 (-0.101), and X1.14 (0.010) from the Human Capital construct. The indicator is then dropped or eliminated from the model and re-executed. From an R-squared value of 0.75, it can be concluded that the model is strong; from a value of 0.50, it can be concluded that the model is moderate; and from a value of 0.25, it can be concluded that the model is weak (Ghozali & Latan, 2015). Based on the R-squared results in Table 2, it shows that the inner model in the study is included in the "strong" model category. The R-squared ($R^2$) value of halalpreneurs (Z) is 0.846. It can therefore be interpreted that the constructs of human capital (X) and halal awareness (Y) can explain halalpreneurs (Z) by 84.6%.

Table 2. R-squared results.

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-squared</th>
<th>Adjusted R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halalpreneurs (Z)</td>
<td>0.846</td>
<td>0.843</td>
</tr>
</tbody>
</table>

Source: Data processing (2021).

Table 3 shows that the t-statistic value of human capital for halalpreneurs is 5.137. This value is greater than 1.96, so it can be concluded that human capital has a direct relationship with halalpreneurs. Table 3 also shows that the t-statistic value of halal awareness in moderating between human capital and halalpreneurs is 3.227. This value
is greater than 1.96; therefore, it can be concluded that there is a moderating effect of halal awareness on human capital and halalpreneurs.

This study shows a direct relationship between human capital and halalpreneurs. This result means that the human capital variable affects the desire of SMEs to become halalpreneurs. Human capital is still one of the biggest problems for MSMEs in becoming halalpreneurs. There is limited halal knowledge, a lack of attention to halal product standards, and low halal certification in MSMEs (Widiastuti et al., 2020). Behavioral factors, competencies, education, knowledge, and skills are the human capital factors that affect MSMEs in carrying out their business activities (Rafiki, AlKhalifa, & Buchari, 2014; Rafiki. & Abdul Wahab, 2016).

Halal entrepreneurship is a new concept that connects halal business activities for halalpreneurs (Anwari & Hati, 2020). According to Soltanian et al. (2016), halalpreneurs are individuals who innovate and maximize all available opportunities for halal business development. Rameli, Aziz, Wahab, and Amin (2014) explained that the characteristics of Muslimpreneurs or halalpreneurs must be realized by making taqwa the basis for work, which is the main priority of worshiping Allah, adopting halal practices, not wasting resources, having high morality, having a concern for welfare, being knowledgeable and protecting social environments and society.

Halalpreneurs involve all functions, activities, and actions related to the perception of opportunities and the creation of organizational goals. The process is a complex thing, because the process must understand halalpreneurs (Bustamam, 2012). The development of halalpreneurs has changed the way people understand business activities and their impact on consumer demand for halal products. Therefore, halalpreneurs are required to balance profit and fulfill halal requirements using halal business activities (Vargas-Hernández, Noruzi, & Sariolghalam, 2010).

Awareness of the importance of halal products in producing goods is very well realized by MSME actors (Rajendra & Kamarulzaman, 2019). The results of focus group discussions and in-depth interviews conducted with several MSMEs show that the desire of MSMEs to become halalpreneurs is very high. However, they experience several obstacles, such as lack of knowledge and competence regarding halal raw materials, high costs in preparing a production site, the high cost of applying for halal certification, and consumers continuing to buy products even though there is no halal certification on the product. This condition is because awareness of halal is still very low, both on the producer and consumer sides. The government must provide support for MSMEs so that they can learn about halal products and more quickly realize their desire to become halalpreneurs (Anwari & Hati, 2020; Tahir, Hanaysha, & Sultana, 2016). The results of this study also show that there is a moderating effect of halal awareness on human capital and halalpreneurs. This result means that halal awareness can strengthen human capital for halalpreneurs. Awareness of becoming halalpreneurs should be increased through education, campaigns, and government policies (Anwari & Hati, 2020; Soltanian et al., 2016; Viverita & Kusumastuti, 2017) so that the human capital factor can still be improved for the producers. Other factors that influence the tendency to want to become halalpreneurs include attitude, motivation, and willingness to look for opportunities (Anwari & Hati, 2020).

Halal awareness can be interpreted as an understanding of whether or not a Muslim follows a halal lifestyle, and understanding how the slaughtering process is carried out in accordance with halal guidelines and prioritizing the consumption of halal food (Ahmad, Abaidah, & Yahya, 2013). Pambudi (2018) defines halal awareness as an understanding of halal concepts, processes and principles, which ultimately prioritize halal food for consumption. To better understand the concepts, processes, and principles of halal, Muslims tend to be more careful in choosing

<table>
<thead>
<tr>
<th>Effect Between Variables</th>
<th>Original Sample (O)</th>
<th>Average Sample (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>t-Statistic (O/STDEV)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderation effect -&gt; Halalpreneurs (Z)</td>
<td>-0.008</td>
<td>-0.009</td>
<td>0.031</td>
<td>0.255</td>
<td>0.799</td>
</tr>
<tr>
<td>Human capital (X) -&gt; Halalpreneurs (Z)</td>
<td>0.490</td>
<td>0.501</td>
<td>0.095</td>
<td>5.137</td>
<td>0.000</td>
</tr>
<tr>
<td>Halal awareness (Y) -&gt; Halalpreneurs (Z)</td>
<td>0.421</td>
<td>0.403</td>
<td>0.130</td>
<td>3.227</td>
<td>0.001</td>
</tr>
</tbody>
</table>

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the products they will consume. Halal awareness also means understanding, perceiving, and feeling the value of halal. For consumers, halal awareness relates to consuming halal goods, such as food and beverages. For entrepreneurs, halal awareness refers to the production or sale of halal goods, including food and beverages) that have been produced according to the halal process. Thus, halal awareness helps encourage consumers to buy halal products (Anggraini & Dewanti, 2020; Aziz & Chok, 2013; Vizano, Khamaludin, & Fahlevis, 2021).

Halal products can be produced by both Muslims and non-Muslims. Entrepreneurs need to ensure coordination and participation of various parties in the product supply chain to prioritize 'halal' (Amarul, Sukirno, & Kurnia, 2019). Nassir and Shahira (2009) stated that halal awareness is the level of Muslims' understanding and desire to learn about issues related to the halal concept. This concept includes knowledge of the law and how the production process is based on halal standards. The measurement indicators include Awareness of Halalpreneurs, Intrinsic Motivation, Obligation, Creativity, and Innovation. Usman, Chairy, and Projo (2021) showed that religious commitment has a significant role in increasing halal awareness. Religiosity and halal awareness positively affect the purchase intention of halal food (Karimah & Darwanto, 2021; Mutmainah, 2018). The same result was also found by Jannah and Al-Banna (2021), that halal awareness affects consumer purchase intention and halal traceability. The level of literacy regarding halal awareness needs to be increased. Yasin, Mahmud, and Diniyya (2020) stated that financial literacy will encourage female entrepreneurs to start halal businesses. Besides that, this research also found other problems and barriers faced by female muslim entrepreneurs, such as lack of access to capital and finance, business operation and management skills, and government regulations.

4. CONCLUSION

This study examines the relationship between human capital and the desire to become halalpreneurs either directly or with a moderating variable in the form of halal awareness. The human capital variables, such as behavior, competence, education, knowledge, and expertise are directly related to micro-entrepreneurs' decisions to become halalpreneurs. Therefore, micro businesses need to improve the capabilities of their human resources. The level of halal awareness of micro-entrepreneurs is a moderating effect that determines the relationship between human capital and the desire to become halal entrepreneurs. Currently, halal awareness is increasing both from the consumer and producer sides. Therefore, producers must ensure that the business processes carried out follow sharia rules. Based on the research results, there are several policy recommendations that the government must carry out. First, it must provide training and education to improve the competence, knowledge, and capabilities of micro-entrepreneurs related to halal products. Second, it must help finance the halal certification process for micro-entrepreneurs. Third, it must establish a halal ecosystem for all halal industries in Indonesia. In addition, this research provides policy recommendations for micro-entrepreneurs. First, they must ensure that the business processes carried out are in accordance with sharia rules. Second, they must improve their human resource capabilities through education and training. Third, they must synergize with each other to identify an easy and inexpensive halal certification process.

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