Does e-Commerce Capability Mediate The Strategic Orientation to Performance and Hybrid Channel to Performance? (An Empirically Analysis of Micro and Small Businesses in Indonesia)

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Abstract. Today, e-commerce has been used as a fast vehicle to transform the world that significantly affects businesses, including small businesses. Many challenges and problems are faced, especially in terms of dealing with e-commerce, such as there is much lack of knowledge about developing technology, customer demand, and human and financial resource management. However, after the pandemic Covid-19 situation, entrepreneurs must rise from adversity, fast, and quickly adapt to the situation. In previous research, Entrepreneurial Orientation, Market Orientation, Learning Orientation, and a combination, Strategic Orientation had a positive and significant effect on Performance. Likewise, Hybrid Channel had a positive and significant effect on Performance. Furthermore, successful entrepreneurs adopt e-commerce in their business development or e-Commerce Capabilities. The purpose of this paper is to prove empirically whether the variable of e-Commerce Capability in mediating the Orientation Strategy or Hybrid Channel to performance in the context of micro and small businesses. The paper used SEM Analysis Covariant Based Structural Equation Modelling (CB-SEM) to test a hypothesis and AMOS as a statistical tool. The data states that the important factors affecting performance, especially micro and small entrepreneurs, are strategic orientation and the use of hybrid channels. However, the data has not been able to show that e-commerce capability can mediate the effect of both on performance.

1. Introduction

E-commerce has significantly evolved over the last decade. E-commerce is an internet technology that has a global phenomenon that affects all aspects of life, including business aspects worldwide [1]. Today, e-commerce has been used as a fast vehicle to transform the world and can significantly affect businesses as important variables for conducting business for the whole world's companies along with small businesses without exception [2]. The percentage count of micro and small businesses to economic growth in Indonesia takes 98% of business units [3]. Therefore because of their large number, micro and small businesses pose the backbone of a country not only in Indonesia but also in other modern countries [4, 5]. Along with the count of micro and small businesses, it is necessary to know more about their performance. It is known that micro and small businesses are different from medium and large businesses. Many challenges and problems faced, especially in dealing with e-commerce, such as there is much lack of knowledge about developing technology and its use, lack of knowledge about customer demand based on the industry 4.0 business model, lack of knowledge about human and financial resource management [6], furthermore, there was only 7.38% micro and small business use of internet technology due to the low level of knowledge, expertise, and education on average [7].

However, at this time the global, including Indonesia, has just passed the pandemic COVID-19 situation that affects production, market, and revenue, which has shocked all entrepreneurs, including micro and small entrepreneurs, which has an impact on sustainability. So it requires a fast and appropriate response from entrepreneurs to rise from adversity by changing their strategy and can elaborate the use of technology [8].

Previous research on the performance of micro and small enterprises stated that the factors that influence are Entrepreneurial Orientation [9–12], Market Orientation [13–15], Learning Orientation [9, 10, 15], and also a combination of these three factors [16–18] which in this paper is Strategic Orientation. There is an opportunity for micro and small businesses to have the potential to continually grow in Indonesia in this digital era due to the many sales channels exist since the global entering hybrid
era in 2013 [19], expected to be a solution to the problems of micro and small businesses in terms of marketing. Previous research proves that Hybrid channels can affect performance [3, 20]. Furthermore, micro and small businesses have great potential to develop their ability, so they expand to reach a global or international scale [21] and have high competitive advantage [22]. Furthermore, successful entrepreneurs adopt e-commerce in their business development [23], [24] in this paper e-Commerce Capabilities.

1.1 Objectives

To summarize, this study is purposed to examine the determinant factors affecting the performance of micro and small businesses. This research is essential to provide new insights regarding e-commerce capability in Indonesia micro and small businesses performance. We also holistically identified the factors that may impact micro and small performance and instruments that play a role in their development.

2. Literature Review

2.1 Resource Based View (RBV)

Resource-based view (RBV) theory is about the bundle of resources, capabilities, or routines to create value for a business, making it difficult to emulate by competitors who are then expanded and strengthened or supported by other theories such as Dynamic Capabilities to achieve competitive advantage [4].

The RBV was initially inspired by the work of Penrose (1959) and later by Wernerfelt (1984) into an RBV theory, which was subsequently used as a reference and was then expanded to other fields to accomplish, prior work done by scholars in economics, finance, entrepreneurship, marketing practice, human resources, to international business [25]. On the journey, RBV is a theory to describe heterogeneous and static resources or immobility [4], an outward approach to achieving competitive advantage, both physical and non-physical, to implement strategies to gain more effective and efficient also profit maximum [5]. Making different companies with different resources, and addressing the best problems for the organization or company [6], and the need for a resource that can align these different resources so that the manager or owner can arrange, group, coordinate, and also integrate within an effective structure [26], and finally as a solution to overcome the complex management of the company [7].

The work [25] shows that the development of RBV through 3 stages, namely the introduction stage, the growth stage, and the mature stage. The introduction stage (the1960s - the 1990s) initiated resources that influenced companies to grow, the concept of a VRIN (Valuable, Rare, Inimitable, Non-Substitutable) as the framework for companies. In the growth stage (1990 - late 2000), the development of RBV introduces competence, capability, its relationship with performance, and achieving competitive advantage. At the mature stage (2001 - present) is the development of an integrated RBV with other perspectives such as entrepreneurship, human resources, and others.

The RBV theory is significant for achieving a sustainable competitive advantage for a company [23]. Base reality is plentiful in research that uses the basic RBV theory and expands the use. An illustration of utilizing this theory is that resources are concentrated in a dynamic market centered on the market environment [24]. There are many studies based on RBV theory and acquire other theoretical approaches such as marketing, entrepreneurship, and others.

2.2 Dynamic Capabilities

Dynamic Capabilities are the ability of a company to mobilize the abilities of both internal and external competencies, to adapt rapidly to an uncertain, changing environment that applied in strategic management to help managers or owners in achieving competitive advantage [27]. Beginning emerged from the results of research by Teece (1997), which stems from an extension of the RBV theory. This theory supports companies in quickly creating, improving, or structuring resources to achieve excellence in the business environment dynamic [28], coping with change all the time with its ability to meet market needs [29], compete in long-term competition [30] as a mediator on the company's performance [31].

2.3 Social Exchange Theory (SET)

Social Exchange Theory (SET) is a theory derived from the science of Sociology, Social Psychology, and Anthropology which is closely related to marketing/traditional marketing and/or e-commerce because it involves emotions, including trust and commitment initially by 4 prominent Fig.s Homans, Kelley, Thibault, and Blau. The work of [32] that discusses the expansion of the marketing context to all economic and social exchanges embarks on further studies in marketing using exchange theory inclusive of social exchange theory. SET is the basis for identifying two different mechanisms that produce consumer perceptions and behaviors, the result of exchange [33]. Closely related to the marketing approach, entrepreneurship, because marketing is an essential part of entrepreneurship, SET is the basis in entrepreneurship, an activity where individuals have an independent motivation to look at opportunities and establish businesses, their application in an entrepreneurial relationship, for instance, and the relation between “actors” such as buyers [34], suppliers and other entrepreneurial relationship.

Furthermore, SET is more inclined to evaluate emotions in nature, for instance, satisfaction with the quality of processes and their results and rational evaluations [33]. SET is the basis of the internet and web era because it is critical in marketing development for now and in the future [35]. In the firm context, SET becomes the basis of organizational behavior, innovative work behavior that will affect a flexible strategy to be applied as an IT capability [35–37].
**2.4 e-Commerce Capability and Micro and Small Businesses Performance**

The character of Micro and Small Businesses is different from the large company, where the owner or manager has almost all the decisions and focuses on operational activities effectively and efficiency, challenging the performance of micro and small businesses [38], its activities centered on the main functions to improve their business strategy [39]. What distinguishes micro and small businesses that have a high performance and fast-growth category are have a very-focused character on product development, understanding consumer desires, establishing close relationships with consumers, in other words, having market-oriented, and satisfied consumers are the main target [40]. Then, implementing innovation is a precious factor in facing a competitive market [41] in which there is a creative process.

E-commerce capability is the capability of companies in kind of internet technology and information technology or has innovation in their development [1, 39]. A company with e-commerce capabilities can develop new digital markets where prices are more transparent, wider, globally, and efficiently, and can deal directly with suppliers, consumers, competitors, and partners along with promotions. There have been many companies, especially micro and small businesses that have succeeded in achieving high performance because of the use of e-commerce [38–40].

**2.5 Strategic Orientation, e-Commerce Capability and Micro and Small Businesses Performance**

According to [40], the success of entrepreneurs depends on the characteristics of capable entrepreneurs who are achievement-oriented. An entrepreneur who has an achievement orientation will always have strategic plans to achieve their goals [41–44]. Some empirical studies instead specifically discuss strategic orientation in the digital era [45–47] to anticipate the fast-paced and digital to develop their performance. A ready entrepreneur will adapt to the environment - having the ability or innovation capability and using technology, especially internet technology and information technology and computers, which are combined into e-commerce technology or have the e-commerce capability. E-commerce capabilities for micro and small businesses have many challenges when using the overall e-commerce process, such as time factor, complexity, and high cost [41, 43]. However, an entrepreneur who adopts this e-Commerce Capability is growing fast with characteristics, significant industry, contributing to global economic growth, and unemployment alleviation [44]. To achieve high performance this e-commerce capability bridges a strategic orientation to performance according to research conducted by [45, 46]. The relations between the strategic orientation, e-commerce capability, and performance can be estimated and accurate with the following hypothesis:

**Hypothesis 1:** Strategic Orientation has a positive and significant effect on performance through the mediation of e-Commerce capabilities.

**2.6 Hybrid Channel, e-Commerce Capability and Micro and Small Businesses Performance**

In its journey in the digital era, all buying and selling transactions run very fast due to the rapid development of technology and understanding of consumer behavior to achieve customer satisfaction. It is necessary to know the pattern of consumer behavior in making purchases to achieve customer satisfaction. The more sales channels provided will reach more consumers. At the same time, when the advance in internet technology is developing, some consumers prefer to continue to make purchases traditionally, but some combine two ways, online buying and traditionally buying. From the entrepreneur's insight, they must follow consumers to achieve good until the high performance. Several studies on the micro and small entrepreneur who use two or more sales channels related to performance are research conducted by [41, 43, 44].

The development of Hybrid Channels comes from Kottler (1994) regarding the marketing system using more channels to achieve more customer segmentation, wider-reach then Morarty (1990) added that the addition of the sales channel is the current channel that has the potential to cause conflicts in its implementation [20, 47] thus requiring complex technology [20]. The relation between hybrid channel and channel performance has been investigated by [48] the less conflict in the hybrid channel the better channel performance. And to achieve a good hybrid channel must be perfectly managed, increase the reach of market-segmentation, cost efficiency and customize the marketing approach by increasing professionalism in terms of information and computer technology and e-commerce capabilities [48, 49] and other innovative technologies related to e-commerce capabilities [50].

The relation between Hybrid Channel on Performance through e-Commerce Capabilities has been studied previously by [49] sales using two or more channels to Performance through the mediation of e-Commerce Capabilities. Then the relationship between the Hybrid Channel, e-commerce Capabilities, and Performance can be estimated and accurate with the following hypothesis:

**Hypothesis 3:** Hybrid Channels have a positive and significant effect on performance.

**Hypothesis 4:** Hybrid Channels have a positive and significant effect on performance through the mediation of e-commerce capabilities.

**3. Methods**

In this study, we using a quantitative research method and conducted with online questionnaires. The questionnaires were only collected once in a certain period, or cross-sectional research. A five-point Likert Scale items question was to develop into an item statement where strongly disagree=1 and strongly agree=5, with 55 item questions asked, which the
The study adopted a quantitative approach using an online survey method to collect data. The objective is to collect information from plenty of micro and small numbers in the Indonesian creative industry culinary sector. The sampling uses random sampling from Jakarta, Bogor, Depok, Tangerang, Bekasi, and West Java (Indonesia). The study used SEM Analysis Covariant Based Structural Equation Modelling (CB-SEM) to test our hypothesis with the AMOS 24.0. We believe that the CB-SEM is the best suited to estimate our research model (see Fig. 1) because of the causality relation between latent variables, counting measures the feasibility of the model, and confirms it according to the empirical data.

SEM is used to study experimental and non-experimental data for cross-sectional and longitudinal data. The complex theoretical model developed using this method is typically linked with the data collected to validate it. These theoretical models can be evaluated for this kind of fit test by empirical data. SEM is considered enough for a plenty sample method that usually demands a minimum sample size of 200. SEM evaluates two models: path analysis and measurement model. Some advanced models are considered, such as multilevel models and growth models. However, in this paper we confine ourselves to i) measurement model and ii) path analysis [51].

Step by step using SEM [51]:
- a) Individual Construct
- b) Preparing for CFA
- c) Running CFA
- d) Structural Modeling
- e) Finding

Strategic Orientation - Strategic orientation is a combination of several single orientations, such as Market Orientation and Entrepreneurial Orientation [52, 53], a combination of Entrepreneurial Orientation and Learning Orientation [12], or a combination of Entrepreneurial Orientation, Market Orientation, and Learning Orientation ([18], [54–56]), the company’s commitment to achieving a goal. The company’s commitment includes the owner /manager/employees intending to create a competitive advantage [57] to achieve superior performance [38, 58]. In this paper, Orientation Strategy is a combination of Entrepreneurial Orientation, Market Orientation, and Learning Orientation.

Dimension:
- a) Innovative; Risk Taker; Proactive (Entrepreneurial Orientation).
- b) Consumer Orientation; Competitor Orientation; Cross-Functional Coordination (Market Orientation).
- c) Commitment to learn; Open Minded; Sharing Vision (Learning Orientation).

Hybrid Channel – Channels through conventional channel (direct) as well as online with the goal of reaching the consumer segment that different ([7], [20], [59])

Dimension:
- a) Channel Marketing Mix Strategy
- b) Channel Resource Strategy
- c) Channel Promotion and Communication Strategy

E-Commerce Capabilities – e-Commerce Capabilities are the capabilities of companies that combination of company assets tangible (infrastructure, software/hardware) and intangible (knowledge, experience) in e-commerce activities (identified, developed, and assimilated).

Dimension:
- a) Information
- b) Transaction
- c) Customization

### Table 1. Variable Identification

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent Variable</th>
<th>Mediating Variable</th>
<th>Dependent Variable</th>
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<tbody>
<tr>
<td>H1</td>
<td>Strategic Orientation</td>
<td></td>
<td>Performance</td>
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<tr>
<td>H2</td>
<td>Strategic Orientation</td>
<td>e-Commerce Capabilities</td>
<td>Performance</td>
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<tr>
<td>H3</td>
<td>Hybrid Channel</td>
<td></td>
<td>Performance</td>
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<tr>
<td>H4</td>
<td>Hybrid Channel</td>
<td>e-Commerce Capabilities</td>
<td>Performance</td>
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### 4. Results and Discussion

Respondents' profiles based on the location of respondents are spread across Jakarta, Bogor, Depok, Tangerang, South Tangerang, Bandung, and other West Java, mostly from South Tangerang with 26.7% and Jakarta with 18.6%. The gender percentage of the respondents was 37.3% male and 62.7% female. The age demographic character of the respondents is the majority aged from the range of 35 - 44 years and 25 - 34 years. The education level is undergraduate with the highest percentage, amounting to 61.4%, and high school with a percentage of 26.7%.

Respondents are the majority of business owners who know the turnover (income) and income category 59.3% is an additional income and 37.7% is the major income. The characteristics of the businesses run by the respondents, the majority are engaged in culinary (creative food and beverages) 47.9%. The length of the business run is the majority 0-3 years. The amount of gross income obtained from business is the majority of less than 800 thousand by 81.4%, with an initial capital of
50 million or less, amounting to 89% of the marketing channels used by micro and small businesses entrepreneurs as respondents from this research, 71.6% are utilizing all channels, both direct and online. Sum of 83.5% answered that they did not use the website in their marketing, and only used marketplace applications 52.5% answered using them. A sum of 29.7% preferred Go Food as the online marketplace application.

The average and standard deviation of each research variable, where there are 4 research variables, using a Likert scale the minimum number is 1 for Strongly Disagree and the maximum number is 5 for Strongly Agree. The average range of all research variables is from 3.35 and 4.54, and the standard deviation range is from 0.460 to 0.975.

Structural Equation Modeling (SEM) is a data analysis technique popular among researchers from various disciplines. Many fit indices are available, which SEM researchers can use to describe the fit indices to determine how well the a priori model fits the sample data and indicate which model has the most superior fit, as a by comparison, or show a simple model fit.

The Goodness of Fit Test or abbreviated GOFI is grouped into three parts: the absolute fit measure, the incremental fit measure, and the parsimony fit measure. Some of the GOFI test criteria like CMIN=1453, 22 (Poor Fit), CMIN/DF= 1.781 (Good Fit), ECVI = 7,651 (Good Fit), RMSEA=0,058 (Good Fit), IFI=0,895 (Good Fit), TLI =0,882, CFI=0,893 (Good Fit), PCFI=0,807 (Marginal Fit), PNFI =0,713 (Fit), PRATIO=0,904 (Good Fit) is used in this research. Based on the ten parameters above, nine of them meet the Marginal and Good Fit criteria, only one is a poor fit, CMIN value, or the chi-square value, because chi-square is very sensitive to the sample, and we can use another fit model criteria. Not all criteria that fit the model test must be met in the study, 4-5 criteria from the GOFI model fit test are sufficient as long as it represents each of the criteria.

In this study, the Strategic Orientation consists of Entrepreneurial Orientation, Market Orientation, and Learning Orientation. The dimensions and indicators for Strategic Orientation are: - Innovative is represented by Learning Orientation. The dimensions and indicators for this study, the Strategic Orientation consists of the GOFI model fit test are sufficient as long as it represents each of the criteria.

In Table 1, hypotheses H3 and H4, H3 shows the effects of Hybrid channels on Performance and H4 shows the effects of Hybrid channels on Performance via mediating variable e-commerce capabilities. Estimation of the coefficient of the relationship between the effects of Hybrid Channels on Performance 4.36 of 0.303 with the value of the Critical Ratio t-test is 2.413 (more than 1.96) significant at 0.05 probability because P-Value 0.016<0.05. Therefore hypothesis 3 (H3) is accepted. Hypothesis 4 shows the effect of Hybrid Channels on Performance via e-Commerce Capabilities. The estimated coefficient value of the relationship between the influence of Strategic Orientation on Performance is 0.683 with a Critical Ratio value of t-test is 2.502 (more than 1.96) significant at 0.05 probability because P-Value 0.012 < 0.05. Thus the hypothesis (H1) can be accepted.

This research also refines and confirms previous studies [18], the effect of strategic orientation on performance is positive and significant in the context both of micro, small businesses, and large companies. This paper only focuses on micro and small businesses as respondents including those in the food sector who have a strong Strategic Orientation.

In terms of e-Commerce Capability, the estimated coefficient value of the relation between Strategic Orientation, e-Commerce Capability, and Performance. The effect of e-commerce capability on performance is 1.708, 0.23. Critical Ratio value of t-test is 5.357, 2.470 (more than 1.96) significant at 0.01 and 0.05 probability because P-Value ***<0.01, 0.014<0.05. Viewed from the estimated Fig. s, the critical ratio is positive and significant. In this research hypothesis, we want to see whether the e-commerce capability variable is an intervening (mediation) variable or not. A direct effect from Strategic Orientation to Performance (0.342) is higher than the Indirect Effect of Strategic Orientation to Performance via e-Commerce Capabilities (0.181).

However, the available data shows that the e-Commerce Capability variable does not mediate the effect between Strategic Orientation and Performance, in line with research [18] and complements the research, e-commerce capability as one of the dimensions of IT Capability had positive and significant performance, but e-commerce capability cannot mediate Strategic Orientation to Performance. So it can be concluded that the hypothesis (H2) is rejected, e-commerce capability is not a mediating variable.

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0.011 <0.05. Thus the effect of Hybrid Channels on e-commerce is positive and significant.

In this study, the Hybrid Channel Variable has three dimensions: - Channel Marketing Mix Interaction and Integration represented by the indicators product/service interaction) and place interaction; - Channel Resource Interaction and Integration are represented by technology interaction and human resource interaction; - Promotion and Communication Integration are represented by brand integration, brand integration, and integration of customer satisfaction facilities. This study confirms the research [20] in addition to empirically proving the effect of Hybrid Channels on e-Commerce Capabilities which is a suggestion from this research to increase investment in new technology if you want new technology, complex or more advanced marketing channels, if the marketing channels are more advanced, the greater the challenge to be able to integrate all these marketing channels, it will spur an entrepreneur or managers to advance capabilities in the field of technology, in this case, is e-commerce.

In terms of the e-Commerce Capabilities variable, the estimated coefficient value of the relationship between the Hybrid Channels on e-commerce Capabilities is positive and significant. The effect of e-commerce Capabilities is 0.23. The critical ratio value of the t-test is 2.470 (more than 1.96) significant at 0.05 probability because the P-Value is 0.014 <0.05. Therefore, the critical ratios are positive and significant. However, in this research hypothesis, consider the e-commerce capability variable is an intervening (mediation) variable or not. The direct effect of Hybrid Channels on Performance (0.376) is greater than the indirect effect of Hybrid Channels on Performance through e-commerce Capabilities (0.283). The result is e-commerce capability is not a mediating for the effect of Hybrid Channels on Performance.

This can be explained by the results of descriptive statistics, although 71.6% of respondents use and utilize all channels, 83.5% of respondents answered that they do not use the website in their marketing, even though 52% of them use an online marketplace application, which is limited to one particular application, namely Go Food. So that the use of e-commerce is still in a too complex stage, and the resulting conflict is not too complicated so that the required e-commerce capabilities are not significant and do not make it can mediate hybrid channels on performance. Then it can be concluded that hypothesis H3 is accepted and hypothesis H4 is rejected, e-commerce capability is not a mediating variable.

5. Conclusion

The strategic orientation variable has a positive and significant effect on e-commerce capability, and the e-commerce capability effect on performance is positive and significant, but the e-commerce capability variable does not mediate the effect of strategic orientation on performance. This means that an entrepreneur with a strong strategic orientation where the characteristics are: innovation, risk-taking, and competitive spirit, customer orientation, competitor orientation, and internal cross-functionality, commitment to learning, open-mindedness, and sharing vision, will spur high e-commerce capabilities also in this era of e-commerce.

The Hybrid Channel variable has a positive and significant effect on e-commerce capability, and the effect of e-commerce capability on performance is positive and significant, but the e-commerce Capabilities variable does not mediate the Hybrid Channel on performance. Hybrid Channel Variables have a positive and significant influence on e-Commerce Capabilities, if you want a complex or more advanced marketing channel, the challenge is getting bigger to be able to integrate all these marketing channels, it will spur an entrepreneur or managers to advance capabilities in the field of technology, in this case, is e-commerce.

E-commerce capability, both in bridging the Strategic Orientation and Hybrid Channels on Performance, couldn’t act as mediating variable. This means in this case, the existing data shows that the capability of e-commerce does not make a variable that can accelerate the influence of the two independent variables on the dependent variable. This means that the independent variable without the e-commerce capability variable which is said to be a dynamic capability that can be useful for making micro and small businesses highly competitive and able to survive in the long term (sustain) can directly affect performance. Suggestion for next research, makes the material for future research with a larger sample, as well as the same or broader research industry fields.

References


