STRATEGIC POLICIES FOR SMALL AND MEDIUM BUSINESSES IN MARKETING THROUGH E-COMMERCE*

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Abstract. Previous literature on the Theory of Planned Behavior suggests that attitudes, subjective norms and behavioral control have a significant effect on behavioural intention including the e-commerce marketing intention by small and medium businesses. More recent studies noted that behavioral control, spiritual intelligence, and intentions have a significant effect on behavior in marketing through e-commerce. In this study, a model developed by Darsono (2018) was further refined based on the results of the model trials carried out using data collected in Malang City, Indonesia. The objectives of this study are: (1) to determine the strategic policies of small and medium businesses in e-commerce marketing by using the Exponential Comparison Method (ECM), and (2) to analyze policy profiling for several types of e-commerce marketing by using correspondence analysis. The Exponential Comparison Method (ECM) is a data analysis techniques based on a decision support system that describes a complex multi-factor problem into a hierarchy where each level of the hierarchy is composed by several specific elements. By using the hierarchy, a complex and unstructured problem is broken down into groups which are then organized into a hierarchical form. Based on the results of ECM analysis, this study recommends the strategic policies of SMEs in the selection of e-commerce marketing related to attitudes towards e-commerce marketing, subjective norms, behavioral control, spiritual intelligence, and the intention to buy and sell online in the market with each attribute. The results of the correspondence analysis further explain the existence of special characteristics in each choice. In particular, (1) online buying and selling in the marketplace has been ranked as the first option based on how to receive orders and shipping methods; (2) internet banking and SMS banking was ranked second based on place to sell products and payment methods; (3) cable TV and internet provider was chosen as the last option based on customer service; and finally (4) product considerations are noted in all options.

Keywords: strategic policy; marketing; e-commerce; small and medium businesses

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1. Introduction

The main focus in the Theory of Planned Behavior (TPB) is intentional behavior whereby intention is an intermediate variable that causes behavior. The literature suggests multiple views on the concept of intention. For instance, intentions has been considered as (1) “catchers” or intermediaries for motivational factors that have an impact on a behavior; (2) intention shows how hard someone dares to try; (3) intention drives how much effort someone is planning to do; and (4) intention is closest to the next behavior (Ajzen, 1991). TPB suggests three determinants of conceptually independent intentions, namely: (1) attitudes toward behavior that indicate the degree to which a person has a good or poor evaluation of a particular behavior; (2) subjective norms as social factors that indicate perceived social pressure to do or not take action / behavior; (3) control of perceived behavioral control, shows the ease or difficulty of taking action and is considered as a reflection of past experience in addition to anticipated obstacles or obstacles (Ajzen, 1991).

More recently, additional variables have been integrated to the Theory of Planned Behavior (see Hage & Posner, 2015; Pekerti & Sendjaya, 2010; Sina & Noya, 2012). From e-commerce perspective, a study by Darsono (2018) suggests that spiritual intelligence plays a significant role in modeling for e-commerce marketing among the small and medium businesses. The findings of the study found that (1) attitudes, subjective norms, behavioral control, and spiritual intelligence have a significant effect on intention in e-commerce marketing by SMEs (2) behavioral control, spiritual intelligence, and intention have a significant effect on behavior in e-commerce marketing by SMEs; (3) behavioral control, and spiritual intelligence have a significant effect on behavior and intention as mediators in e-commerce marketing by SMEs. Nevertheless, a further examination of the strategic choices of policy formulation regarding e-commerce marketing among the small and medium businesses are still lacking. As such, a more systematic approach in solving e-commerce marketing strategic options need to be addressed.

The literature suggests that the Exponential Comparison Method (ECM) can be used to solve strategic policy problems (Yulianti & Juwita, 2016). ECM is a decision support system that describes a complex multi-factor problem into a hierarchy where each level of the hierarchy is composed by several specific elements. With hierarchy, a complex and unstructured problem is broken down into groups and then the groups are organized into a hierarchical form. In this study, the process of selecting alternative solutions using the Exponential Comparison Method (ECM) enables several strategic steps in an effort to increase team collaboration on work efficiency in small and medium enterprises to be identified.

Thus, the present study aims to address the following research questions:

a. How to determine the strategic policies of SMEs in e-commerce marketing by using the Exponential Comparison Method (ECM)?

b. How is the policy profiling for several types of e-commerce marketing done using correspondence analysis?

Based on the above research issues, this research was conducted to solve strategic policy problems in e-commerce marketing by SMEs with particular reference to the application of the Theory of Planned Behavior in a model developed by Darsono (2018). More specifically, the objectives of this study are as follows:
a. To determine the strategic policies of SMEs in e-commerce marketing using the Exponential Comparison Method (ECM).

b. To analyze policy profiling for several types of e-commerce marketing using correspondence analysis.

In this study, the results of the modeling are carried out through an in-depth study by looking at the suitability between the causes and solutions, the weaknesses and strengths of each alternative solution carefully and deeply identified for further verification. Various opinions and ideas are gathered from key respondents, both in the government and industry, pertaining to this research issues. Selection of various alternatives is used to choose the best solution. Alternative solutions are arranged in priority and simulated to obtain maximum results.

2. Literature Review

2.1 Theory of Planned Behavior

In general, it can be said that the better the attitudes and subjective norms of a buying behavior, and the greater the behavioral control it feels, the stronger the consumer's intention to carry out the intended purchase. Conversely, intention, is seen as a decisive variable for real behavior, meaning that the stronger the intention of the consumer to make a purchase or to reach the purchase goal, the greater the success of behavioral predictions or behavioral goals to occur. However, the success rate will depend not only on intention, but also on non-motivational factors such as opportunities and resources (for example: time, money, skills, cooperation from others, etc.). This can be studied further by basing on Ajzen's (1985) observations. Together these factors show a person's real control of behavior. In the event that a person has the opportunities and resources needed, and tends to carry out the behavior, in that condition he can succeed. The behavior in question must be specific, not general behavior.

Behavioral control problems can only occur within the boundaries of certain actions, and other actions occur because of the influence of factors outside one's control. Simple behaviors such as driving to a supermarket can be hampered by vehicle engine problems. So, control of behavior can be viewed as a continuum. One extreme is behavior that has little contradiction if there is a problem of control. For example is a choice at a hair salon. After consumers enter the salon, the choice of the haircutter (people are certain) can be done at will.

Measurements in the Theory of planned behavior are attitudes, subjective norms, and behavioral controls that are felt. These three components interact and become a determinant of intention / intention which in turn will determine whether the behavior in question will be done or not. Attitudes towards a behavior are influenced by the belief that the behavior will bring desired or undesirable results. Normative sticky beliefs (expected by others) and the motivation to act in accordance with normative expectations forms subjective norms in the individual. Perceived behavioral control is determined by past experience and individual estimates of how difficult or easy it is to conduct behavior. This behavioral control is very important when a person's confidence is in a weak condition. The relationship of the three components in the theory of planned behavior can be explained as follows: behavior is influenced by intention to behave, while intention is influenced by variables: attitudes, subjective norms, and behavioral controls.

Zohar and Marshall (2002) explain spiritual intelligence as intelligence to deal with and solve problems of meaning and value, namely intelligence to place our behavior in a broader and richer sense, intelligence to judge that an action or way of life will be more meaningful than others. Zohar and Marshall (2002) also provide different meanings about spirituality and religiosity, that spirituality is not related to religiosity. Religiosity is related to religion (religion) which is the basics of life that make individual life become organized, while spirituality is an individual effort to reach a certain mental level where in these conditions humans try hard to unite with their God, unite with the universe and merge with surrounding energy.
The capacity of spiritual intelligence that develops in humans according to Zohar and Marshall (2002) can be seen from observations, among others, as follows: (1) ability to be flexible, (2) high level of awareness, (3) ability to deal with and exploit suffering, (4) ability to deal with and transcend pain, (5) quality of life inspired by vision and supply-value, (6) reluctance to cause unnecessary losses, (7) real tendency to ask "why" or "what if" to look for fundamental answers.

Pekerti and Sendjaya (2010) stated that spiritual intelligence shapes personal, moral character and behavior. Spiritual intelligence must be possessed by every individual including the leader. Leaders are individuals who have a strong influence in the organization to shape the performance of the people they lead. Spiritual intelligence affects the intention to behave (Hage & Posner, 2015). Spiritual intelligence is a form of intelligence that is used to achieve success in work and life. Someone who has high spiritual intelligence will influence behavior in every decision making (Sina & Noya, 2012).

2.2 E-Commerce Marketing of Small and Medium Businesses
Marketing is a social and managerial process in which individuals and groups get what they need and want by creating, offering, and exchanging valuable products with other parties. According to Kotler (2003) marketing is a social and managerial process where individuals and groups get their needs and desires by creating, offering and exchanging something of value to each other. This definition is based on core concepts: needs, desires, and demands, product values, values and satisfaction, exchanges, transactions and relationships, markets and marketing and marketers. Whereas according to Assauri (2011) marketing is a human activity that is directed at fulfilling and satisfying needs and desires through an exchange process.

Electronic Commerce (electronic commerce) is part of electronic business (business conducted by using electronic transmission). The global definition of e-commerce is all forms of trade transactions of goods or services carried out electronically. A formal definition of e-commerce is provided by Baum, Locke and Smith (2001), namely: a dynamic set of technologies, applications and business processes that connect companies, consumers, and communities through electronic transactions and trade in goods, services and information carried out electronically. The quality of internet marketing and differentiating qualitative criteria for the development of internet marketing will help in the internet process of implementing marketing quality.

The development of this media is the most rapid compared to other media in supporting e-commerce. There are two supporting factors that cause the internet to develop faster in mediating e-commerce, namely (1) the internet has a very wide range, is cheap, fast, and easily accessible to the public; (2) the internet uses electronic data as a medium for delivering messages/data so that information can be sent and received easily and concisely, both in the form of analog and digital electronic data (Teo, Raganathan & Dhaliwal, 2006). According to (Teo et al., 2006) traditional trade is basically the actions of companies selling goods and/or services to generate income in the form of money, which in turn produces net income from the difference in income minus market prices plus operational costs.

Electronic commerce does things similar to traditional trade, but having advantages directly can be useful to increase company revenue and profits. With the flexibility of electronic commerce can reduce marketing costs with ease and sophistication in delivering information about goods and services directly to consumers wherever they are. Companies that do business electronically can also cut shop operating costs because they do not need to display their items in large-sized stores with many employees. Commitment to products or services, enthusiasm to compete, enthusiasm for entrepreneurship and enthusiasm for opportunities correlate with business tenacity. Entrepreneurs who have enthusiasm for entrepreneurship continue to stay in business.

Small and medium enterprises (SMEs) have a very large role in the national economy. The functions and roles of SMEs include: providing goods and services, absorbing labor, equitable income, adding value to regional
products, improving living standards. The absorption of SMEs towards labor is very large and close to the small people (Supardi, 2009; Kowo et al., 2019). The main problem faced by SMEs is marketing (Supardi, 2009). Marketing with conventional methods requires high costs, for example opening new branches, participating in exhibitions, making and distributing brochures etc.) The development of the internet has become an efficient means of opening new marketing channels for products. In addition to the relatively low cost of SMEs, using the internet to disseminate information will be faster and broader in scope, development of e-commerce marketing and sales models to overcome these problems (Supardi, 2009). The growth and sustainability of the company are subject to the adoption of technology-oriented business processes led by information systems within the organization.

To improve the competitiveness of SMEs as well as to get export opportunities and other business opportunities can be done by utilizing the development of Information and Communication Technology (ICT), especially e-commerce (Jauhari, 2010). Website and e-commerce development needs to be done as a means for promotion and marketing of business products, so that it will increase sales volume and increase revenue. This increase in income will eventually develop these small and medium enterprises (Jauhari, 2010). SMEs are required to pay more attention to global market expansion and value creation through R & D investments, as part of their long-term growth and survival strategies (Nino-Amézquita, Legotin & Oleg Barbakov, 2017). The perception of business risk that has an impact on the involvement of SMEs in cluster collaboration and competition risk turns out to be the most important risk indicator.

3. Methodology
3.1 Population, Samples, and Sampling Techniques

This study utilized data collected from SMEs in Malang City, Indonesia. This location was chosen due to the importance of the city being the second largest city in East Java. As such it is viewed as an industrial city as well as an education a tourism city. The population in this study is the manager of SMEs who are domiciled in Malang City. Based on data in the Malang City Cooperative and SMEs Office, there are a total of 2,764 SMEs assisted. However, only 880 units have been certified, or around 32 percent. The sample size in this study uses the formula for the number of indicators multiplied (5-10) = 18 x 7 = 126. While the sampling technique is Simple Random Sampling.

3.2 Analysis of Exponential Comparison Methods (ECM)

The results of modeling in the first year research activities are used as a reference in designing research activities in the second year. Trial or implementation of the results of the development of the Theory of Planned Behavior model in e-commerce marketing by SMEs in Malang City. The implementation of the model development compiled in the first year will be refined based on the results of the model trials in the second year. Besides that, an in-depth study was also conducted.

Alternative solutions to these factors have begun to be explored to conduct a suitability study between causes and solutions. The weaknesses and strengths of each alternative solution are carefully and deeply identified for further verification. At this stage various opinions and ideas will be explored from various parties, both the government and the people who have high attention to this problem.

The next step is to select various alternatives to choose the best solution. Various alternative solutions are arranged in priority and simulated to obtain maximum results. The process of selecting alternative solutions will be used by the Exponential Comparison Method (ECM), which is a decision support system that describes a complex multi-factor problem into a hierarchy where each level of the hierarchy is composed by several specific elements. With hierarchy, a complex and unstructured problem is divided into groups and then the groups are organized into a hierarchical form. From the method obtained in the form of strategic steps in an effort to increase
team collaboration on work efficiency in SMEs. So, the output at this stage is a recommendation that will be used by SMEs actors in order to take technical policies.

In using the Exponential Comparison Method there are several steps that must be done, namely:

a. Arrange decision alternatives to be chosen.
b. Determine criteria or comparisons of important decisions to be evaluated.
c. Determine the importance of each decision criterion.
d. Assess all alternatives on each criterion.
e. Calculates the score or total value of each alternative.

Determine the order of priority decisions based on the score or total value of each alternative.

The formulation of the score calculation for each alternative in the exponential comparison method is:

\[
\text{Total value (TN}_i) = \sum_{j=1}^{m} (R_{Kij}) T_{Kj}
\]

Where:

- \(TN_i\) = Total alternative value to \(-i\)
- \(R_{Kij}\) = the relative importance of the \(j\) criteria in the choice of decision \(i\)
- \(T_{Kj}\) = the degree of importance of the criteria of the \(j\)th decision; \(T_{Kj}>0\); round
- \(n\) = number of decision choices
- \(m\) = number of decision criteria

Determination of the importance of criteria is done by interviewing experts or through brainstorming agreements. Determination of alternative scores on certain criteria is done by giving the value of each alternative based on the value of each criterion.

3.3 Correspondence Analysis

Correspondence Analysis is part of a multivariate analysis that studies the relationship between two or more variables by modeling lines and columns together from a two-way contingency table in a low dimensional vector space (Greenacre, 2007). The results of correspondence analysis usually show the best dimension for presenting data, which is the point coordinates and a measure of the amount of information that exists in each dimension called inertia (Johnson, 2002).

The stages in the correspondence analysis are as follows:

a. From the contingency table, the original data is arranged in the form of a matrix and a singular value decomposition is carried out to determine the value of the variability of the original data which is explained by each dimension produced.
b. Perform correspondence analysis on contingency tables.
c. Observing the coordinate values and visualizing the plot of row and column vector profiles in each of the closest points for each consideration to describe marketing options through e-commers.

4. Results

4.1 Results of the Exponential Comparison Method (ECM) Analysis

Some considerations of e-commerce marketing decisions by small and medium enterprises (SMEs) in Malang City are related to the attitude of subjective norms, behavioral control, spiritual intelligence, and intentions. In each factor, the amount of consideration given in e-commerce marketing decisions will be analyzed so that the weight of the decision to make a choice will be generated. Decision choices will be divided into three based on the strength of choice, namely: low, medium and high. At the beginning, consumers will be asked to fill the
degree of importance on the factors of consideration in order to produce weight. Then the choice decision will be calculated by the exponential comparison method (ECM) which will be the basis of e-commerce marketing decisions.

**Attitude**

The results of weight calculations, the calculated weights range from 16.3% to 17.1%. Customer service has the lowest weight of 16.3%, while the payment method has the highest weight, which is 17.1%. Four considerations of attitudes include: payment methods (16.9%), how to receive orders (16.8%), places to sell products (16.5%), and shipping methods (16.5%). The results of calculations with attitude-based ECM for e-commerce marketing options with online buying and selling in the marketplace are the highest choice then continue with internet banking and SMS competing, as well as cable TV and internet providers. In particular, consideration of options for e-commerce marketing with online buying and selling in the marketplace is, products, how to receive orders, payment methods, shipping methods, and customer service (Table 1).

**Table 1. Weight of Marketing Options Through E-Commerce Based on Attitude Considerations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marketing Options Through E-Commerce</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buy and Sell Online at Marketplace</td>
<td>Internet Banking and SMS Banking</td>
</tr>
<tr>
<td>1. Products</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. Product selling place</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3. How to receive orders</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4. Payment method</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>5. Shipping method</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6. Customer service</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Score</td>
<td>7.697</td>
<td>7.598</td>
</tr>
<tr>
<td>Ranking</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subjective Norm**

The results of weight calculations, the calculated weights range from 49.4% to 50.5%. The consideration of friends has the lowest weight of 49.4%, while family members have the highest weight, which is 50.6%. Overall consideration from family members is stronger when compared to friends. The results of calculations with subjective norm-based ECM through e-commerce marketing options with online buying and selling in the marketplace became the highest choice, then continued with internet banking and SMS competing, as well as cable TV and internet providers. Specifically the consideration of options for e-commerce marketing with online buying and selling in the marketplace is family members (Table 2).

**Table 2. Weight of Marketing Options Through E-Commerce Based on Subjective Norm Considerations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marketing Options Through E-Commerce</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buy and Sell Online at Marketplace</td>
<td>Internet Banking and SMS Banking</td>
</tr>
<tr>
<td>1. Family member</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2. Friends</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Score</td>
<td>4.24</td>
<td>3.96</td>
</tr>
<tr>
<td>Ranking</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Behaviour Control
The results of weight calculations, the calculated weights range from 33.1% to 33.5%. The consideration of the availability of hardware has the lowest weight of 33.1%, while the availability of human resources has the highest weight, namely 33.5%. And the weight of consideration for the availability of software is 33.3%. The results of calculations with ECM-based behavioral control through e-commerce marketing options with online buying and selling in the marketplace are the highest choice then continue with internet banking and SMS competing, as well as cable TV and internet providers. In particular the consideration of options for buying and selling online in the marketplace are software availability, hardware availability, and availability of human resources (Table 3).

### Table 3. Weighting Marketing Options Through E-Commerce Based on Behavior Control Considerations

<table>
<thead>
<tr>
<th>Description</th>
<th>Marketing Options Through E-Commerce</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buy and Sell Online at Marketplace</td>
<td></td>
</tr>
<tr>
<td>1. Availability of software</td>
<td>5</td>
<td>0.335</td>
</tr>
<tr>
<td>2. Availability of hardware</td>
<td>5</td>
<td>0.331</td>
</tr>
<tr>
<td>3. Availability of human resources</td>
<td>5</td>
<td>0.333</td>
</tr>
<tr>
<td>Score</td>
<td>5.127</td>
<td>0.374</td>
</tr>
<tr>
<td>Ranking</td>
<td>1</td>
<td>0.374</td>
</tr>
</tbody>
</table>

Spiritual Intelligence
The results of weight calculations, the calculated weights range from 9.6% to 10.03%. Contemplating what will happen after death has the lowest weight of 9.6%, while finding a problem and trying to choose a way out of that problem with spiritual awareness that I have has the highest weight of 10.3%. Overall the weight of consideration in sequence is to develop one's own theory of life, death, reality, and existence which is 10.2%, aware of the nonmaterial or spiritual aspects of life that are 10.2%, aware of nonmaterial or spiritual aspects namely 10.1%, explore spiritual awareness myself, which is 10.1%, the decision is in accordance with the purpose of life, which is 10.1%, accepts change for the better, 9.9%, develops more than preserving what is known or existing, 9.8%, finding meaning contained in everyday experiences which is 9.7%.

The results of calculations with ECM-based behavioral control through e-commerce marketing options with online buying and selling in the marketplace are the highest choice then continue with internet banking and SMS competing, as well as cable TV and internet providers. Specifically the consideration of options for buying and selling online in the marketplace is contemplating what will happen after death, developing one's own theory of life, death, reality, and existence, being aware of nonmaterial or spiritual aspects, making decisions in accordance with life's purpose, finding meaning daily experience, finding problems and trying to choose the way out of the problem with the spiritual awareness that I have, developing more than just preserving what is known or existing, accepting change for the better (Table 4).

### Table 4. Weight of Marketing Options Through E-Commerce Based on Spiritual Intelligence Considerations

<table>
<thead>
<tr>
<th>Description</th>
<th>Marketing Options Through E-Commerce</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reflect on what will happen after death.</td>
<td>5</td>
<td>0.096</td>
</tr>
<tr>
<td>2. Develop your own theories about life, death, reality, and existence.</td>
<td>5</td>
<td>0.102</td>
</tr>
</tbody>
</table>
3. Be aware of the nonmaterial or spiritual aspects of life that exist within. | 5 | 3 | 3 | 0.102
4. Be aware of nonmaterial or spiritual aspects, can help me feel more centered. | 4 | 5 | 3 | 0.101
5. Decisions are in accordance with the purpose of life. | 5 | 5 | 4 | 0.101
6. Find the meaning contained in everyday experience. | 4 | 4 | 5 | 0.097
7. Find the problem and try to choose the way out of the problem with the spiritual awareness that I have. | 5 | 4 | 3 | 0.103
8. Dive into my own spiritual awareness. | 4 | 4 | 3 | 0.101
9. Develops more than just preserving what is known or existing. | 5 | 5 | 5 | 0.098
10. Accept change for the better. | 5 | 5 | 5 | 0.099

Score | 11.669 | 11.526 | 11.426
Ranking | 1 | 2 | 3

**Intention**

The results of weight calculations, the calculated weights range from 11.5% to 14.3%. Finding information about e-commerce marketing that provides the best service has the lowest weight of 12.2%, while intending to say the positive thing about e-commerce marketing has the highest weight of 12.9%. Overall, the weight of consideration sequentially is planning e-commerce marketing, which is 12.6%, looking for information about e-commerce marketing, which is 12.6%, has a preference on e-commerce marketing that provides the best service, 12.5%, has The main preference for e-commerce marketing is 12.5%, intending to refer e-commerce marketing so that other SMEs will do 12.4%, intending to do e-commerce marketing in the near future, which is 12.3%.

The results of calculations with intention-based ECM, e-commerce marketing options with online buying and selling in the marketplace became the highest choice then continued with internet banking and SMS competing, as well as cable TV and internet providers. In particular the consideration of the choice for online buying and selling in the marketplace is intending to do e-commerce marketing in the near future, intending to refer e-commerce marketing to other SMEs, intending to say positive things about e-commerce marketing, has the main preference of e-commerce marketing, looking for information about e-commerce marketing, looking for information about e-commerce marketing that provides the best service (Table 5).

**Table 5. Weighting Marketing Options Through E-Commerce Based on Consideration of Intentions**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marketing Options Through E-Commerce</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intend to do marketing through e-commerce in the near future.</td>
<td>Buy and Sell Online at Marketplace</td>
<td>5</td>
</tr>
<tr>
<td>2. Planning e-commerce marketing.</td>
<td>Internet Banking and SMS Banking</td>
<td>3</td>
</tr>
<tr>
<td>3. Intend to refer e-commerce marketing to other SMEs.</td>
<td>Cable TV and Internet Provider</td>
<td></td>
</tr>
<tr>
<td>4. Intend to say positive things about e-commerce marketing.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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5. Has the main preference of e-commerce marketing.  
6. Have a preference on e-commerce marketing that provides the best service.  
7. Looking for information about e-commerce marketing.  
8. Looking for information about e-commerce marketing that provides the best service.  

<table>
<thead>
<tr>
<th>Score</th>
<th>9.673</th>
<th>9.639</th>
<th>9.444</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranking</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### 4.2 Results of Correspondence Analysis

Policy profiles that describe e-commerce marketing options will be illustrated in the relationship between e-commerce marketing considerations and e-commerce marketing options using correspondence analysis. This technique aims to explore the results of mapping the relationship between two variables that are categorized (attributes). Correspondence analysis is an advanced technique based on the results of the distribution of frequency distributions in cross-tabulation. Based on its usefulness, correspondence analysis is used to reduce the dimensions of data into smaller and simpler dimensions and is appropriately used for categorical data. The input data is a contingency table that indicates a qualitative association between rows and columns. Correspondence analysis scales the rows and columns in a unit that are mutually compatible, so that each can be displayed graphically in the same low-dimensional space. These spatial maps provide an overview of:

- a. Similarity and difference in lines for a particular column category.
- b. Similarities and differences in certain column categories,
- c. Relationship between rows and columns.

The interpretation of the results in correspondence analysis is the same as the interpretation in the analysis of the main components for the similarity of certain algorithms. The results of correspondence analysis in grouping categories are found in contingency tables, only because the analysis of the main components involves variable grouping. This result is interpreted according to the closeness between the rows and the contingency table columns. Adjacent categories are more similar in terms of their basic structure (Malhotra, 2010). The results of the correspondence analysis in the form of coordinates for the first and second dimensions, are described in Table 6 and Figure 1 below.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Proportion</th>
<th>Dimensions 1</th>
<th>Dimension 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Options Through E-Commerce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Online Buying and Selling in the Marketplace</td>
<td>.496</td>
<td>-.351</td>
<td>-.104</td>
</tr>
<tr>
<td>B. Internet Banking and SMS Banking</td>
<td>.328</td>
<td>.186</td>
<td>.343</td>
</tr>
<tr>
<td>C. Cable TV and Internet Provider</td>
<td>.176</td>
<td>.644</td>
<td>-.346</td>
</tr>
<tr>
<td>Marketing Considerations Through E-Commerce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Products</td>
<td>.064</td>
<td>.218</td>
<td>-.811</td>
</tr>
<tr>
<td>2. Place to sell products</td>
<td>.136</td>
<td>.095</td>
<td>.170</td>
</tr>
<tr>
<td>3. How to receive orders</td>
<td>.216</td>
<td>-.561</td>
<td>.022</td>
</tr>
</tbody>
</table>
The results of the correspondence analysis calculation show that there are two attributes that are highly considered namely the payment method (A4) and the shipping method (A5). Then in the next sequence is how to receive orders (A3), where to sell products (A2), customer service (A6), and products (A1) and finally will be a general consideration of the 3 e-commerce marketing options. The estimated attributes are (1/21):(3/21):(4/21):(5.5/21):(5.5/21):(2/21) or if based on the sample size 6:18:24:33:33:11. Thus the ranking of attributes A1 (1), A2 (3), A3 (4), A4 (5.5), A5 (5.5), A6 (2). The estimated composition of the six attributes is (1/21):(3/21):(4/21):(5.5/21):(5.5/21):(2/21) or if based on the sample size 6:18:24:33:33:11. The strongest choice is in Online Buying and Selling in the Marketplace followed by Internet Banking and SMS Banking and Cable TV and Internet Providers, so that the composition of the data (3/6):(2/6):(1/6) or 49.6%:32.8%:17.6%. or in a sample size of 63:41:21.

Figure 1. Biplot Graph Between Marketing Options Through E-Commerce and Considerations

Biplot graph between e-commerce marketing options and shows the existence of special characteristics for each choice. Online Buy and Sell options in the Marketplace are 49.6% with considerations: how to receive orders and shipping methods. The choice of Internet Banking and SMS Banking is 32.8% with considerations: the place to sell products and payment methods. Cable TV and Internet Provider options are 17.6% with considerations: customer service. Product considerations exist in all options (in the results of the image, the coordinates of the product position are far away with all marketing choices).
5. Discussion of results

5.1 The strategic policy of SMEs in e-commerce marketing using the Exponential Comparison Method (ECM).

The e-commerce marketing selection policy related to attitudes toward e-commerce marketing is online buying and selling in the marketplace. The policy is based on the results of the ECM analysis which shows that online buying and selling in the marketplace is the main choice in e-commerce marketing. Consideration of options for e-commerce marketing by buying and selling online at the marketplace based on products, how to receive orders, payment methods, shipping methods.

The e-commerce marketing selection policy that relates to subjective norms is online buying and selling in the marketplace. The policy is based on the results of the ECM analysis which shows that online buying and selling in the marketplace is the main choice in e-commerce marketing. Consideration of options for e-commerce marketing with online buying and selling in a marketplace based on family members.

The e-commerce marketing selection policy that deals with behavior control is online buying and selling in the marketplace. The policy is based on the results of the ECM analysis which shows that online buying and selling in the marketplace is the main choice in e-commerce marketing. Consideration of options for e-commerce marketing with online buying and selling in the marketplace based on software availability, hardware availability, and availability of human resources.

The e-commerce marketing selection policy related to spiritual intelligence is online buying and selling in the marketplace. The policy is based on the results of the ECM analysis which shows that online buying and selling in the marketplace is the main choice in e-commerce marketing. The consideration of choice for e-commerce marketing with online buying and selling in a marketplace is based on contemplating what will happen after death, developing your own theories about life, death, reality and existence, being aware of nonmaterial aspects or spirituality, making decisions in accordance with life's purpose, finding problem and trying to choose the way out of the problem with the spiritual awareness that I have, developing more than just preserving what is known or existing, accepting change for the better.

The e-commerce marketing selection policy related to intention is online buying and selling in the marketplace. The policy is based on the results of the ECM analysis which shows that online buying and selling in the marketplace is the main choice in e-commerce marketing. Consideration of the choice for e-commerce marketing with online buying and selling in the marketplace based on intending to do e-commerce marketing in the near future, intending to refer e-commerce marketing to other SMEs, intending to say positive things about marketing through e-commerce, has the main preference of e-commerce marketing, looking for information about e-commerce marketing, looking for information about e-commerce marketing that provides the best service.

5.2 Policy profiling for several types of e-commerce marketing using correspondence analysis.

A policy profile that describes the relationship between choices and marketing considerations through e-commerce using correspondent analysis shows the existence of special characteristics in each choice. Online Buy and Sell options in the Marketplace are 49.6% with considerations: how to receive orders and shipping methods. The choice of Internet Banking and SMS Banking is 32.8% with considerations: the place to sell products and payment methods. Cable TV and Internet Provider options are 17.6% with considerations: customer service. Product considerations exist in all options (in the results of the image, the coordinates of the product position are far away with all marketing choices).
Conclusions

The strategic policies of SMEs in marketing through e-commerce in Malang City which are related to attitudes towards e-commerce marketing are online buying and selling options in the marketplace with consideration of products, how to receive orders, payment methods, shipping methods. The findings in this study are consistent with previous research (Jin at al., 2015 pp. 101-112), the study found that the dynamics of the causative relationship between variables examined and highlighted the importance of attitudes, subjective norms, trust and consumer behavior in ensuring purchase intentions in the context of Malaysian online purchases. The results of this study support previous studies such as Mamoun at al. (2015, pp. 1353-1376) stated the importance of the perceived website reputation, the relative profitability, trustworthiness and image of the web which were perceived as the main drivers of attitudes towards online shopping.

Policies related to subjective norms are online buying and selling options in the marketplace with consideration for family members. The findings in this study are consistent with previous research (Jin at al., 2015 pp. 101-112), the study found that the dynamics of the causative relationship between variables examined and highlighted the importance of attitudes, subjective norms, trust and consumer behavior in ensuring purchase intentions in the context of Malaysian online purchases. Policies related to behavior control are online buying and selling options in the marketplace with consideration of software availability, hardware availability, and availability of human resources. The results in this study are consistent with previous research (Jin at al., 2015 pp. 101-112), the study found that the dynamics of the causative relationship between the variables examined and highlighted the importance of attitudes, subjective norms, trust and consumer behavior in ensuring purchase intentions in the context of Malaysian online purchases.

Policies related to spiritual intelligence are online buying and selling options in the marketplace with consideration of contemplating what will happen after death, developing their own theories about life, death, reality and existence, being aware of nonmaterial aspects or spirituality, making decisions in accordance with life's purpose, finding problem and trying to choose the way out of the problem with the spiritual awareness that I have, developing more than just preserving what is known or existing, accepting change for the better. The findings in this study are consistent with previous studies (Noroozi at al., 2015 pp. 60-71), stating that spiritual intelligence has a positive and significant effect on behavior. The results of this study support previous studies such as Anwar et al. (2015, pp. 1162-1178) states that spiritual intelligence plays an important role in behavior. Two important dimensions namely critical existential thinking and transcendental awareness of spiritual intelligence have a profound influence on behavior.

While the policy related to intention is an online buying and selling option in the marketplace with the consideration of intending to do e-commerce marketing in the near future, intending to refer e-commerce marketing to other SMEs, intending to say positive things about marketing through e-commerce, has the main preference of e-commerce marketing, looking for information about e-commerce marketing, looking for information about e-commerce marketing that provides the best service. The findings in this study are consistent with previous research (Jin at al., 2015 pp. 101-112), the study found that the dynamics of the causative relationship between variables examined and highlighted the importance of attitudes, subjective norms, trust and consumer behavior in ensuring purchase intentions in the context of Malaysian online purchases. The results of this study support previous studies such as Lima et al. (2015, pp. 1353-1376) states that purchase intention has a significant positive effect on online shopping behavior.

The policy profile on e-commerce marketing in Malang City is (1) The first choice of Online Buying and Selling in the Marketplace with considerations: how to receive orders and shipping methods; (2) Second choice of Internet Banking and SMS Banking with considerations: place to sell products and payment methods; (3) Third choice of Cable TV and Internet Provider with features of consideration; customer service. Product considerations
are in all options. The results of this study support previous studies such as Yu (2007, pp. 84-100) stating that in e-commerce and e-technology has accelerated intra-business and inter-business online transactions between buying and selling with the marketplace and which affects the company's willingness to using e-marketplaces identified through pre-joining, decision to join, and post-joining research structures.

References


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