

## **Digital Marketing Adoption Level in MSMEs of Halal Certified Food Products in Yogyakarta**

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### **Abstract**

The high consumption pattern of halal food in Indonesia and the large contribution of MSMEs to Gross Domestic Product (GDP) play a role in Indonesia's economic growth. The high pattern of halal consumption in Indonesia can open up great opportunities for halal food products to further strengthen the domestic market. Digital marketing is a strategy that utilizes technology or digital platforms to reach audiences, expand markets, build relationships with customers, so as to optimize sales. This study was conducted to measure the level of digital marketing adoption in MSMEs of halal-certified food and beverage products in the Special Region of Yogyakarta. This research uses a

quantitative approach, namely by distributing Likert scale questionnaires to 100 MSME players. The data obtained was analyzed using Likert scale interpretation to measure the level of digital marketing adoption that has been carried out by MSME players. The results showed that the level of digital marketing adoption was at a good level with an index of 63.09%.

## **Keywords**

Digital Marketing Adoption, Halal Products, Likert Scale, MSMEs

## **1. Introduction**

Micro, Small, and Medium Enterprises (MSMEs) is a businesses run by individuals or groups to improve the welfare of themselves or the group (Idayu et al., 2021). MSMEs act as one of the crucial elements in the Indonesian economy. This is due to its contribution to the Gross Domestic Product (GDP) of up to 61.07% or as much as 8,573.89 trillion rupiah (DJPB Kemenkeu, 2024). The scope of these MSMEs includes various sectors, including food, which is a basic need of the community.

The halal food sector is an important element in the Indonesian economy. The existence of regulations that encourage the importance of food products circulating in Indonesia must have a halal certificate refers to Law Number 33 of 2014. Indonesia is also a country with the largest Muslim population in the world, reaching 245.97 million people (87.08%) in 2024. Based on Databoks (2022), in 2020, halal food consumption in Indonesia reached US\$135 billion and is projected to increase in 2025 to reach US\$204 billion. This fact makes halal consumption patterns in Indonesia the largest in the world, while opening up great opportunities for halal food products to further strengthen the domestic market.

Despite having high opportunities, most MSME players have not been able to utilize digital media optimally (Aditya & Rusdianto, 2023). According to the Ministry of Cooperatives and SMEs of the Republic of Indonesia, it is stated that by 2024, only 22 million MSMEs or around 33.6% of the total MSMEs in Indonesia, have adopted digital platforms. This indicates that the application of digital marketing in MSMEs in Indonesia is still low. Conventional marketing strategies, such as direct sales, entrusting products to various stores, or oral-based promotions, are still widely practiced by MSME players (Setiawati et al., 2024).

Digital marketing is a marketing activity carried out by business actors through digital information technology or the internet with the intention of expanding market reach and building relationships with consumers (Kamil & Ridlo, 2024). The application of digital marketing can be a means to strengthen MSMEs of halal food products. According to research conducted by Setiawati et al. (2024), it is known that the adoption of digital marketing can strengthen business performance so that it can increase business income. On the other hand, research by Hanjaya et al. (2023) also revealed that the existence of digital marketing affects consumer decisions in buying a product. Through a survey organized by the Indonesian Internet Service Providers Association (APJII) in (2024), there are various social media platforms consisting of Facebook, Youtube, Tiktok, and Instagram which have high usage rates, so they can be utilized by MSMEs as a means of marketing products.

It can be seen that digital marketing is important for MSMEs to improve their business and boost the Indonesian economy. The importance of digital marketing has prompted the government to establish various programs to support digitalization in MSMEs, including the "MSME Level Up" program. The program initiated by the Ministry of Communication and Information Technology (Kominfo) or currently called the Ministry of Communication and Digital (Komdigi) has one of the objectives to support the adoption of digital marketing. This program was established to encourage MSME players to utilize digital technology more optimally to expand marketing reach, improve existence, and strengthen competitiveness (Komdigi, 2024).

Yogyakarta was chosen as the research location because it is one of the priority areas in MSME development programs, including the "MSME Level Up" program. As a student city and cultural city, Yogyakarta has strong market potential for MSME products. In addition, according to Databoks (2024), Yogyakarta Province has the highest internet penetration rate in Java, at 88.73%. This shows a great opportunity for MSMEs in Yogyakarta to utilize digital marketing as a strategy in developing their business. But in reality, based on BPS DIY (2022) data, out of 57,958 food MSMEs in Yogyakarta, only 11,319 or around 19.5% use digital technology in their business. This indicates a gap between the importance of digital marketing and its actual implementation in the field, so this study was conducted to

determine the level of digital marketing adoption that has been carried out by MSMEs of halal food products in Yogyakarta.

## 1.1 Objectives

The purpose of this study is to determine the level of digital marketing adoption applied by MSME players of halal food and beverage products in the Special Region of Yogyakarta. This research aims to provide an overview of the extent to which MSME players have integrated digital marketing strategies in their business operations, so that it can be the basis for developing strategies to increase the adoption of digital technology that is more effective and follows the characteristics of MSMEs in the halal food and beverage sector.

## 2. Literature Review

### 2.1. Micro, Small, and Medium Enterprises (MSMEs)

Micro (Idayu et al., 2021) Small and Medium Enterprises (MSMEs) is a business activity operated by individuals or groups to improve the welfare of themselves or the group. MSMEs are also defined as productive activities, both by individuals and legal entities that meet certain criteria (Fitriani et al., 2022).

Table 1 MSME Criteria

Category	Criteria	
	Business Capital	Annual Sales
Micro Business	≤ Rp 1000,000,000	≤ Rp 2,000,000,000
Small Business	Rp 1,000,000,000 - Rp 5,000,000,000	Rp 2,000,000,000 - Rp 15,000,000,000
Medium Business	Rp 5,000,000,000 - Rp 10,000,000,000	Rp 15,000,000,000 - Rp 50,000,000,000

Source: Government Regulation Number 7 of 2021

According to Government Regulation (PP) No. 7/2021, the grouping of MSMEs is based on the criteria of capital or annual sales. However, under certain conditions, criteria such as net worth, turnover, investment value, and number of workers can also be used as a reference for grouping MSMEs. Table 1 is a classification of MSMEs based on Government Regulation No. 7 of 2021, Chapter III, Article 35. The criteria in the classification are that land and business buildings are not taken into account.

### 2.2. Halal Products

Products are all forms that are provided to customers to be seen, used, owned, or consumed to meet one's needs or desires (Firmansyah, 2019). Afif & Krisdianto (2020) define a product as something that is created with hard work and is the result of a process. Meanwhile, halal includes vocabulary from Arabic, which means permitting. Halal can be defined as a rule in Islam that determines that something is allowed to be consumed by Muslims referring to the teachings of the Qur'an, Hadith, or Ijtihad (Saputra et al., 2021).

Based on this, it can be seen that halal products refer to Law Number 33 of 2014, namely products that have met halal status in accordance with Islamic law. In Surah Al-Baqarah [2] Verse 168, Allah emphasizes to humans to only eat halal and good food, and stay away from what is forbidden. Halal products are an effort to provide protection to Muslims in obtaining products that are guaranteed halal.

Referring to Surah Al-Ma'idah [5] Verse 3, it can be seen that the halal requirements for food products include the following (Fitri & Jumiono, 2021).

- Food products do not contain meat or ingredients that taste of pork.
- Food products are free from haraam ingredients.
- All ingredients including halal animals must be slaughtered in accordance with Islamic procedures.
- Places for storing, transporting, selling, processing and managing food products are not exposed to materials containing pork.
- Food products do not contain alcohol or khamr.

In an effort to ensure consumer protection regarding the halal status of products marketed in Indonesia, there are several regulations in Indonesia that regulate halal products with the main regulation being Law Number 33 of 2014 concerning Halal Product Guarantee. This law is the main legal basis that regulates halal product guarantees in

Indonesia. The main focus is to ensure legal certainty regarding the halal status of products marketed in Indonesia so that people feel safe to believe about the products in circulation (Fatima et al., 2023).

### **2.3. Digital Marketing**

Marketing by Seran et al. (2023) is defined as a process involving the efforts of a person or group to meet their needs by offering or exchanging products that have value. These activities include all activities to deliver products or services from producers to consumers, including promotion, advertising, sales, and distribution to consumers. Meanwhile, digital is a form of modernization or renewal in the use of technology that is closely related to the internet and information technology (Berutu et al., 2024).

Based on this, it can be seen that digital marketing is defined as a strategy that utilizes technology or digital platforms to reach audiences, expand markets, and build relationships with customers, so as to optimize sales (Indrapura & Fadli, 2023). According to Rauf et al. (2021), digital marketing is a branch of marketing that utilizes digital technology to sell products, making it easier for users to access information anywhere and anytime.

The application of digital marketing can make it easier for businesses to monitor, supervise, and provide for consumer needs, which can indirectly make it easier for consumers to find the product information they need (Susilowati et al., 2022). Digital marketing has advantages over conventional methods, including its rapid distribution and can be monitored in *real-time*, its wide geographic reach, and costs that tend to be cheaper compared to its usefulness. Digital marketing also participates in strengthening a brand image that can become sustainable branding for the business (Fadli et al., 2023).

The application of digital marketing can be done in several forms, according to Ayesha et al. (2022) including the following.

- a. *Website*, which is a site owned by a business to help consumers or the public understand existing businesses or products that are easily accessible to the public.
- b. *Search Engine Marketing* (SEM), which is marketing by optimizing website affordability in search results through paid collaboration with other parties.
- c. *Social Media Marketing*, which is marketing done by conveying information using social media such as Instagram, Facebook, Twitter, TikTok, or YouTube at a low or free cost to strengthen business branding.
- d. *Email Marketing*, which is a marketing strategy carried out by disseminating various information or promotions through *email*.
- e. *Video Marketing*, which is a marketing strategy to introduce products, build relationships with customers, and increase sales through videos that contain business branding or testimonials.
- f. *Online Advertising*, which is a paid marketing technique through the internet to disseminate information and reach consumers more quickly.

### **2.4. Digital Marketing Adoption Level**

Adoption is the stage of applying innovation by using and utilizing innovation to the fullest as a solution to meet their needs (Pratiwi et al., 2018). Referring to Isnian (2021), the level of adoption is the extent to which someone has accepted and implemented an innovation. Meanwhile, Kurniawan et al. (2022) define the level of adoption as the rate at which a person can accept or use new innovations, that are influenced by a person's ability to accept these innovations.

The level of digital marketing adoption can be interpreted as the extent to which a person can accept and implement innovations in the form of digital marketing. Based on the definition of digital marketing by Indrapura & Fadli (2023), which is a strategy that utilizes technology or digital platforms to reach audiences, expand markets, build relationships with customers, and optimize sales. So that the level of digital marketing adoption can be defined as the extent to which someone has accepted and utilized digital platforms to optimize sales by expanding market reach.

### 3. Methods

#### 3.1. Population

Population is a general research target that includes subjects or objects that have specific characteristics or varieties that have been designed by researchers (Riyanto & Hatmawan, 2020). This research population includes Micro, Small and Medium Enterprises (MSMEs) with halal-certified food products in the Special Region of Yogyakarta.

#### 3.2. Sample

According to Riyanto & Hatmawan (2020), samples are elements of the population that have the same characteristics so that they can represent the population. Determining the sample size of this study using the Lameshow method because the population size is not known with certainty. The Lemeshow method formula is as follows.

$$n = \frac{\left(\frac{Z_{1-\alpha}}{2}\right)^2 \times p \times (1-p)}{d^2} \quad (1)$$

Description:

n : Sample size

$\left(\frac{Z_{1-\alpha}}{2}\right)^2$  : Degree of confidence

p : Population proportion

d : Margin of error

The confidence level used in this study is 95% so that the accuracy level is 5% and the Z value is 1.96. The error rate set is 10% and the estimated population proportion is 50%. Based on this, it is obtained that the number of samples required is at least 97 samples.

#### 3.3. Data source

There are two sources of data in this study, including the following.

##### a. Primary Data

Primary data is information collected directly from the source by data collectors without intermediaries through observation, interviews, or questionnaires. The primary data used in this study are the results of a questionnaire regarding the level of adoption of digital marketing on halal-certified food products in the Special Region of Yogyakarta,

##### b. Secondary Data

Secondary data is information obtained from certain parties or indirectly from the source so that to understand it without the need for data processing (Riyanto & Hatmawan, 2020). This data contains question instruments used in the questionnaire.

#### 3.4. Data collection method

The primary data collection technique in this study was carried out through a questionnaire. The questionnaire is a way of collecting data by asking a series of questions related to the issue under study (Prawiyogi et al., 2021). The questionnaire used is a Likert scale type with a scale of 1-5 (Table 2).

Table 2 Likert Scale Measurement

Scale	Digital Marketing Adoption Level
1	Never
2	Rarely
3	Sometimes
4	Often
5	Always

Source: Sugiyono (2015)

According to Suasapha (2020), the Likert scale questionnaire consists of statements that contain a measurement scale of attitude choices that can be selected by respondents regarding their views on the statement. The technique of collecting questionnaire data using the *purposive sampling* method. *Purposive sampling* is the selection of samples through considering characteristics that are relevant and have a close relationship with the characteristics of the

population determined previously (Riyanto & Hatmawan, 2020). Samples were selected based on characteristics that are in accordance with the research focus, namely MSMEs with halal-certified food and beverage products located in the Special Region of Yogyakarta.

### **3.5. Analysis Method**

#### **3.5.1. Validity Test**

Validity test is a test that aims to assess the level of accuracy of measuring instruments or research instruments that can achieve measurement objectives (Maulana, 2022). The measuring instrument used in this study is a Likert scale questionnaire. The questionnaire is considered valid if the questions can accurately describe what will be measured using the questionnaire. The validity test is carried out through three stages, namely a *pilot study* and validity test of all the respondent data collected.

The validity test was carried out using the *Pearson correlation* test. The *Pearson correlation* test is a test to measure the extent of the relationship between variables (Gobel et al., 2024). This test is guided by the comparison of the value of the *r* table with the *r* count (Riyanto & Hatmawan, 2020).

#### **3.5.2. Reliability Test**

Reliability test is the level of consistency of the tool to assess something that is measured (Riyanto & Hatmawan, 2020). This test is divided into two, namely *pilot study* and overall data reliability test. Reliability test on this research questionnaire by measuring the *Cronbach's alpha* value. *Cronbach's alpha* is a test to measure the reliability of each question item so that it can be trusted and is suitable for use (Teni & Yudiyanto, 2021).

#### **3.5.3. Likert Scale Interpretation**

In the Likert scale interpretation analysis is carried out using descriptive statistics. Descriptive statistics is a statistical method that aims to collect and present data so that the information obtained is easy to understand (Martias, 2021). According to Riyanto & Hatmawan (2020), the interpretation of descriptive statistics can be in the form of averages, amounts, and standard deviations. To interpret the results of the digital marketing adoption level questionnaire, it refers to the classification used by Wahjusaputri & Purwanto (2022), which is as follows.

- a) Interval 0% - 19.99% = very bad
- b) Interval 20% - 39.99% = bad
- c) Interval 40% - 59.99% = fair
- d) Interval 60% - 79.99% = good
- e) Interval 80% - 100% = very good

**4. Data Collection** Respondents of this study are MSME actors who run their businesses in the field of food and beverage products. These MSMEs have halal certificates located in the Special Region of Yogyakarta, including Yogyakarta City, Bantul Regency, Sleman Regency, Gunung Kidul Regency, and Kulon Progo Regency. The total number of respondents was 100 respondents.

All respondents are characterized as business actors with an annual turnover of less than IDR 50,000,000,000 and capital of less than IDR 10,000,000,000 in accordance with the characteristics of MSMEs in Government Regulation Number 7 of 2021. Business actors come from various business scales and have various levels of digital marketing utilization in their businesses.

## 5. Results and Discussion

### 5.1 Numerical Results

#### 5.1.1. Validity Test and Reliability Test

Table 3. Validity Test

Item	R <sub>table</sub>	R <sub>calculated</sub>	Significance	Description
Q1	0,195	0,833	0,000	Valid
Q2	0,195	0,830	0,000	Valid
Q3	0,195	0,761	0,000	Valid
Q4	0,195	0,796	0,000	Valid
Q5	0,195	0,810	0,000	Valid
Q6	0,195	0,773	0,000	Valid
Q7	0,195	0,732	0,000	Valid
Q8	0,195	0,797	0,000	Valid
Q9	0,195	0,661	0,000	Valid
Q10	0,195	0,688	0,000	Valid
Q11	0,195	0,498	0,000	Valid

The results of the validity test on the digital marketing adoption level variable in Table 3 show that all question items with 100 respondents have an  $r_{\text{count}}$  value of more than 0.195 and a significance of less than 0.05. These results indicate that all question items on the digital marketing adoption level variable are considered valid, so they can be used in further analysis.

Table 4. Reliability Test

Variable	Number of Items	Cronbach's Alpha	Description
Digital Marketing Adoption Level	11	0,917	Reliable

Based on the results of the reliability test analysis in Table 4, it can be seen that all variables have a *Cronbach's alpha* value of more than 0.6. Based on this, it can be seen that all question items on each variable are declared reliable, so that the question items are suitable for further testing.

#### 5.1.2. Descriptive Statistical Analysis

Table 5. Respondent Demographic Data

Demographic Data	Number	Percentage
<b>Gender</b>		
Female	77	77%
Male	23	23%
<b>Age</b>		
<=20	4	4%
21-30	14	14%
31-40	24	24%
41-50	30	30%
51-60	25	25%
61-70	3	3%
<b>Last Education</b>		
Elementary School	3	3%

<b>Demographic Data</b>	<b>Number</b>	<b>Percentage</b>
Junior high school/equivalent	8	8%
High school/equivalent	46	46%
Diploma	10	10%
S-1 or S-2 or S-3	33	33%
<b>Position</b>		
Owner	91	91%
Manager	2	2%
Employees	7	7%
<b>Number of Outlets</b>		
1	89	89%
2	7	7%
3	0	0%
>3	4	4%
<b>Location</b>		
Yogyakarta City	29	29%
Sleman Regency	27	27%
Bantul Regency	34	34%
Gunung Kidul Regency	5	5%
Kulon Progo Regency	5	5%
<b>Duration of business</b>		
0 - 1 year	6	6%
1 - 5 Years	54	54%
5 - 10 Years	27	27%
>10 Years	13	13%
<b>Number of Workers</b>		
<10 Employees	98	98%
10 - 50 Employees	2	2%
>50	0	0%
<b>Capital</b>		
0 - Rp 10,000,000	79	79%
Rp 10,000,000 - Rp 50,000,000	18	18%
Rp 50,000,000 - Rp 100,000,000	0	0%
Rp 100,000,000 - Rp 1,000,000,000	3	3%
Rp 1,000,000,000 - Rp 5,000,000,000	0	0%
Rp 5,000,000,000 - Rp 10,000,000,000	0	0%
<b>Turnover</b>		
0 - Rp 5,000,000	66	66%



<b>Demographic Data</b>	<b>Number</b>	<b>Percentage</b>
Rp 5,000,000 - Rp 10,000,000	20	20%
Rp 10,000,000 - Rp 25,000,000	10	10%
Rp 25,000,000 - Rp 167,000,000	2	2%
IDR 167,000,000 - IDR 1,250,000,000	2	2%
IDR 1,250,000,000 - IDR 4,166,000,000	0	0%
<b>Use of Digital Marketing</b>		
Already using a digital marketing platform	83	83%
Not yet using a digital marketing platform	17	17%
<b>Use of Digital Payment</b>		
Already using a digital payment platform	80	80%
Not yet using a digital payment platform	20	20%

Table 5 shows the demographic data of the respondents who participated in this study including gender, age, latest education, job title, number of outlets, business location, length of business, number of workers, business capital, business turnover per month, use of digital marketing platforms, and use of digital payment platforms. The results showed that out of 100 respondents, 77 were women and 23 respondents were men. Then, there are as many respondents who have less than 20 years of age as 4 respondents. Respondents with an age range of 21 - 30 years are 14 respondents. Respondents with an age range of 31 - 40 years were 24 respondents. Respondents with an age range of 41 - 50 years are 30 respondents. Respondents with an age range of 51 - 60 years were 25 or 25% of respondents. While respondents with an age range of 61 - 70 years were 3% of respondents. The last education of the respondents consisted of elementary school as many as 3 respondents. There are 8 respondents with junior high school / equivalent education. Furthermore, in high school / equivalent education, there are 45 respondents. The last Diploma education was 10 respondents, while the last education was S-1 or S-2 or S-3 as many as 33 respondents. Respondents were dominated by business owners with a total of 91 respondents, while the others were managers with a total of 2 respondents and employees with a total of 7 respondents.

Table 5 also shows that the majority of MSMEs have a sales turnover of less than Rp 10,000,000 per month, totaling 66 MSMEs. This was followed by MSMEs with a turnover of Rp 5,000,000 to Rp 10,000,000 per month, totaling 20 MSMEs. In addition, there are 10 MSMEs with a turnover of Rp 10,000,000 to Rp 25,000,000 per month. Other MSMEs have a turnover of Rp 25,000,000 to Rp 167,000,000 per month as many as 2 MSMEs and a turnover of Rp 167,000,000 to Rp 1,250,000,000 per month as many as 2 MSMEs. These results when converted into turnover per year show that 98% of MSME players in this study are classified as micro businesses and 2% are classified as small scale. Then there are 83 respondents who have utilized digital marketing platforms. Meanwhile, 17 respondents have not used digital marketing platforms. As for the use of digital payment platforms, there are 20 respondents who have not used digital payment platforms and 80 respondents have used digital payment platforms.

Table 6. Distribution of Digital Marketing Platform Usage

Digital Marketing Platform	Number	Percentage
Instagram	51	27,42%
Facebook	29	15,59%
WhatsApp	89	47,85%
TikTok	15	8,06%
Twitter	1	0,54%
Shopee	1	0,54%
<b>Total</b>	<b>186</b>	<b>100%</b>

Table 6 shows that the use of the WhatsApp platform for marketing is the most dominant or most widely used by MSME players, reaching 47.85% of the total use of digital marketing platforms. The use of the Instagram platform reached 27.42% while Facebook reached 15.59% of the total use of digital marketing platforms. Then the TikTok platform reached 8.06%, Twitter 0.54%, and Shopee reached 0.54%. These results show that there are several MSME players who have used more than 1 digital marketing platform. In addition, these results also show that MSME players tend to choose platforms that are easy to use and familiar. Meanwhile, platforms such as TikTok, Twitter, and Shopee are still rarely used, possibly due to limited understanding or incompatibility with the market segment.

Table 7. Distribution of Digital Payment Platform Usage

Digital Payment Platform	Number	Percentage
QRIS	47	25,68%
OVO	9	4,92%
Gopay	15	8,20%
ShopeePay	17	9,29%
Bank Transfer	67	36,61%
Debit/Credit Card	5	2,73%
DANA	3	1,64%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table 7 shows that the most widely used digital payment method is the bank transfer method, which reaches 41.10% of the total use of digital payment platforms. Then followed by the QRIS method, which reached 28.83% and ShopeePay, which reached 10.43%. The use of other platforms is below 10%, namely using debit or *credit cards* as much as 9.20% and DANA as much as 5.52%. These results show that there are several MSME players who have used more than 1 digital payment platform.

### 5.1.3. Likert Scale Analysis

Table 8. Likert Scale Interpretation

Item	Total Score	Y	Index	Interpretation
Q1	358	500	71,60%	Good
Q2	361	500	72,20%	Good
Q3	374	500	74,80%	Good
Q4	320	500	64,00%	Good
Q5	356	500	71,20%	Good
Q6	303	500	60,60%	Good
Q7	337	500	67,40%	Good

Q8	326	500	65,20%	Good
Q9	253	500	50,60%	Fair
Q10	310	500	62,00%	Good
Q11	172	500	34,40%	Bad
Average			63,09%	Good

Likert scale interpretation analysis is carried out referring to the calculation and interpretation by Wahjusaputri & Purwanto (2022). Table 8 shows that the Likert scale interpretation results for each question are divided into 3, namely good, fair, and bad. Good interpretation is found in items Q1 to Q8 and Q10, with an index of 60.60% to 74.80%. Item Q9, which relates to the use of *e-commerce*, has an index of 50.60% which is interpreted as fair. Meanwhile, item Q11 regarding the use of the website produces an index of 34.40% which means poor. Overall, it can be seen that the average index is 63.09%, which means that the level of digital marketing adoption in MSMEs of halal food products in the Special Region of Yogyakarta is at a good level.

Based on the results of the Likert scale interpretation analysis, it can be seen that the level of digital marketing adoption of halal-certified food MSMEs in the Special Region of Yogyakarta is in the good category with an index of 63.09%. This indicates that most MSME players have utilized digital media, particularly digital marketing, to promote their products and do not rely solely on conventional marketing methods. These results are inseparable from the respondents' demographic data that the majority of respondents have high school and college education levels.

Although the adoption of digital marketing can be said to be good, it should be emphasized that the score is at the lower threshold for the good category. These results indicate that digital marketing practices in MSME players of halal food products in the Special Region of Yogyakarta have been carried out but not maximized. This is reinforced by the gap of 17% of MSME players who have not used digital platforms for marketing.

Digital marketing practices are still limited to social media such as WhatsApp, Instagram, and Facebook, which are the most dominant platforms for digital marketing. In addition, the results of the interpretation of question items regarding the use of e-commerce are in the moderate category and the use of websites is in the poor category. These results prove that the use of digital marketing platforms is limited to social media, which is practical and familiar compared to e-commerce and websites, which are more complex and require further management.

This limitation is also related to the majority of turnover generated by MSMEs, 66% of which is below Rp 5,000,000 and 79% of which has capital below Rp 10,000,000. This limited capital and turnover make MSME players prioritize marketing techniques that have minimal costs. E-commerce and websites are often seen as requiring large costs and capable human resources to operate. Therefore, many MSME players do not have a dedicated digital marketing team.

## 6. Conclusion

This study aims to measure the level of digital marketing adoption in MSME players of halal-certified food products in the Special Region of Yogyakarta. Based on the results of the Likert scale interpretation, it was found that the level of digital marketing adoption was in the good category, with an index of 63.09%. This shows that most MSME players have utilized digital technology in business activities, although there is still room for improvement, especially in terms of optimal and sustainable utilization of digital platforms.

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