The effect of partnership and information and communication technology (ICT) capability on competitive advantage through entrepreneurial marketing: a study on culinary sector SMEs in Batam City

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Abstract.
This study analyzes the influence of partnership and Information and Communication Technology (ICT) capability on competitive advantage through entrepreneurial marketing. The research employs a quantitative approach with descriptive analysis, involving data collected through questionnaires, interviews, and observations from 56 culinary sector SMEs in Batam City. The data analysis technique used is Structural Equation Modeling-Partial Least Square (SEM-PLS). The results indicate that partnership and ICT capability positively and significantly affect entrepreneurial marketing, enhancing coordination and technology usage among SMEs. However, these variables do not significantly impact competitive advantage directly. On the other hand, entrepreneurial marketing demonstrates a positive and significant influence on competitive advantage, highlighting the importance of strong customer relationships and high-value product creation. Additionally, ICT capability significantly influences competitive advantage through entrepreneurial marketing, emphasizing the role of technology in enhancing business flexibility and marketing capabilities.

Keywords: Competitive advantage, Entrepreneurial marketing, ICT capability, Partnership

JEL Classification: C30, C52, L26, M10, M30.

INTRODUCTION
Small and Medium Enterprises (SMEs) play a crucial role in developing and growing a country's economy (Azzahra & Wibawa, 2021). This is evident from the fact that, in 2021, SMEs in Indonesia contributed 61.07% to the country's Gross Domestic Product (GDP), amounting to IDR 8.6 trillion (Ministry of Finance, 2021). Ensuring the sustainability of SMEs involves employing a creative economy approach across various business sectors (Bahagia & Subiyantoro, 2022).

According to data from the Ministry of Tourism & Creative Economy (2020), several provinces in Indonesia lead in export contributions, including West Java
(14.62%), East Kalimantan (10.5%), East Java (9.94%), Riau (8.61%), Riau Islands (6.4%), and Banten (5.84%). This data prompts questions, particularly because the Riau Islands, which rank among the top three provinces for tourist contributions in Indonesia, hold significant potential in tourism and the creative economy but have not achieved the highest export contributions in either Indonesia or Sumatra (Septyan, 2022).

Within the Riau Islands, Batam City stands out as the largest contributor to business actors in the creative economy sector, representing 68.03% of the province's total. The city's major creative economy sub-sectors include music (21.97%), culinary (20.02%), and performing arts (8.81%) (Ministry of Tourism & Creative Economy, 2021). This research specifically focuses on the culinary sub-sector.

The focus of this research was determined through observations and interviews conducted with the Batam City Office of Cooperatives and SMEs. Information gathered indicates that since the COVID-19 pandemic, the culinary sector has significantly contributed to the local economy. Additionally, the high interest of Batam City's residents in exploring various culinary offerings from SMEs has made the culinary business a strategic sector. There is also a unique value in developing special foods distinctive to Batam City, as these foods are rarely found elsewhere (Anggraini & Yana, 2022).

Despite these favorable conditions, SMEs in Batam City have struggled to maximize their competitive advantage. This shortcoming is attributed to various factors, including deficiencies in marketing, management, technology, human resources, and economic structure (Raharja et al., 2020). To achieve a competitive advantage, SMEs must develop strong company management skills, including resource excellence, expertise, and innovation (Rahmadani & Qomariah, 2022).

Today's importance of competitive advantage lies in addressing competition resulting from globalization, technological innovation, and an uncertain business environment (Zultaqawa et al., 2019). Business actors cannot compete effectively without relying solely on conventional marketing approaches. Consequently, a new creative alternative in entrepreneurial marketing has been introduced (Fillis, 2010). Entrepreneurial marketing can create product advantages that enhance competitiveness in a highly competitive market environment (Winata, 2021).

In addition to entrepreneurial marketing, the product marketing process can be improved by collaborating with stakeholders, including the government, the private sector, and the community (Hadiyati & Hendrasto, 2021). According to Raharja et al. (2020), partnerships have become increasingly important in SME business processes in recent years. Partnerships affect a company's performance in terms of competitive advantage, enabling businesses to mitigate their deficiencies by leveraging competitors' strengths (Oktaviani & Rahardjo, 2017).

Raharjo (2018) explained that a partnership is a cooperative relationship involving the coaching and development of companies, wherein each party's strengths and weaknesses complement one another. Partnerships are collaborations between a company and internal parties, suppliers, customers, and lateral parties (Witjara et al., 2019). Research by Ashoka et al. (2022) found that partnerships can reduce the risks associated with entrepreneurial marketing by utilizing resources and assisting in innovation. Furthermore, Hadiyati & Hendrasto (2021) noted that partnerships can support entrepreneurial marketing strategies for SMEs, such as building relationships or collaborating with stakeholders (government, private sector, and customers). Thus,
it can be indicated that partnerships have a positive and significant relationship with entrepreneurial marketing (H1).

Apart from entrepreneurial marketing and partnerships, Porter (1996) states that competitive advantage can be achieved by utilizing comprehensive technology and promotion. Information and Communication Technology (ICT) is useful for accelerating the production and marketing processes in various ways, such as selling products and services (Dharma et al., 2022). Among SMEs in Batam City, the use of ICT for marketing products has not significantly increased sales due to business actors' limitations in applying technology and presenting engaging content. Additionally, ICT capabilities among SMEs in Batam City's culinary sector are not evenly distributed.

In an uncertain business environment, ICT capabilities positively affect entrepreneurial marketing to achieve excellence (Mutiara, 2022). Effective alignment of ICT capabilities with entrepreneurial marketing can improve business positioning, as ICT capabilities are essential in promoting entrepreneurship and enhancing marketing practices (Ghezali & Boudi, 2021). Thus, it can be indicated that ICT capability has a positive and significant relationship with entrepreneurial marketing (H2).

Research by Herawaty & Raharja (2019) explained that if an organization strengthens its network and combines superior resources, it will create strength and achieve a competitive advantage. Consequently, their research indicated that partnerships affect competitive advantage. Therefore, it can be indicated that partnerships have a positive and significant relationship with competitive advantage (H3).

Mardia et al. (2021) explained that every business actor must develop ICT capabilities to respond to an unstable business environment and achieve competitive advantage. According to Johannessen et al. (1999), ICT capability is a company's ability to strategically use information and communication technology functions for business purposes and achieve competitive advantage. Pamungkas et al. (2021) state that ICT capability significantly affects competitive advantage. Thus, it can be indicated that ICT capability has a positive and significant relationship with competitive advantage (H4).

Morris et al. (2002) explained that entrepreneurial marketing involves proactively identifying opportunities to acquire and retain profitable customers through innovative approaches to risk management, resource utilization, and value creation. Research by Suharyati et al. (2021) and Subagyo et al. (2021) explains that entrepreneurial marketing positively and significantly influences competitive advantage. Thus, it can be indicated that entrepreneurial marketing has a positive and significant relationship with competitive advantage (H5).

Based on the theoretical explanations published, the rest of the hypothesis development will attempt to test the simultaneous effect of partnerships on competitive advantage through entrepreneurial marketing (H6). It will also examine the simultaneous influence of ICT capabilities on competitive advantage through entrepreneurial marketing (H7).

Based on the previously explained phenomena, gaps, brief explanations, and facts, this study aims to discuss whether there is a significant influence of the partnership variable and the ICT capability variable on competitive advantage.
variables through entrepreneurial marketing variables, focusing on the culinary sector SMEs in Batam City.

METHODS

This research employs a quantitative approach with descriptive analysis. The data used in this study includes both primary and secondary sources. The data collection involves several stages, including distributing questionnaires, conducting interviews, and making observations. The population for this study consists of 125 SMEs in the culinary sector in Batam City. The sample size for this study was calculated using the Slovin Formula, as explained below:

\[ n = \frac{N}{1 + N(e)^2} = \frac{125}{1 + 125(0.1)^2} = 56 \]

Where:
- \( n \) = sample size
- \( N \) = population size
- \( e \) = error value (10%)

This study uses the Structural Equation Modeling-Partial Least Square (SEM-PLS) technique for data analysis. The SEM-PLS method involves two stages of analysis. The first stage is the outer model analysis, which includes several inferential statistical processes such as the loading factor, validity, and reliability construct. The second stage involves analyzing the \( R^2 \), \( Q^2 \), and Goodness of Fit Index (GoF) (Ghozali, 2008; Kline, 2023). The software used for data analysis is SmartPLS 3.0.

The structural equation model (SEM) framework in this study is presented in Figure 1.

![Figure 1. The structural equation model (SEM) framework](image-url)
The variables in this study reference several sources. The partnership variable (X1) includes dimensions such as commitment, coordination, dependence, and trust (Mohr & Spekman, 1994). The ICT capability variable (X2) includes dimensions such as internal use, use for collaboration, and use for communication (Johannessen et al., 1999). For the intervening variable, entrepreneurial marketing (Z), dimensions include proactiveness, opportunity focus, innovation orientation, customer intensity, risk-taking, resource leveraging, and value creation (Morris et al., 2002). Finally, operationalizing the competitive advantage variable (Y) includes dimensions such as uniqueness, competitive price, not easily imitated, and not easily replaced (Bharadwaj et al., 1993).

The variables and dimensions used in this study are relevant due to their strong theoretical foundations, as proposed by leading researchers in their respective fields. The design of the questionnaire, which is based on examining these variables and dimensions, is presented in Table 1.

Table 1. Operationalization of research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnership (X1)</td>
<td>Commitment</td>
<td>• Willing to sacrifice</td>
<td>X1.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Willing to continue the relationship</td>
<td>X1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Willing to spend more time</td>
<td>X1.3</td>
</tr>
<tr>
<td></td>
<td>Coordination</td>
<td>• Having a good coordination system</td>
<td>X1.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Business goal alignment</td>
<td>X1.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Coordination in facing problems</td>
<td>X1.6</td>
</tr>
<tr>
<td></td>
<td>Dependency</td>
<td>• Maintaining relationships</td>
<td>X1.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Maintain competitiveness</td>
<td>X1.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Involvement of partners in business processes</td>
<td>X1.9</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>• The degree of promise fulfillment</td>
<td>X1.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Level of honesty</td>
<td>X1.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Take mutual interests into consideration</td>
<td>X1.12</td>
</tr>
<tr>
<td></td>
<td>Internal Use</td>
<td>• Understand the use of technology</td>
<td>X2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technology reduces company expenses</td>
<td>X2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technology facilitates market analysis</td>
<td>X2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Making it easier to carry out various promotional methods</td>
<td>X2.4</td>
</tr>
<tr>
<td></td>
<td>Use for Collaboration</td>
<td>• Technology makes it easier to coordinate with partners</td>
<td>X2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technology expands relationships</td>
<td>X2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technology helps flexibility in working with partners</td>
<td>X2.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase marketing effectiveness with digital collaboration</td>
<td>X2.8</td>
</tr>
<tr>
<td></td>
<td>ICT Capability</td>
<td>• Technology makes business marketing easier</td>
<td>X2.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technology makes it easier to communicate with customers</td>
<td>X2.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The technology builds a business reputation</td>
<td>X2.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Makes it easier to group target markets</td>
<td>X2.12</td>
</tr>
<tr>
<td></td>
<td>Opportunity Focus</td>
<td>• Capable of turning problems into opportunities</td>
<td>Z.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Predict the threat of business destruction</td>
<td>Z.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Creating opportunities within resource limitations</td>
<td>Z.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Creating product diversity according to</td>
<td>Z.4</td>
</tr>
</tbody>
</table>
Variable | Dimension | Indicator | Scale
--- | --- | --- | ---
Innovation Oriented | | market needs | Z.5
Customer Intensity | | • Innovation to gain new markets | Z.6
| | • Able to realize ideas | Z.7
| | • Responsiveness in responding to consumer criticism/suggestions | Z.8
| | • Ability to establish relationships with consumers | Z.9
Risk Taking | | • Courage to face risks to gain business opportunities | Z.10
| | • The ability to determine a strategy before taking risks | Z.11
Resource Leveraging | | • Creating innovative marketing within resource limitations | Z.12
| | • Anticipate/respond to resource limitations with collaboration | Z.13
Value Creation | | • Creating low-selling power products into high-value products | Z.14
| | • Creating products on consumer perceptions | Z.15
Uniqueness | | • Consumers easily recognize the product | Y.1
Competitive Price | | • Has a different appeal from competitors | Y.2
| | • Prices are by product quality | Y.3
| | • Prices are based on consumers' purchasing power | Y.4
| | • Prices are based on the benefits received by consumers | Y.5
Competitive Advantage (Y) | | • Products have distinctive characteristics | Ordinal
| | • Products are difficult to imitate | Y.6
| | • The product is superior | Y.7
Not Easily Imitated | | • Consumers do not easily find replacements | Y.8
| | • The product has become embedded in the minds of consumers | Y.9
Not Easily Replaced | | • Consumers easily recognize the product | Y.10


RESULTS AND DISCUSSION

Analysis of the outer model
This section presents the research findings, starting with the outer model analysis. The loading factor value of each indicator in the variables used measures the outer model. According to Hair et al. (2019), a loading factor value > 0.3 is considered to meet the minimum level for initial examination, a value > 0.4 is considered better, and a value > 0.5 is deemed significant.

Based on the results processed using SmartPLS 3.0, the loading factor values from the 1st iteration show that one indicator in the competitive advantage variable (Y), specifically the Y.4 indicator, has a loading factor value below 0.4. In this study, any loading factor value < 0.4 must be removed from the research model, as it is deemed unfavorable to continue.

After removing the Y.4 indicator, the loading factor values were processed again in a 2nd iteration. The results obtained from this second iteration show that all indicators meet the requirements, with all values > 0.5. The results of the loading factor values for the 1st and 2nd iterations are presented in Table 2 and Table 3. Figure 1 visualizes the
loading factor values for the 2nd iteration, serving as a reference for proceeding to the next stage in using SEM-PLS.

**Table 2. Loading Factor 1st Iterations**

<table>
<thead>
<tr>
<th>X1</th>
<th>X2</th>
<th>Z</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>0.535</td>
<td>X2.1</td>
<td>0.664</td>
</tr>
<tr>
<td>X1.2</td>
<td>0.802</td>
<td>X2.2</td>
<td>0.723</td>
</tr>
<tr>
<td>X1.3</td>
<td>0.732</td>
<td>X2.3</td>
<td>0.813</td>
</tr>
<tr>
<td>X1.4</td>
<td>0.769</td>
<td>X2.4</td>
<td>0.758</td>
</tr>
</tbody>
</table>

Based on Table 2, the Y.4 indicator in the competitive advantage (Y) variable, specifically in the competitive price dimension, "prices are by consumers' purchasing power," does not significantly contribute to the construction of variable Y. Its result, 0.474, is considered below the acceptable loading factor value and thus must be removed from the research model. This is supported by observational findings: most respondents perceive that the products they sell use high-quality raw materials, so the selling prices are adjusted to cover overall production costs. Additionally, many respondents state that customers do not continuously consume the products they sell, so the selling prices are still considered reasonable.

After removing the Y.4 indicator, the next step in the outer model analysis involves reprocessing the PLS Algorithm in SmartPLS 3.0. The results of this reprocessing are presented in Table 3 and Figure 2.

**Table 3. Loading factor 2nd iterations**

<table>
<thead>
<tr>
<th>X1</th>
<th>X2</th>
<th>Z</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>0.537</td>
<td>X2.1</td>
<td>0.664</td>
</tr>
<tr>
<td>X1.2</td>
<td>0.802</td>
<td>X2.2</td>
<td>0.723</td>
</tr>
<tr>
<td>X1.3</td>
<td>0.734</td>
<td>X2.3</td>
<td>0.813</td>
</tr>
<tr>
<td>X1.4</td>
<td>0.770</td>
<td>X2.4</td>
<td>0.758</td>
</tr>
<tr>
<td>X1.5</td>
<td>0.751</td>
<td>X2.5</td>
<td>0.781</td>
</tr>
<tr>
<td>X1.6</td>
<td>0.769</td>
<td>X2.6</td>
<td>0.749</td>
</tr>
<tr>
<td>X1.7</td>
<td>0.796</td>
<td>X2.7</td>
<td>0.815</td>
</tr>
<tr>
<td>X1.8</td>
<td>0.731</td>
<td>X2.8</td>
<td>0.725</td>
</tr>
<tr>
<td>X1.9</td>
<td>0.708</td>
<td>X2.9</td>
<td>0.804</td>
</tr>
<tr>
<td>X1.10</td>
<td>0.790</td>
<td>X2.10</td>
<td>0.726</td>
</tr>
<tr>
<td>X1.11</td>
<td>0.760</td>
<td>X2.11</td>
<td>0.628</td>
</tr>
<tr>
<td>X1.12</td>
<td>0.653</td>
<td>X2.12</td>
<td>0.618</td>
</tr>
</tbody>
</table>

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The results of the second iteration in Table 3 indicate that all indicators in the research model have met the standard value for the outer model (> 0.5) (Hair et al., 1998). The strongest indicator for the partnership variable (X1) is X1.2, "Willing to continue the relationship," with a value of 0.802. Observational findings reveal that most respondents emphasized that the partnering process relies heavily on trust and dependence, especially in business. The SME actors surveyed may have built strong relationships with their partners, with mutual trust and dependence to achieve common goals.

Regarding the ICT capability variable (X2), the strongest indicator is X2.7, "Technology helps flexibility in working with partners," with a value of 0.815. Most respondents indicated that using technology to automate business processes, such as online payments, inventory management, and automatic ordering, helps reduce workload and improve efficiency, allowing them to focus more on partner relationships.

For the entrepreneurial marketing variable (Z), the strongest indicator is Z.8, "Ability to establish relationships with consumers," with a value of 0.813. Observational findings during data collection highlighted that establishing good consumer relationships is essential. Its positive effects include increased customer satisfaction, building customer loyalty, and fostering sustainable business growth.

Regarding the competitive advantage variable (Y), the strongest indicator is Y.9,
"Consumers do not easily find replacements," with a value of 0.863. Respondents confirmed that consumer preferences vary, and each culinary business has its unique recipe. If consumers find a suitable product, it leads to continuous orders and makes it difficult for consumers to switch to another product, even if the main ingredients are the same.

The successful removal of the weak indicator and the subsequent validation of the remaining indicators with acceptable loading factors ensure the robustness of the outer model, setting a strong foundation for further analysis using the Structural Equation Modeling-Partial Least Square technique.

The next step in the outer model analysis is to examine the validity and reliability constructs within the research model. Validity and reliability constructs are essential measurements used to assess the reliability of a set of indicators for two or more variables in research (Hendrayana, 2020). Evaluation of these constructs can be measured by the Average Variance Extracted (AVE) value, which should be greater than 0.5, the composite reliability value, and Cronbach's alpha value, which should be greater than 0.7 (Yamin & Kurniawan, 2011). If the results obtained through SmartPLS 3.0 processing meet these thresholds, this study's outer model is considered valid and reliable. Table 4 summarizes the validity and reliability constructs of the research model.

Table 4. Validity and reliability constructs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>0.923</td>
<td>0.931</td>
<td>0.934</td>
<td>0.543</td>
</tr>
<tr>
<td>X₂</td>
<td>0.922</td>
<td>0.928</td>
<td>0.934</td>
<td>0.542</td>
</tr>
<tr>
<td>Z</td>
<td>0.924</td>
<td>0.927</td>
<td>0.934</td>
<td>0.503</td>
</tr>
<tr>
<td>Y</td>
<td>0.921</td>
<td>0.928</td>
<td>0.935</td>
<td>0.619</td>
</tr>
</tbody>
</table>

Based on the results of the validity and reliability constructs presented in Table 4, it is evident that all research variables have met the measurement parameters specified for the outer model. All variables exceed the Cronbach's Alpha threshold of 0.7, indicating high internal consistency, with the highest value observed for the entrepreneurial marketing variable (Z) at 0.924. Similarly, all variables exceed the composite reliability threshold of 0.7, demonstrating the reliability of the measurement items. The competitive advantage variable (Y) exhibits the highest composite reliability value at 0.935. Additionally, all variables have Average Variance Extracted (AVE) values greater than 0.5, meaning that more than 50% of the variance is explained by the constructs, with the highest AVE value found in the competitive advantage variable (Y) at 0.619.

The results from Table 4 confirm that the outer model is valid and reliable. The strong Cronbach's Alpha values indicate high internal consistency among the indicators. The composite reliability values suggest that the measurement items are consistently reliable, and the AVE values demonstrate that the constructs explain a significant portion of the variance. Specifically, for the composite reliability value in the competitive advantage (Y) variable, it is evident that the measurement items assessing this variable possess an acceptable level of reliability (CR > 0.70). Therefore, the measurement items in the research model are considered consistent and reliable for measuring the competitive advantage (Y) variable.
Consequently, the results of the outer model validate proceeding to the next analysis stage in SEM-PLS, which is the analysis of the inner model.

**Analysis of the inner model**

The inner model analysis is conducted to ensure that the research model built has a high level of accuracy (Pamungkas et al., 2021). Evaluation of the inner model can be observed through criteria including the coefficient of determination ($R^2$), predictive relevance ($Q^2$), and the Goodness of Fit Index (GoF) (Table 5).

**Table 5. Evaluation of the inner model**

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-Square</th>
<th>$R^2$ Adjusted</th>
<th>$Q^2$</th>
<th>AVE</th>
<th>$R^2$</th>
<th>GoF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>0.720</td>
<td>0.704</td>
<td>0.518</td>
<td>0.552</td>
<td>0.493</td>
<td>0.552</td>
</tr>
<tr>
<td>Y</td>
<td>0.684</td>
<td>0.672</td>
<td>0.468</td>
<td>0.552</td>
<td>0.493</td>
<td>0.552</td>
</tr>
</tbody>
</table>

According to Chin (1998), an $R^2$ value greater than 0.67 can be categorized as strong, a value greater than 0.33 as moderate, and a value less than 0.19 as weak. Based on Table 5, the $R^2$ value for the entrepreneurial marketing variable ($Z$) is 0.720, and the $R^2$ value for the competitive advantage variable ($Y$) is 0.684. These $R^2$ values indicate that the model built in this study falls into the strong category. $R^2$ describes the extent of variance in the endogenous variable explained by the exogenous or endogenous variables. Specifically, the competitive advantage ($Y$) variable is explained by the partnership ($X_1$), ICT capability ($X_2$), and entrepreneurial marketing ($Z$) variables, accounting for 68.4% of the variance. Meanwhile, the entrepreneurial marketing ($Z$) variable is explained by the partnership ($X_1$) and ICT capability ($X_2$) variables, accounting for 72% of the variance.

Next, we will discuss the value of predictive relevance ($Q^2$). $Q^2$ is used to determine the measure of predictive relevance, indicating how well exogenous variables can predict endogenous variables. Based on the results of calculating the $Q^2$ value, the entrepreneurial marketing ($Z$) variable has a $Q^2$ value of 0.518, while the competitive advantage ($Y$) variable has a $Q^2$ value of 0.468. According to Chin (1998), if the $Q^2$ value obtained is greater than 0.35, the research model built has a strong predictive capability. Thus, both $Q^2$ values in this study indicate the model has a robust predictive capability.

The Goodness of Fit Index (GoF Index) evaluates the overall model, encompassing assessments of both the measurement and structural models. According to Tenenhaus et al. (2005), GoF values are categorized into three levels: small (0 - 0.25), medium (0.26 - 0.35), and large (greater than 0.35). Based on the calculation of the GoF value for this study, the research model falls into the large category with a value of 0.522. Therefore, the model is considered robust, allowing for the reliable execution of hypothesis testing.

Hypothesis testing using SEM-PLS was carried out to determine the direction and significance of the assumed hypotheses in this study. The path coefficient values are crucial for this determination, as presented in Table 5. The results, processed through SmartPLS 3.0 software using bootstrapping calculations, reveal positive original sample values for all hypotheses, indicating a positive direction and influence. The key metrics for significance are the T-statistics and P Values, with the standard thresholds being a T-statistic greater than 1.96 and a P-Value less than 0.05.
Hypothesis testing using SEM-PLS was carried out to determine the direction and significance of the assumed hypotheses in this study. The path coefficient values are crucial for this determination, as presented in Table 5. The results, processed through SmartPLS 3.0 software using bootstrapping calculations, reveal positive original sample values for all hypotheses, indicating a positive direction and influence. The key metrics for significance are the $T$-statistics and $P$-Values, with the standard thresholds being a $T$-statistic greater than 1.96 and a $P$-value less than 0.05.

The first hypothesis (H1) examines the impact of partnerships on entrepreneurial marketing. The analysis shows that partnerships positively and significantly affect entrepreneurial marketing, with a $T$-statistic of 2.176 and a $P$-value of 0.015. This finding aligns with Witjara et al. (2019) and Ashoka et al. (2022), who suggest that partnerships enhance entrepreneurial marketing by leveraging internal and external resources to create opportunities and mitigate risks through innovation.

For the second hypothesis (H2), the data indicate that ICT capability positively and significantly influences entrepreneurial marketing, supported by a $T$-statistic of 4.065 and a $P$-value of 0.000. This outcome corroborates the assertions by Gbadamosi (2019), Mutiara (2022), and Ghezali & Boudi (2021), who emphasize that technology skills enhance marketing strategies and effectiveness, especially in uncertain business environments, thereby boosting competitiveness.

However, the data did not support the third hypothesis (H3), which posits that partnerships directly enhance competitive advantage, with a $T$-statistic of 1.273 and a $P$-value of 0.102, indicating a non-significant effect. This result, while partially aligned with Herawaty & Raharja (2019), suggests that the impact of partnerships on competitive advantage may vary and requires further exploration to understand this relationship better. Strengthening networks and integrating superior resources are fundamental to achieving competitive advantage, yet this study's findings highlight the complexity of this dynamic.

Similarly, the fourth hypothesis (H4), which explores the direct impact of ICT capability on competitive advantage, was not supported, as indicated by a $T$-statistic of 1.269 and a $P$-value of 0.103. This finding is consistent with Qosasi et al. (2019), who found no significant direct influence of ICT capability on competitive advantage but contrasts with Pamungkas et al. (2021). The difference may stem from the distinct industry contexts and respondent perspectives, underscoring the need for contextual consideration in future research.

The fifth hypothesis (H5), which investigates the effect of entrepreneurial marketing on competitive advantage, was supported by a $T$-statistic of 2.251 and a $P$-value of 0.012. This result is consistent with previous research by Suharyati et al. (2021).
and Subagyo et al. (2021), highlighting the critical role of an entrepreneurial marketing mindset in enhancing competitive advantage through proactive opportunity identification, risk management, and value creation.

The sixth hypothesis (H6), which examines the mediating role of entrepreneurial marketing between partnerships and competitive advantage, was not supported, as indicated by a T-statistic of 1.278 and a P-value of 0.101. Despite the positive influence, the effect was insignificant, suggesting that further investigation is needed to understand this indirect relationship fully.

Conversely, the seventh hypothesis (H7) was supported, with a T-statistic of 2.049 and a P-value of 0.020, indicating that ICT capability significantly enhances competitive advantage through entrepreneurial marketing. This finding emphasizes the importance of aligning ICT capabilities with entrepreneurial marketing strategies to improve business positioning and marketing practices, as the existing literature suggests.

In conclusion, the hypothesis testing results underscore the significant roles of entrepreneurial marketing and ICT capability in achieving competitive advantage within the culinary sector SMEs in Batam City. While partnerships positively influence entrepreneurial marketing, their direct and indirect effects on competitive advantage require further exploration. The findings highlight the necessity for future research to delve deeper into the varying impacts of partnerships and ICT capabilities across different industry contexts.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Several conclusions can be drawn based on the results discussed in this study. Firstly, partnerships have a partially positive and significant effect on entrepreneurial marketing. This finding is supported by the discovery of good coordination between culinary sector SMEs in Batam City and their partners, along with a strong commitment to maintaining these relationships.

ICT capability also demonstrates a partially positive and significant effect on entrepreneurial marketing. Most SMEs in Batam City's culinary sector effectively use ICT to facilitate marketing, enhancing flexibility in working with partners and simplifying customer needs analysis.

However, partnerships do not have a significant effect on competitive advantage. Some indicators, such as mutual support and consideration of common interests in decision-making, are lacking and need improvement among culinary SMEs in Batam City. Similarly, ICT capability does not exhibit a significant effect on competitive advantage. Some ICT capability indicators are not yet effectively enhancing competitive advantage. Culinary sector SMEs in Batam City need to improve their understanding and sustainable implementation of technology tools like social media and e-commerce to enhance product marketing, target market identification, and overall business image.

Entrepreneurial marketing, however, shows a positive and significant influence on competitive advantage. Many SMEs in Batam City's culinary sector have developed good customer relationships and create high-value products, contributing to their competitive advantage.

Lastly, the ICT capability variable (X2) demonstrates a positive and significant influence on competitive advantage (Y) through entrepreneurial marketing (Z). SMEs in the culinary sector in Batam City acknowledge the significant role of ICT in enhancing
business flexibility through partner collaboration and improving marketing capabilities to establish good relationships with customers and other stakeholders.

**Recommendations**

This study provides unique insights differing from previous research by measuring the effects both partially and simultaneously, thus serving as a comparative basis for future research using the same variables (partnerships, ICT capability, entrepreneurial marketing, and competitive advantage).

For the government and stakeholders in Batam City, the findings can inform more effective policy and program designs to support the development of SMEs in the culinary sector. Understanding the critical roles of ICT and partnerships allows for targeted strategies to enhance competitiveness and sustainability. This could include training to improve ICT skills and fostering collaborations with strategic partners, such as universities or industries, enhancing market access and product innovation. Strengthening infrastructure, such as better internet access and modern food processing facilities, can also support the sustainable growth of culinary SMEs.

Practically, culinary sector SMEs in Batam City should focus on enhancing their innovation capabilities and strategic planning to address business uncertainties. When forming partnerships, selecting partners that meet current needs is crucial. In leveraging ICT, SMEs need to consider relevant strategies to ensure a tangible impact, such as reducing business expenses and improving product marketing, which can increase profits.

This study has limitations, particularly in the sample size, with only 56 respondents representing SMEs in the culinary sector in Batam City. Future research should aim for a larger sample size and include SMEs from different sectors. Although the sample size is adequate for SEM-PLS analysis, the findings are specific to culinary SMEs in Batam City, limiting the generalizability to similar populations.

**REFERENCES**


