Culinary MSME Business Development Model Post the COVID-19 Pandemic

Lela Nurlaela Wati¹*, Tazqia Amalia²
¹,²Universitas Teknologi Muhammadiyah, Indonesia

Abstract

The objective of this study is to examine the influence of distribution and digital marketing on the revenue and growth of culinary micro, small, and medium enterprises (MSMEs) in Jakarta. The research used quantitative research, and the sample consisted of 251 owners of MSMEs in the culinary sector in Jakarta. The data analyses were performed using the Structural Equation Model. The food distribution channel has a favorable and substantial influence on the revenue of MSMEs in Jakarta, however it does not directly impact on the growth and advancement of MSMEs. Food distribution routes have a notable indirect impact on growth. Digital marketing does not directly impact revenue, but it does have a beneficial influence on MSME’s growth and expansion. The presence of operating revenue has a favorable influence on the growth and progress of MSMEs in Jakarta. The findings of this study are valuable for advancing the field of marketing science by providing insights for stakeholders, serving as input for culinary MSMEs, and enhancing understanding of the impact of food distribution and digital marketing on MSMEs’ revenue and business growth. Consequently, MSMEs can adopt more effective business strategies and improve product sales. This study thoroughly investigates the direct and indirect impact of food distribution channels and digital marketing on the revenue and growth of MSMEs. This research is unique because it employs second-order confirmatory models, which address gaps in earlier studies that mostly focused on testing direct effects.

Keywords: Distribution; Digital Marketing; Business Income; SME Growth

INTRODUCTION

The COVID-19 epidemic has caused a 40-60% decline in the income of MSMEs in Indonesia. Nevertheless, the prevailing pandemic circumstances presented a favorable occasion for MSMEs to assume a prominent position in the nation’s shift toward endorsing digital transformation and supportive policies. Sustainable economy. MSMEs play a pivotal role in the Indonesian economy, exerting significant influence in the Southeast Asian region. MSMEs in Indonesia play a significant role in the economy, employing 97% of the workforce and contributing to 61% of the country’s GDP. MSMEs have a significant impact on Indonesia’s economic growth and serve as the fundamental basis of the country’s economy, as evidenced by their contribution to the increase in gross domestic product (Susanti et al., 2023).

The growth of MSMEs in Indonesia is hindered by various challenges. These include the lack of financial resources and inadequate management skills, particularly in areas such as production, marketing, and human resource management. MSME development is a crucial undertaking that must be initiated by MSME actors themselves, leveraging their potential to foster business innovation through the utilization of advancing technological resources. This is essential for the survival and growth of MSMEs in the post-Covid-19 era (Aisyah et al., 2020).

According to the production factor theory, there is a strong correlation between the level of income and the quantity of output or production. According to the theory of production factors,
the income of MSMEs is determined by the extent of their production capacity. Therefore, the larger the firm’s capital, the greater its potential to produce goods and services. Nevertheless, if MSMEs have financial backing from big corporations but lack effective marketing tactics, their production will not provide the desired outcomes and will strongly correlate with their revenue level of the MSMEs. MSMEs in Jakarta, particularly those in the culinary food and beverage sector, saw a decrease in income due to the COVID-19 outbreak. MSMEs have made significant contributions to the development of the Jakarta region and the reduction of unemployment in Jakarta.

The primary challenge faced by MSMEs that engage in large-scale production is typically related to issues within the food distribution systems. Expanding the marketing area increases the number of challenges encountered, necessitating the distribution of inventory to each site and careful management to ensure ideal inventory levels. It is crucial to prevent the accumulation of food supplies, which can lead to high storage expenses and product deterioration. (Adawiyah, 2013). The findings of a preliminary survey conducted on culinary MSMEs in Jakarta indicate that there were issues with the distribution routes for food during the pandemic. The presence of obstacles in food distribution channels adversely affects the efficient production and sales of MSMEs, leading to a decrease in income and impeding the growth of MSMEs in Jakarta. In addition to challenges in food distribution, numerous MSMEs have failed to effectively utilize the Internet as a digital marketing strategy to promote their products. Despite the advantages of digital marketing, such as its ability to reach a wide audience and serve as a diverse platform for information exchange, many MSMEs have yet to tap into its potential. Digital marketing can expand market share without any restrictions and has been demonstrated to boost the sales and revenue of MSMEs (Dassou et al., 2019), (Lee et al., 2018), (Lateh et al., 2017), (Porto et al., 2017), (Wilcox & Moore, 2016).

Findings from earlier studies on the impact of digital distribution and marketing channels on business revenue and the growth of MSMEs remain inconclusive. The beneficial impact of food distribution channels on business revenue is supported by the research studies conducted by Hasanuddin et al. (2020), Anggraini (2018), Greene & Welch (2018), Lee & Lin (2018), Guellec & Paunov (2017), Kharisma et al. (2020), Xing et al. (2020), and Siregar et al. (2020). However, there are contrasting outcomes when regarding food distribution. According to Setiyarti and Wardhana (2018), there is no evidence to suggest that it has a beneficial impact on business revenue. The favorable impact of distribution channels on business development has been documented in previous studies conducted by Jacyna-Gołda et al. (2014), Krisnawati (2018), and Giles et al. (2018). Previous studies have demonstrated a significant positive correlation between digital marketing and business income. This has been documented by various researchers, including Widyayanti & Insiatiningsih (2021), Kusnia & Nur (2021), Hernita et al. (2021), Revida & Sudarwati (2019), Dassou et al. (2019), Lee et al. (2018), Lateh et al. (2017), Porto et al. (2017), Wilcox & Moore (2016), and Priyankara (2014). Prior studies on digital marketing have demonstrated a substantial and favorable influence on business growth, as evidenced by the works of Shyu et al. (2015) and Warokka et al. (2020). The earlier research conducted by Lateh et al. (2017) and Ranjbar & Rassekh (2017) established a strong favorable influence of business income on business development.

The impact of distribution channels on business income has been examined in earlier studies conducted by Hasanuddin et al. (2020), Anggraini (2018), Lee & Lin (2018), and Kharisma et al. (2020). Previous research has shown that digital marketing has a significant positive impact on business development and income. This influence has been documented by several studies, including those conducted by Widyayanti & Insiatiningsih (2021), Kusnia & Nur (2021), Hernita et al. (2021), Revida & Sudarwati (2019), Mukherjee (2017), Wilcox & Moore (2016), Warokka et al. (2020), and Priyankara (2014).

This research investigates how business income acts as a mediator in the relationship
between food distribution routes, digital marketing, and the growth of MSMEs. This research diverges from earlier studies that extensively investigated the direct and indirect impact of food distribution channels and digital marketing on the financial performance and growth of MSMEs. Prior studies mostly examined the impact through various models. In contrast, this study incorporates second-order confirmatory dimensions for all research variables, which helps address gaps in earlier research and contributes to its high level of originality.

**LITERATURE REVIEW**

The resource-based view (RBV) is commonly employed to demonstrate how firms can attain greater performance and gain a competitive advantage (Susanti et al., 2022). In the context of MSMEs, the RBV theory states that business actors consist of a distinct and diverse set of resources that play a crucial role in the organization. This study draws on the resource-based view (RBV) theory and the production theory as theoretical frameworks to underpin this research.

**Impact of Distribution Channels on MSME Revenue**

Business income is a crucial factor for entrepreneurs and corporations as it encompasses the earnings, revenue, and profits generated by a business (Maulana et al., 2018). Food distribution is one of the elements that affect the income of culinary MSMEs in Jakarta. Distribution refers to a network of individuals or entities inside an organization that are capable of carrying out the necessary tasks to transport a product or service from the producer to the end customer. Distribution facilitates the efficient and streamlined transportation of goods and services from producers to consumers, enabling customers to promptly fulfill their demands (Pangestu et al., 2020).

The role of distribution activities in the contemporary economy is crucial. With the advancements in information technology and transportation technology, it is evident that distribution channels play a significant role in the success of product production and marketing. Distribution obstacles can profoundly affect the entire business system (Kho, 2019). Previous research has shown that distribution channels have a positive impact on business income, as evidenced by studies conducted by Hasanuddin et al. (2020), Anggraini (2018), Greene & Welch (2018), Lee & Lin (2018), Guellec & Paunov (2017), Kharisma et al. (2020), Xing et al. (2020), and Siregar et al. (2020). Given the information provided, the following initial hypothesis is formulated:

Hypothesis 1: Distribution channels have a beneficial impact on the income of MSMEs.

**Impact of Digital Marketing on MSME’s Revenue**

Digital marketing refers to the strategic activities undertaken to promote products and services and establish customer connections via the use of the Internet. Digital marketing refers to marketing operations conducted digitally using Internet technology. It is considered the most captivating and rapidly expanding segment of marketing. Digital marketing is the strategic utilization of online platforms to effectively communicate a company's brand, product, or service to consumers (Hestanto, 2021). By implementing the strategies and tactics used in digital marketing, such as email marketing, social media marketing, display advertising, search engine optimization, and other ways.

The objective of digital marketing is to enable consumers to engage in activities such as reading, searching, shopping, or socializing digitally. Another determinant believed to impact the revenue of Jakarta Culinary MSMEs is digital marketing, as there are still numerous MSMEs that possess limited digital literacy, particularly micro-enterprises. Prior studies have demonstrated the ability of digital marketing to enhance business revenue, as evidenced by the works of Widyayanti & Insatiningsih (2021), Kusnia & Nur (2021), Hernita et al. (2021), Revida & Sudarwati (2019).
Based on this description, a second hypothesis is described.

**Hypothesis 2:** Digital marketing has a beneficial impact on the income of MSMEs.

**Impact of Distribution Channels on the Growth of MSMEs**

Distribution is an economic process that involves the movement of goods from producers to consumers to provide products that have been produced. Distribution operations encompass several processes, such as trading, transportation, and storage, among others, that are involved in delivering goods or services to customers for their tangible experience. Distribution is an economic activity connected to the production and consumption processes. If distribution routes are hindered, it would also hinder economic activities (Annaisabiru, 2018) observed that traders’ prevailing expectations and attitude of raising prices, despite normal supplies, coupled with weather-related delays in food production delivery and the absence of collateral for food distribution in certain regions, can pose challenges to food distribution (Faisal, 2021). Food distribution obstacles may also arise from road renovations and market accidents. The pandemic has had a significant influence on the growth of culinary enterprises in Jakarta, resulting in many challenges. Previous studies have investigated the impact of distribution channels on business development and found that distribution channels have a substantial role in influencing business development (Jacyna-Gołda et al., 2014; Krisnawati, 2018; Giles et al., 2018). Based on this description, a third hypothesis is described.

**Hypothesis 3:** Distribution channels have a beneficial impact on the growth of MSMEs.

**Impact of Digital Marketing on the Growth of MSMEs**

Utilizing digital marketing strategies can expedite the collaboration between MSMEs and large corporations to enhance the visibility and promotion of their products. Consumers today favor digital marketing because it allows them to easily access information. Consumers are not affected by the constraints of distance, and the cost of goods is comparatively low due to the presence of several rivals. Micro, Small, and Medium Enterprises (MSME) can enhance their marketing efforts by leveraging technology to target a broader spectrum of consumers. The use of this digital marketing approach might yield favorable outcomes for the firm, thus fostering the continuous growth of MSMEs. Previous studies have demonstrated that digital marketing has a favorable impact on business development, as evidenced by studies conducted by Shyu et al. (2015) and Warokka et al. (2020). Based on this description, a fourth hypothesis is described.

**Hypothesis 4:** Digital marketing has a beneficial impact on the growth of MSMEs.

**Effect of MSME Revenue on the Growth of MSMEs**

The measure of success in growing a small firm can be determined by the rise in sales revenue. As income increases, MSMEs have greater opportunities to expand and grow their businesses. The key determinants for the growth of MSMEs, in addition to income, are MSMEs that possess adequate capital resources, enjoy extensive access to investors, raw materials suppliers, potential consumers, and other stakeholders, and demonstrate excellent competitiveness. This is corroborated by prior studies indicating that business revenue has a favorable impact on business growth (Lateh et al., 2017) (Ranjbar & Rassekh, 2017). From this description, the fifth hypothesis is created.

**Hypothesis 5:** MSMEs revenue has a beneficial impact on the growth of MSMEs.

**Impact of Distribution Channels on the Growth of MSMEs via Business Revenue**

Distance poses a significant challenge for culinary MSMEs in Jakarta when it comes to
distributing raw materials, along with considerations of location and transportation. The user’s text is a single letter "D". Climate change also hinders dispersal. At what time occurrence of heavy rainfall during the rainy season lead to floods in various parts of Jakarta, resulting in restricted transportation access? This, in turn, negatively affects the sales turnover of MSMEs and consequently hampers their growth of MSMEs in the culinary sector in Jakarta.

Previous research has shown that distribution channels positively impact business development and income. This is supported by studies conducted by Hasanuddin et al. (2020), Anggraini (2018), and Kharisma et al. (2020). Based on this description, a sixth hypothesis is described.

**Hypothesis 6**: Distribution Channels have a beneficial impact on MSMEs growth by increasing MSMEs revenue.

**Impact of Digital Marketing on the Growth of MSMEs via Business Revenue**

Digital marketing is a strategic approach to advertising products that can significantly impact a business’ revenues. Since this marketing activity is conducted online, it necessitates the usage of Internet platforms, digital shopping applications, and other related applications. The objective of digital marketing initiatives is to disseminate information on business products to consumers and enhance consumer purchasing inclination. The impact of digital marketing on boosting sales and income for MSMEs is well-documented. As a result, many business owners have successfully expanded their operations, transitioning from microbusinesses to small businesses, and further upgrading to medium-sized enterprises. Previous research supports the notion that digital marketing positively impacts business development and increases business income. This is evidenced by studies conducted by Widyayanti & Insiatiningsih (2021), Kusnia & Nur (2021), Lesmana and Valentina (2021), Sunardi et al. (2021), Revida & Sudarwati (2019), Mukherjee (2017), Wilcox & Moore (2016), Warokka et al. (2020), and Priyankara (2014). Based on this description, a seventh hypothesis is described.

**Hypothesis 7**: Digital marketing has a beneficial impact on MSMEs growth by increasing MSMEs revenue.

The conceptual framework model, as depicted in Figure 1 below, explains the link between variables and the formation of the hypothesis based on the underlying theory.

![Figure 1. Conceptual Framework](image)

**RESEARCH METHOD**

The study methodology employs a quantitative approach by examining the causal relationship between variables. A total of 251 MSME actors in Jakarta were selected as the sample for this research utilizing a purposive sampling method. The employment of the Structural Equation Model...
(SEM) with Second Order Confirmatory is employed for data analysis due to its ability to incorporate dimensions in the measurement of study variables. The exogenous constructs in this study include food distribution networks (X1) and digital marketing (X2). The concept of food distribution channels can be broken down into three distinct sub-variables or dimensions: place, time, and form. Meanwhile, digital marketing can be broken down into five sub-variables or dimensions: website development, search engine optimization (SEO), affiliate marketing, social networking, and customer relationship management. Endogenous constructs refer to factors influenced or determined by one or more other constructs (Wati, 2021). The focal constructs in this study are business income (Y) and business development (Z), both of which are endogenous variables.

Table 1. Operational Variables

| Variable                  | Dimension | Question indicator                                                                 | Source                                           |
|---------------------------|-----------|------------------------------------------------------------------------------------|                                                 |
| Distribution channels     | 1. Place  | 1. Number of distributors  
2. Distributors have a large amount of food supplies in stock  
3. The business premises are always operational | Kho (2019), Greene & Welch (2018), Xing et al. (2020) |
|                           | 2. Time   | 1. Speed of delivery  
2. Availability of food according to the time required  
3. Delivery according to the agreed time |                                                 |
|                           | 3. Form   | 1. All business menus are always available  
2. Food availability is met  
3. The quality of the food is good |                                                 |
| Digital marketing         | 1. Website| 1. Makes it easier to find consumers  
2. Making purchases digitally  
3. Improve product marketing | Hestanto, (2021), Widyayanti & Insiantingsih (2021), Lee et al. (2018) |
|                           | 2. Search engine optimization (SEO) | 1. Make consumers to find products  
2. Speed accessibility information  
3. Availability information |                                                 |
|                           | 3. Affiliate marketing | 1. Cooperate with other parties  
2. Can minimize food ingredients  
3. Carrying out digital marketing activities |                                                 |
|                           | 4. Social Networking | 1. Makes it easier to find new consumers  
2. Increase in consumers through social media  
3. Consumers increase |                                                 |
5. **Customer Relationship Management**

| MSME revenue | 1. Income | 1. Business profit increase.  
2. Consumers are increasing.  
|--------------|-----------|--------------------------------------------------|
| 2. Budget    | 1. Business has increased.  
2. Venture capital increases.  
3. Food prices rise. |
2. Difficulty finding additional capital.  
3. Operating expenses increase |

Maulana et al. (2018), Xing et al. (2020), Susanti et al. (2022)

| MSME growth | 1. Association | 1. Delays in opening new branches  
2. Growing Business  
3. Maintained consumer relations |
|--------------|----------------|--------------------------------------------------------------------------------------------------|
| 2. Promotion | 1. Digital marketing can increase consumers  
2. Provide sales benefits in promoting products.  
3. Promotion can develop businesses. |
2. Effective cooperation in conducting business development.  

Giles et al. (2018), Shyu et al. (2015)

Source: Author development (2023)

The next step is to conduct an analysis of the relationship between variables using the approach direct and indirect relationships using structural equation models and translate them into equation form (research model) as follows:

\[
Rev = \beta_1Dist + \beta_2Dig + \epsilon_1 \quad \text{(Equation 1)}
\]

\[
Growth = \beta_3Dist + \beta_4Dig + \beta_5Rev + \beta_{6Rev} + \beta_{7Rev} + \epsilon_2 \quad \text{(Equation 2)}
\]

RESULTS

Descriptive Analysis

The characteristics of the respondents in this study are explained in Table 2 below:
Table 2. Characteristics of the Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Amount</th>
<th>Percentage</th>
<th>Age</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>118</td>
<td>47%</td>
<td>&lt; 30</td>
<td>123</td>
<td>48.6%</td>
</tr>
<tr>
<td>Woman</td>
<td>133</td>
<td>53%</td>
<td>30-45</td>
<td>85</td>
<td>33.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 45</td>
<td>43</td>
<td>17.5%</td>
</tr>
<tr>
<td>Amount</td>
<td>251</td>
<td>100%</td>
<td>Amount</td>
<td>251</td>
<td>100%</td>
</tr>
</tbody>
</table>

The type of Business

<table>
<thead>
<tr>
<th>Business</th>
<th>Amount</th>
<th>Present</th>
<th>Monthly Business (in million IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>118</td>
<td>47%</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Drink</td>
<td>34</td>
<td>13.5%</td>
<td>2-6</td>
</tr>
<tr>
<td>Food &amp; Drink</td>
<td>99</td>
<td>39.4%</td>
<td>&gt; 6</td>
</tr>
<tr>
<td>Amount</td>
<td>251</td>
<td>100%</td>
<td>Amount</td>
</tr>
</tbody>
</table>

Source: Author Calculation (2023)

According to the questionnaire findings, most MSMEs are predominantly run by men who are on average under the age of 30 years. The majority of these businesses generate a monthly income ranging from 2 to 6 million, with the food industry being the most common type of business.

Assessment of Validity and Reliability

According to the Smart PLS output data, there are still certain indication loading factor values that are less than 0.5. Indicators with factor loadings below 0.5 were eliminated due to their poor convergent validity values. Specifically, indicators Y5, Y6, Y7, Y8, Y9, and Z1 were removed. A variable is considered to be good in research if it exhibits a construct reliability of over 0.7. Table 3 presents the findings from reliability testing for each dimension of the latent variables related to food distribution channels, digital marketing, business income, and business development.

Table 3. Testing for Reliability

<table>
<thead>
<tr>
<th>Dimensional Variables</th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>Cronbachs Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to Food Distribution (X1)</td>
<td>0.639</td>
<td>0.941</td>
<td>0.929</td>
</tr>
<tr>
<td>Place</td>
<td>0.744</td>
<td>0.897</td>
<td>0.828</td>
</tr>
<tr>
<td>Time</td>
<td>0.824</td>
<td>0.934</td>
<td>0.893</td>
</tr>
<tr>
<td>Form</td>
<td>0.741</td>
<td>0.896</td>
<td>0.825</td>
</tr>
<tr>
<td>Digital Marketing (X2)</td>
<td>0.604</td>
<td>0.958</td>
<td>0.953</td>
</tr>
<tr>
<td>Website</td>
<td>0.730</td>
<td>0.890</td>
<td>0.814</td>
</tr>
<tr>
<td>Search Engine Optimization</td>
<td>0.840</td>
<td>0.940</td>
<td>0.904</td>
</tr>
<tr>
<td>Affiliate Marketing</td>
<td>0.638</td>
<td>0.841</td>
<td>0.717</td>
</tr>
<tr>
<td>Social networking</td>
<td>0.870</td>
<td>0.953</td>
<td>0.925</td>
</tr>
<tr>
<td>Customer Relationship Management</td>
<td>0.782</td>
<td>0.915</td>
<td>0.860</td>
</tr>
<tr>
<td>Business Income (Y)</td>
<td>0.859</td>
<td>0.961</td>
<td>0.945</td>
</tr>
<tr>
<td>Business Development (Z)</td>
<td>0.455</td>
<td>0.927</td>
<td>0.916</td>
</tr>
</tbody>
</table>
Based on the data presented in Table 3, it can be inferred that all dimensions within the variables of food distribution channels, digital marketing, business income, and business development have a composite reliability score above 0.7. Therefore, it can be concluded that the indicators used in each dimension have a satisfactory level of reliability and are capable of accurately measuring the construct. Mean Variation The extracted value is significantly high, with nearly all AVE values over 0.5, except for business development, which has a value of 0.455. However, even though it falls slightly below the threshold, it is still judged to be submarginal and fits the criteria for convergent validity in the research variables.

### Evaluation of the Goodness of Fit of the Structural Model (Inner Model)

Assessing the adequacy of the model’s fit the measurement of structural integrity is determined by the predictive relevance value (P2). Table 4 explains the results obtained from the examination of the coefficient of determination for the research variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Income (Y)</td>
<td>0.591</td>
</tr>
<tr>
<td>Business Development (Z)</td>
<td>0.994</td>
</tr>
<tr>
<td>Predictive-Relevance (Q2)</td>
<td>0.998</td>
</tr>
</tbody>
</table>

According to the information provided in Table 4, the R² value for business income is 0.591. This indicates that 59.1% of the variation in business income can be described by food distribution and digital marketing, while the remaining 40.9% is impacted by other variables that are not included in the study model. The R² value for MSME development is 0.994, suggesting that 99.4% of the variation in the business development variable can be described by the food distribution, digital marketing, and company income variables. The remaining 0.6% was impacted by other variables that were not included in this study model.

The assessment of the internal model has yielded highly favorable outcomes in elucidating business revenue and business growth factors. The predictive relevance value of the structural model in this study is 0.998 or 99.8%. This indicates that the model explains the relationship between business development and many factors, including business income, distribution channels, and digital marketing. This model exhibits a high degree of prediction accuracy, making it suitable for hypothesis testing purposes.

### Conducting a Hypothesis Test

All aspects of the research variables were significant in constructing the construct. The characteristics of place, time, and form constitute the food distribution routes. The digital marketing framework comprises websites, search engine optimization, affiliate marketing, social networking, and customer relationship management. The establishment of MSME development is achieved through amalgamation, advocacy, and collaboration.
Table 5. Hypothesis Testing Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Parameter Coefficient</th>
<th>T statistic</th>
<th>P value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>0.738</td>
<td>15.510</td>
<td>0.000</td>
<td>Significant**</td>
</tr>
<tr>
<td>H₂</td>
<td>0.040</td>
<td>0.760</td>
<td>0.224</td>
<td>Not significant</td>
</tr>
<tr>
<td>H₃</td>
<td>0.018</td>
<td>1.596</td>
<td>0.056</td>
<td>Not significant</td>
</tr>
<tr>
<td>H₄</td>
<td>0.074</td>
<td>2.912</td>
<td>0.002</td>
<td>Significant**</td>
</tr>
<tr>
<td>H₅</td>
<td>0.247</td>
<td>5.526</td>
<td>0.000</td>
<td>Significant**</td>
</tr>
<tr>
<td>H₆</td>
<td>0.182</td>
<td>5.533</td>
<td>0.000</td>
<td>Significant**</td>
</tr>
<tr>
<td>H₇</td>
<td>0.010</td>
<td>0.743</td>
<td>0.229</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Source: Author Calculation (2023)

The VAF value in this research model can be estimated based on the table parameter coefficient values that have been created above.

\[
VAF = \frac{\text{Direct Influence}}{\text{Total Influence}}
\]

\[
\text{Distribution VAF} = \frac{0.182}{0.182 + 0.018} = 0.91
\]

\[
\text{Digital VAF} = \frac{0.010}{0.010 + 0.074} = 0.1190
\]

Variance Accounted for (VAF) quantifies the extent to which the mediating variable can absorb the previously considerable direct influence of the model without mediation. A VAF value above 80% indicates that the mediating variable fully mediates the relationship. A VAF value ranging from 20% to 80% is classified as partial mediation. However, when the value of the Variance Accounted For (VAF) is below 20%, researchers can confidently determine that a negligible mediation effect is present (Wati, 2021).

The computations above provide a value. The Variance Accounted for (VAF) food distribution is 91%, indicating that food distribution channels fully mediate the impact on business expansion through business income. Mark The Variance Accounted for (VAF) of digital marketing is 11.90%, indicating that digital marketing does not have a mediating influence on business development and business income.

**DISCUSSION**

**Impact of Distribution on MSME’s Revenue**

The empirical findings of the initial hypothesis demonstrate a robust and statistically significant relationship between distribution channels and business income, indicating a beneficial impact. Food distribution channels in Jakarta have a significant impact on the income of MSME businesses. One of the main factors is the difficulty in getting food, which may be attributed to delays in delivery, insufficient food stock for processing, and subpar food quality. Culinary MSMEs in Jakarta faced a decrease in their business revenue due to disruptions in distribution networks following the epidemic, as the economic recovery remained sluggish. If there are insurmountable impediments to food distribution, the commercial income of culinary MSMEs will continue to decrease.
Empirical research demonstrates that the food distribution channels play a crucial role in influencing the income of MSMEs in Jakarta. Improved food distribution routes directly correlate with increased income for MSME businesses, and conversely, a decline in distribution channels would decrease income. The empirical evidence presented by Hasanuddin et al. (2020), Anggraini (2018), Greene & Welch (2018), Lee & Lin (2018), Guellec & Paunov (2017), Kharisma et al. (2020), Xing et al. (2020), and Siregar et al. (2020) supports the notion that distribution channels have the potential to enhance business revenue.

**The Impact of Digital Marketing on MSMEs Revenue**

The findings of testing the second hypothesis indicate no statistically significant correlation between digital marketing and firm income. This indicates that the income of MSME businesses in Jakarta is not influenced by digital marketing. The advancement of technology has led MSME players to utilize technology for marketing their products. One approach is to implement digital marketing strategies through social media platforms or by collaborating with other entities such as GrabFood and GoFood. Amidst the epidemic, culinary MSME players in Jakarta turned to digital marketing as a strategy to promote their products, optimize distribution networks, and generate company revenue using technology. Nevertheless, as the pandemic subsided, the utilization of digital marketing for culinary MSMEs in Jakarta did not yield any discernible impact on augmenting MSME revenue. This phenomenon occurs due to the regular operation of office activities in the Jakarta region, resulting in a drop in online culinary services. Office personnel typically engage in direct purchasing. The findings of testing this second hypothesis corroborate the research results (Setiyarti & Wardhana, 2018), indicating that digital marketing does not exert a substantial impact on business revenue. However, this contradicts the findings of previous studies that have consistently shown a positive and significant impact of digital marketing on business income. Notable studies include those conducted by Widyayanti & Insiatiningsih (2021), Kusnia & Nur (2021), Revida & Sudarwati (2019), Dassou et al. (2019), Lee et al. (2018), Lateh et al. (2017), Porto et al. (2017), Wilcox & Moore (2016), and Priyankara (2014), all of which examined the relationship between digital marketing and business income.

**Impact of Distribution Channels on the Growth of MSMEs**

The test results of the third hypothesis indicate that there is no direct positive and significant connection between distribution channels and business development. Food distribution networks in Jakarta have no impact on business development. One of the contributing factors to the challenge of acquiring food during the pandemic is the combination of delayed delivery times, insufficient supply of processed food, subpar food quality, and the absence of popular menu items. Nevertheless, the improved conditions after the pandemic facilitated the resumption of distribution channel activities, resulting in less intricate challenges for food distribution compared with the pandemic period. The research findings indicate that food distribution routes have little impact on the growth of MSME enterprises. The findings of this third test do not align with the results of previous research studies that provide evidence for a strong and meaningful correlation between obstacles to food distribution and business growth, specifically the studies conducted by Jacyna-Golda et al. (2014), Krisnawati (2018), and Giles et al. (2018).

**Impact of Digital Marketing on the Growth of MSMEs**

The test results of the fourth hypothesis indicate a strong and statistically significant correlation between digital marketing and business development. Implementing digital marketing methods can immediately enhance business growth for culinary MSMEs in Jakarta. Micro, Small, and Medium Enterprises (MSME) utilize technology to promote and advertise their culinary
offerings, which can include both food and beverages. Digital marketing offers numerous advantages in boosting market penetration, facilitating MSMEs to conduct their business operations with buyers and producers more effortlessly. The use of technology in transactions has proven to be advantageous for MSMEs, allowing them to grow their enterprises. The findings of this fourth test align with prior studies conducted by Shyu et al. (2015) and Warokka et al. (2020), which provide evidence for the favorable and significant impact of digital marketing on business development.

**Effect of MSME Revenue on the Growth of MSMEs**

The empirical findings from testing the fifth hypothesis indicate that business income has a substantial and favorable impact of business income on the growth and progress of MSMEs. The revenue generated by culinary MSMEs in Jakarta has the potential to enhance their overall growth. Following the pandemic, there have been enhancements in distribution channel limitations, leading to a rise in income for MSMEs and directly influencing their expansion of culinary MSMEs in Jakarta. The rise in MSME revenue can grow and enhance the presence of the MSME cluster. This empirical evidence aligns with the findings of previous research studies that support the presence of a substantial positive correlation between business income and business development. Specifically, the research conducted by (Lateh et al., 2017) and (Ranjar & Rassekh, 2017) investigated the impact of business income on business development.

**Impact of Distribution Channels on the Growth of MSMEs via Business Revenue**

The findings from testing the sixth hypothesis indicate a substantial and favorable impact of food distribution channels on business development, specifically in terms of business income. The accessibility of food ingredients in the post-pandemic era is a contributing factor to the growth of MSMEs in DKI Jakarta. This is due to factors such as fast delivery times, ample stock of ready-to-process food ingredients, and high-quality ingredients that enhance business revenue. Consequently, MSMEs are expanding their operations by opening new branches in various areas of DKI Jakarta. The findings of this sixth test align with previous research, specifically studies conducted by Hasanuddin et al. (2020), Anggraini (2018), Lee & Lin (2018), and Kharisma et al. (2020).

These studies provide evidence supporting a positive and significant correlation between food distribution channels and business development, as measured by business income. This empirical study demonstrates that business income plays a mediating role in influencing the development of MSME enterprises through distribution channels. This aligns with the process of determining the value. The Variance Accounted for (VAF) for food distribution is 91%, indicating that business income fully mediates the influence of food distribution channels on the development of MSMEs.

**Impact of Digital Marketing on the Growth of MSMEs via Business Revenue**

The test results of the seventh hypothesis indicate that there is no statistically significant relationship between digital marketing and business development as measured by business income. While digital marketing may not directly impact corporate income, it has a significant influence on business development. This may be attributed to the lack of a direct impact of digital marketing on the income of MSMEs. The results of this seventh test do not align with previous research findings that support a positive and significant relationship between digital marketing and business development, specifically in terms of business income. The research studies conducted by Widyayanti & Insiatiningsih (2021), Kusnia & Nur (2021), Lesmana and Valentina (2021), Sunardi et al., (2021), Revida & Sudarwati (2019), Mukherjee (2017), Wilcox & Moore (2016), Warokka et
al. (2020), and Priyankara (2014) all provide evidence supporting this relationship. These findings suggest that business income does not effectively mediate the impact of digital marketing tactics on the growth of MSME enterprises in Jakarta. This aligns with the outcomes of the value computation. The Variance Accounted for (VAF) for digital marketing is 11.90%, indicating that the impact of digital marketing on business development is not mediated by firm income.

CONCLUSIONS
The findings from hypothesis testing indicate that food distribution channels have a statistically significant and beneficial effect on the income of MSMEs in Jakarta. However, there is no significant impact of these channels on the development of MSMEs. When food distribution channels are obstructed, it can lead to a decrease in business income due to increased food prices, resulting in higher expenses and reduced consumer purchases. Food distribution channels have an important indirect impact on business development by affecting the revenue of MSMEs. This income can serve as a mediating factor in the relationship between distribution channels and MSME development. Digital marketing does not directly impact corporate revenue, but it does have a beneficial impact on business growth and expansion. Implementing digital marketing in MSMEs can enhance business development by utilizing technology that simplifies product search and purchase processes for consumers. The growth of MSMEs in Jakarta is significantly influenced by the revenue generated from business activities. Consequently, a rise in business revenue for MSME players will enable them to enhance the growth of culinary MSME firms in Jakarta.

LIMITATION & FURTHER RESEARCH
Based on these findings, culinary MSMEs should reduce the number of food items used. This may be achieved by appropriately processing the materials without excessive or unnecessary processing. Adapting the processing of materials to meet specific demands ensures the availability of the generated goods, thus preventing any shortage of products that consumers require and mitigating a decline in business revenue. In Jakarta, MSME companies must utilize advanced technology and employ applications with business marketing capabilities to optimize their marketing strategies. This approach has been demonstrated to significantly accelerate the growth of MSMEs. MSME players should allocate their business income efficiently, avoiding personal expenditures, to prioritize business expansion and foster growth within their business cluster.

According to the findings of hypothesis testing, multiple factors lack significance. Therefore, conducting in-depth interviews with respondents is necessary to enhance the reliability of the survey results. Future research is expected to conduct similar studies using a mixed method research approach.

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