Factors affecting prospective entrepreneurs to utilize e-marketplace: A study of business school students in Indonesia

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ABSTRACT

Currently, e-marketplace utilization grows significantly both on the buying side as well as on the selling side. However, the complete utilization rate is still low. Hence, this study investigates the factors considered by the prospective entrepreneurs to utilize the e-marketplace. The purpose of this study is also to find out the most potential e-marketplace to be employed by the prospective entrepreneurs. This study distributes questionnaires by using a convenience sampling technique to the 285 students at a business school. This study applies the Importance Performance Analysis and Correspondence Analysis methods to process the data gathered. It is found that the trust factor becomes the least important factor as well as the worst performance factor at the same time. On the other hand, the technical factor becomes the most important factor and the environmental factor is recorded as the best performance factor. To utilize e-marketplace, prospective entrepreneurs pay the highest attention to several indicators such as latency, user friendly, marketing, supply chain, price competitiveness, service quality, support/helpdesk, and bank transfer. Furthermore, Tokopedia and Shopee are rated as the best e-marketplaces. This study illuminates the prospective entrepreneurs’ consideration toward e-marketplace utilization; hence the platform owner can make a better service. The findings of the study will inspire the preparation steps for entrepreneurs to start their businesses and enrich the online consumer buying decision theory.

INTRODUCTION

The growth of technology and the internet has an impact on changing the lifestyle of the Indonesian people. Over the last two decades, internet users in Indonesia have increased rapidly. Data shows that internet users in Indonesia in 2018 increased by 95.2 million and grew 13.3% from 2017 which amounted to 84 million users. In the 2018-2023 period, internet users in Indonesia are predicted to increase with an average growth of 10.2%. The internet users in Indonesia in 2022 are predicted will be 141.3 million and increase to 149.9 million in 2023 (Jayani and Widowati, 2019).

The development of online infrastructure also affects the development of online shopping sites in Indonesia. Based on a report released by Google and Temasek, online sites are the sector with the largest value in Southeast Asia (Temasek, 2019). It is predicted that the e-commerce users in Indonesia in 2022 will be 204 million and 212 million in 2023 (Databoks, 2019). More specifically, the number of transactions in nine marketplaces also continued to increase. In 2025, Indonesia is predicted to have the top rank and reach USD 82 billions of e-marketplace transactions. The penetration rate of the number of e-marketplace users in Indonesia in 2017 reached 139 million users, which continued to increase to 154 million users in 2018 (Temasek, 2019).

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Furthermore, the rapid growth of e-commerce users certainly cannot be separated from the existence of e-marketplaces that have been present in Indonesia such as Tokopedia, Shopee, OLX, Bukalapak, and Lazada. SWA magazine research in 2017 evaluated e-marketplaces in Indonesia and created some important insights (SWA Magazine, 2017). It is found that Tokopedia has the smallest Detractor value which indicates that Tokopedia has the lowest level of customer disappointment. In the Passive aspect, Shopee has the lowest score which indicates that the lack of enthusiasm of Shopee customers is the lowest. Shopee also has the highest Promoter value which means it is highly recommended by customers because it provides satisfaction. Furthermore, Tokopedia’s NPS (Net Promoter Score) is the highest and this shows that Tokopedia’s customer loyalty to buy and recommend to others is the highest compared to other e-marketplaces. Lastly, Shopee’s NEV (Net Emotional Value) is the highest even though it is slightly adrift with Tokopedia.

The current condition, which is experiencing a new era as a result of the global coronavirus pandemic, has even shown significant results for the online buying and selling business or e-commerce. During this pandemic, e-commerce transactions increased, thus driving the digital economy in Indonesia (Dinisari, 2020). People are forced to do the majority of their work from home, thus encouraging the use of technology for various needs, one of which is shopping through e-marketplaces. E-marketplaces encourage new shopping habits, including payment and delivery of groceries. Yanto (2016) states that e-marketplaces have a concept like traditional markets but are located on the internet. Marketplace managers have a role as a party that brings together sellers and buyers on their websites.

Moreover, the existence of this new habit also encourages entrepreneurs to open their stores online in the e-marketplace. The interest of entrepreneurs to take advantage of e-marketplaces is because there is no need for them to set up a physical store with all the infrastructure. This certainly greatly reduces the cost of starting a business and becomes an incentive for prospective entrepreneurs. However, there were recorded only 9.6 million out of 59 million or 16.27 percent Micro Small and Medium Enterprises (MSMEs) who utilized the features of the e-marketplace for their businesses (CNN Indonesia, 2019). It can be seen there is a problem regarding e-marketplace penetration. Hence, a study to investigate the factors selected in using e-marketplace is needed. The basic theory of Kotler and Keller (2016: 195) which states that the purchasing decision-making process is based on cognitive and emotional influences should be expanded and more contextualized to the online environment. In addition, a study by Tangmanee and Rawesna (2016) found that trust is the key factor in e-commerce. Specific studies that focus on e-marketplace by Sfenrianto et al. (2018) found that trust is one of the important factors and Prihastomo et al.’s (2018) mentions trust as the most important factor of the e-marketplace. According to this, our study will prove whether the trust is the most important factor or just one of the important factors of the e-marketplace. By conducting this study, it can be found the e-marketplace factors’ level of importance and performance as well. The importance of this study is also shown from the prospective entrepreneurs who are chosen as its respondent target. This section continues with the other five sections below namely literature review, methodology, results, discussion, and conclusion.

**Literature Review**

E-commerce is the process of buying, selling, or trading data, goods, or services over the internet (Turban et al., 2018). E-commerce is defined as a commercial transaction involving the exchange of value through or using digital technology between individuals (Laudon and Traver, 2013: 8-9). One of the most common types of e-commerce is Business-to-Consumer (B2C) e-commerce. This type of online business reaches individual consumers and includes the purchase of retail goods, travel, online content, and other types of services. This type of B2C e-commerce has grown exponentially since 1995. In general, the e-commerce component according to Turban et al. (2018) consists of human; public policy; marketing and advertising; support services; and business partnerships. To achieve the customer satisfaction of e-commerce, Skordoulis et al. (2018) indicate some important factors namely safety, interaction, delivery process, customer service, and products quality. The objectives to have the digital strategy in doing a business are to increase efficiency, to improve the process of business decision making, to improve innovation, to improve the understanding of customer preferences and behavior, to improve the experience and loyalty of customers, to essentially transform business model, and to essentially transform business processes (Karekla et al., 2021). Moreover, input control’s perceptions and clan control influence the crucial behavioral outcomes of sellers as mentioned by Croitor et al. (2021).

Dewi et al. (2017) state that a marketplace is a place where sellers and buyers come together to perform transactions. Hence an e-marketplace is a marketplace where online transactions are performed. One of the reasons for utilizing the e-marketplace is to expand the more flexible work environment and the business’ globalization (Zhai and Liu, 2013). A systematic literature review by Prihastomo et al. (2018) constructs some critical success factors in implementing an e-marketplace. These factors are trust; technical; platform; platform owner; product; service operation; sellers; marketing and sales; payment channel; buyers; and environmental. This review also found that trust is considered the most important factor. Sfenrianto et al. (2018) argue that to assess the trust and satisfaction of e-marketplace, the important factors involved are perceived risk, perceived usefulness, perceived ease of use, e-marketplace reputation, seller’s reputation, seller’s expertise, and convenience. A similar finding was also mentioned by Tangmanee and Rawesna (2016) that perceived risk and website reputation significantly influenced purchase intention through online trust. Hence, the online sellers should raise the customers’ trust to increase the purchase possibility. Another study from Subawa et al. (2020) found that hedonic motivation and price value significantly influence MSMEs’ behavioral intention to use the e-marketplace. On the other hand, the e-marketplace features’ utilization by many MSMEs is still low (Subawa and Mimaki, 2019). It was found that organizational and environmental factors significantly impacted behavioral intention in accepting e-marketplace. According to
Hossain et al. (2021), e-marketplace delivers small firms to market expansion, internationalization, and resource maximization. To enter an e-marketplace, there are three main factors to be decided such as technological, organizational, and environmental factors.

The important factors to implement e-marketplace as mentioned by Prihastomo et al. (2018) are explained further. Trust is about believing each other in the online transaction processes. Technical is related to experience using the system. The platform is about how to handle the users’ traffic within the e-marketplace, including gamification to build engagement between parties. Platform owner is the party who ensures technical and non-technical matters run well in an e-marketplace. Product is about the quality of the item sold, its supply chain, and price. Service operation is about daily operation aspects that directly impacted the customers. Marketing and sales are the processes from offering until selling the products to the customers. The payment channel is the facilities used for receiving the payment. Lastly, environmental is an external factor such as the industry structure, government, competitor, and collaboration.

**Research & Methodology**

This study was conducted in 2021 by quantitative research based on questionnaire distribution. For the research, convenience sampling has been chosen as a non-probability sampling technique. The authors tried to find the answers to two research questions:

i. What are the factors considered by the prospective entrepreneurs to utilize the e-marketplace?

ii. What is the best e-marketplace in Indonesia rated by prospective entrepreneurs?

The questionnaire is formed by adopting Prihastomo et al.’s (2018) construction. Furthermore, the four-point Likert scale is applied to measure the 33 indicators. The complete operational variable can be seen in Table 1 below.

| No. | Variable           | Instrument            | Indicator |
|-----|--------------------|-----------------------|-----------|
| 1.  | Trust              | Transaction           | TR1       |
|     |                    | Payment               | TR2       |
|     |                    | Funding               | TR3       |
|     |                    | Privacy               | TR4       |
|     |                    | Security              | TR5       |
|     |                    | Information quality   | TR6       |
| 2.  | Technical          | Internet-related technology | TE1   |
|     |                    | Accessibility         | TE2       |
|     |                    | Latency               | TE3       |
| 3.  | Platform           | Number of users       | P1        |
|     |                    | User friendly         | P2        |
|     |                    | Mobile                | P3        |
|     |                    | Gamification          | P4        |
| 4.  | Platform owner     | Superior value        | PO1       |
|     |                    | Marketing             | PO2       |
| 5.  | Product            | Quality               | PR1       |
|     |                    | Supply Chain          | PR2       |
|     |                    | Price transparency    | PR3       |
|     |                    | Price competitiveness | PR4       |
| 6.  | Service Operation  | Service quality       | S1        |
|     |                    | Support/help desk     | S2        |
|     |                    | Feedback              | S3        |
| 7.  | Marketing and sales| Discount              | MS1       |
|     |                    | Product price         | MS2       |
|     |                    | Product specification information | MS3   |
|     |                    | Testimonials          | MS4       |
| 8.  | Payment channel    | Credit card service   | PC1       |
|     |                    | Cash on delivery      | PC2       |
|     |                    | Bank transfer         | PC3       |
|     |                    | e-wallet              | PC4       |
| 9.  | Environmental      | Industry structure    | E1        |
|     |                    | Government support    | E2        |
|     |                    | Competitor            | E3        |

**Source:** Own elaboration and Prihastomo et al. (2018)
The population of this study is the students who took the Entrepreneurship subject in the Management Department of a business school in Bandung, Indonesia. Since these students will have to run their business projects for a semester, these students were considered prospective entrepreneurs. By relating to the characteristic of this study, the authors followed the guideline of Roscoe (1982: 253) to set the total amount of respondents i.e.:

i. Sample sizes larger than 30 and less than 500 are appropriate for most research.
ii. For multivariate data analysis, the sample size should be ten times greater than the number of variables analyzed. Since there are nine variables used in this study, the minimum total samples should be ten times nine (10 x 9) equals 90.

There were 13 classes run by the school for the Entrepreneurship subject, then the authors decided to gather at least 20 students for each class to be invited in this study. Hence, the initial target of the final respondents was 260 students. Fortunately, this study gathered 285 respondents who completed the questionnaires at the end. The questionnaires were available in the online form. The authors distributed the link of the online questionnaire to the targeted respondents by using a messenger application.

After collecting the data from the questionnaires distributed, the next step was processing the data for further analysis. To analyze the data, this study employed the Importance Performance Analysis (IPA) and Correspondence Analysis (CA). Kotler and Keller (2016: 434) state that importance-performance analysis rates the various elements of the service bundle and identifies required action. Perhaps the company should spend less on sending out maintenance notices and use the savings to improve performance on important elements. Importance Performance analysis is described in the form of a Cartesian graph, which is a shape divided into four quadrants bounded by two lines that intersect perpendicular to the points (X and Y). Where X is the average score of the perceived performance or service assessment and Y is the average score of the expected interest/service assessment. It is used to determine the position of each attribute or measure of service quality with the level of importance on service quality that is given.

Lastly, Correspondence Analysis (CA) is a method used to quantify categorical data (Greenacre, 2002:6). It is conducted by assigning numerical scale values to the response categories of discrete variables, with certain optimal properties. These scale values have been shown to have interesting geometric properties and provide what are called maps of the relationships between variables.

Results

It is found from all 285 respondents that the most frequent e-marketplace used for shopping is Shoppee (31.2%) followed by Tokopedia (25.6%). While Bukalapak is 19.6%, Lazada is 12.6% and OLX is 10.9%. On the other hand, the most frequent e-marketplace used for selling is Tokopedia (32.6%), followed by Shopee (26.7%), Lazada (20.4%), Bukalapak (15.4%), and OLX (4.9%). This result presents that the respondents’ preference to use e-marketplace for shopping and selling is different.

Furthermore, the factors and indicators of the importance level of e-marketplace defined by the prospective entrepreneurs are presented in Table 2. The table shows the number of responses for the four levels of the Likert scale and their percentage of total responses. The average scores of importance level for each indicator and factor are also presented. They are the input for the Importance Performance Analysis (IPA).

| No. | Indicator | Not Very Important | Not Important | Important | Very Important | Average |
|-----|-----------|--------------------|---------------|-----------|----------------|---------|
| 1   | TR1       | 5 1.80%            | 30 10.50%     | 80 28.10% | 170 59.60%     | 3.46    |
| 2   | TR2       | 6 2.10%            | 37 13.00%     | 87 30.50% | 155 54.40%     | 3.37    |
| 3   | TR3       | 5 1.80%            | 29 10.20%     | 82 28.90% | 168 59.20%     | 3.44    |
| 4   | TR4       | 3 1.10%            | 29 10.20%     | 103 36.10%| 150 52.60%     | 3.40    |
| 5   | TR5       | 5 1.80%            | 24 8.40%      | 96 33.70% | 160 56.10%     | 3.44    |
| 6   | TR6       | 5 1.80%            | 25 8.80%      | 115 40.40%| 140 49.10%     | 3.37    |
|     | **Average for the importance of Trust** | **3.41** |
| 7   | TE1       | 0 0.00%            | 26 9.10%      | 77 27.00% | 182 63.90%     | 3.55    |
| 8   | TE2       | 2 0.70%            | 14 4.90%      | 73 25.60% | 196 68.80%     | 3.62    |
| 9   | TE3       | 0 0.00%            | 16 5.60%      | 74 26.00% | 195 68.40%     | 3.63    |
|     | **Average for the importance of Technical** | **3.60** |
| 10  | P1        | 4 1.40%            | 29 10.20%     | 68 23.90% | 184 64.60%     | 3.52    |
| 11  | P2        | 1 0.40%            | 21 7.40%      | 89 31.20% | 174 61.10%     | 3.53    |
From table 2, it is seen that the most important factor is the technical factor with an average score of 3.60, while the most important indicator is the product specification information (MS3) of marketing and sales factor with an average score of 3.64. On contrary, the least important factor is the trust factor (average score of 3.41) and the least important indicator is the superior value (PO1) of the platform owner factor with an average score of 3.33. It is also counted that the total average score of importance level is 3.49.

As the pair of the importance level, Table 3 presents the performance factors and indicators of e-marketplace defined by the prospective entrepreneurs. They are asked to express their assessment of the popular e-marketplaces selected.
### Table 3: Responses and Average of the Performance Level

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 1   | TR1       | 1     | 0.40% | 72   | 25.30% | 81 | 28.40% | 131 | 46.00% | 3.20 |
| 2   | TR2       | 0     | 0.00% | 48   | 16.80% | 83 | 29.10% | 154 | 54.00% | 3.37 |
| 3   | TR3       | 1     | 0.40% | 60   | 21.10% | 69 | 24.20% | 155 | 54.00% | 3.33 |
| 4   | TR4       | 1     | 0.40% | 40   | 14.00% | 48 | 16.80% | 196 | 68.80% | 3.54 |
| 5   | TR5       | 4     | 1.40% | 38   | 13.30% | 96 | 33.70% | 147 | 51.60% | 3.35 |
| 6   | TR6       | 1     | 0.40% | 33   | 11.60% | 101 | 35.40% | 150 | 52.60% | 3.40 |

**Average for the performance of Trust**: 3.37

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 7   | TE1       | 2     | 0.70% | 33   | 11.60% | 86 | 30.20% | 164 | 57.50% | 3.45 |
| 8   | TE2       | 0     | 0.00% | 50   | 17.50% | 52 | 18.20% | 183 | 64.20% | 3.47 |
| 9   | TE3       | 0     | 0.00% | 41   | 14.40% | 93 | 32.60% | 151 | 53.00% | 3.39 |

**Average for the performance of Technical**: 3.43

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 10  | P1        | 0     | 0.00% | 19   | 6.70% | 101 | 35.40% | 165 | 57.90% | 3.51 |
| 11  | P2        | 2     | 0.70% | 26   | 9.10% | 109 | 38.20% | 148 | 51.90% | 3.41 |
| 12  | P3        | 0     | 0.00% | 35   | 12.30% | 102 | 35.80% | 148 | 51.90% | 3.40 |
| 13  | P4        | 1     | 0.40% | 44   | 15.40% | 107 | 37.50% | 133 | 46.70% | 3.31 |

**Average for the performance of Platform**: 3.41

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 14  | PO1       | 1     | 0.40% | 45   | 15.80% | 70 | 24.60% | 169 | 59.30% | 3.43 |
| 15  | PO2       | 4     | 1.40% | 35   | 12.30% | 92 | 32.30% | 154 | 54.00% | 3.39 |

**Average for the performance of Platform Owner**: 3.41

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 16  | PR1       | 4     | 1.40% | 31   | 10.90% | 91 | 31.90% | 159 | 55.80% | 3.42 |
| 17  | PR2       | 3     | 1.10% | 40   | 14.00% | 107 | 37.50% | 135 | 47.40% | 3.31 |
| 18  | PR3       | 3     | 1.10% | 32   | 11.20% | 66 | 23.20% | 184 | 64.60% | 3.51 |
| 19  | PR4       | 3     | 1.10% | 33   | 11.60% | 114 | 40.00% | 135 | 47.40% | 3.34 |

**Average for the performance of Product**: 3.40

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 20  | S1        | 1     | 0.40% | 50   | 17.50% | 97 | 34.00% | 137 | 48.10% | 3.30 |
| 21  | S2        | 2     | 0.70% | 36   | 12.60% | 93 | 32.60% | 154 | 54.00% | 3.40 |
| 22  | S3        | 1     | 0.40% | 32   | 11.20% | 94 | 33.00% | 158 | 55.40% | 3.44 |

**Average for the performance of Service Operation**: 3.38

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 23  | MS1       | 1     | 0.40% | 40   | 14.00% | 97 | 34.00% | 147 | 51.60% | 3.37 |
| 24  | MS2       | 0     | 0.00% | 41   | 14.40% | 97 | 34.00% | 147 | 51.60% | 3.37 |
| 25  | MS3       | 0     | 0.00% | 18   | 6.30% | 95 | 33.30% | 172 | 60.40% | 3.54 |
| 26  | MS4       | 0     | 0.00% | 16   | 5.60% | 71 | 24.90% | 198 | 69.50% | 3.64 |

**Average for the performance of Marketing and Sales**: 3.48

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 27  | PC1       | 1     | 0.40% | 16   | 5.60% | 68 | 23.90% | 200 | 70.20% | 3.64 |
| 28  | PC2       | 3     | 1.10% | 25   | 8.80% | 67 | 23.50% | 190 | 66.70% | 3.56 |
| 29  | PC3       | 1     | 0.40% | 43   | 15.10% | 79 | 27.70% | 162 | 56.80% | 3.41 |
| 30  | PC4       | 1     | 0.40% | 23   | 8.10% | 65 | 22.80% | 196 | 68.80% | 3.60 |

**Average for the performance of Payment Channel**: 3.55

| No. | Indicator | Worst | Bad | Good | Best | Average |
|-----|-----------|-------|-----|------|------|---------|
| 31  | E1        | 1     | 0.40% | 38   | 13.30% | 76 | 26.70% | 170 | 59.60% | 3.46 |
| 32  | E2        | 0     | 0.00% | 15   | 5.30% | 34 | 11.90% | 236 | 82.80% | 3.78 |
| 33  | E3        | 1     | 0.40% | 28   | 9.80% | 97 | 34.00% | 159 | 55.80% | 3.45 |

**Average for the performance of Environmental**: 3.56

*Source: Own elaboration.*
From table 3, it is seen that the best performance factor is the environmental factor with an average score of 3.56, while the best performance indicator is the government support (E2) of the environmental factor with an average score of 3.78. On the other hand, the worst performance factor is the trust factor (average score of 3.37) and the worst performance indicator is the transaction (TR1) of the trust factor with an average score of 3.20. It is also counted that the total average score of performance level is 3.44.

To build the four quadrants of IPA, the total average score of importance level and performance level are used for the axis. The average score of performance level (3.44) is used for the X-axis, while the average score of importance level (3.49) is used for the Y-axis. Hence, the scatter diagram of the IPA can be seen in Figure 1.

![IPA output](image)

**Figure 1:** IPA output; Source: Own elaboration.

Four quadrants indicate the groups of indicators based on their importance and performance level. Quadrant 1 is the group of indicators that have a below-average score of performance level but above average score of importance level. Therefore, the prospective entrepreneurs pay more attention to the indicators belong to this Quadrant 1. It is urged for the platform owner to increase the performance of the Quadrant 1 indicators if they want to serve the prospective entrepreneurs in starting their businesses better. The indicators of the Quadrant 1 are Latency (TE3), User-friendly (P2), Marketing (PO2), Supply Chain (PR2), Price competitiveness (PR4), Service quality (S1), Support/help desk (S2), and Bank transfer (PC3). Hence, these indicators become the priority aspect when prospective entrepreneurs want to utilize the e-marketplace.

Quadrant 2 is the group of indicators that have an above-average score of performance level as well as importance level. From the view of the prospective entrepreneurs, they are happy with the indicators in Quadrant 2. The platform owner should maintain the condition of indicators belongs to this quadrant. The indicators of Quadrant 2 are Internet-related technology (TE1), Accessibility (TE2), Number of users (P1), Price transparency (PR3), Product specification information (MS3), e-wallet (PC4), and Competitor (E3). Moreover, indicators grouped to Quadrant 3 have a below-average score of performance level as well as importance level. Indicators in this Quadrant 3 are considered as the low priority. The indicators are Transaction (TR1), Payment (TR2), Funding (TR3), Security (TR5), Information quality (TR6), Mobile (P3), Gamification (P4), Superior value (PO1), Quality (PR1), Feedback (S3), and Product price (MS2). Lastly, Quadrant 4 is a group of indicators that have an above-average score of performance level but have a below-average score of importance level. The indicators belong to this quadrant are considered excessive. The prospective entrepreneurs think that the platform owners give their performance on the indicators much higher than their importance level. Indicators of this Quadrant 4 are Privacy (TR4), Discount (MS1), Testimonials (MS4), Credit card service (PC1), Cash on Delivery (PC2), Industry structure (E1), and Government support (E2). Nevertheless, the average scores of importance level of these indicators are still above 3. It means they are still in the important category.

After examining the indicators of e-marketplace, the analysis is continued to the Correspondence Analysis (CA). By using the CA, the competitive advantage and disadvantages of the five most popular e-marketplaces are revealed. First, the rank of each e-marketplace is connected to each indicator of the performance level. Then the number of each e-marketplace’s rank in each indicator is multiplied to the weight defined. Rank 1 is given a weight of 5, rank 2 gets 4, rank 3 gets 3, rank 4 gets 2, and rank 5 gets 1. Later, the weighted number for all ranks of each e-marketplace is summed. The result of this process is presented in table 4 below.
Table 4: Correspondence Analysis Input Data

| No. | Indicator | Tokopedia | Shopee | OLX | Bukalapak | Lazada |
|-----|-----------|-----------|--------|-----|-----------|--------|
| 1   | TR1       | 1007      | 1049   | 495 | 895       | 829    |
| 2   | TR2       | 1001      | 1052   | 516 | 846       | 860    |
| 3   | TR3       | 962       | 1079   | 392 | 946       | 896    |
| 4   | TR4       | 1011      | 979    | 492 | 917       | 876    |
| 5   | TR5       | 1076      | 1028   | 404 | 880       | 887    |
| 6   | TR6       | 1016      | 1004   | 545 | 857       | 853    |
|     | **Technical** |          |        |     |           |        |
| 7   | TE1       | 976       | 1007   | 541 | 916       | 848    |
| 8   | TE2       | 961       | 978    | 494 | 978       | 864    |
| 9   | TE3       | 979       | 911    | 515 | 985       | 885    |
|     | **Platform** |          |        |     |           |        |
| 10  | P1        | 935       | 1008   | 536 | 982       | 814    |
| 11  | P2        | 945       | 953    | 564 | 942       | 871    |
| 12  | P3        | 1022      | 889    | 600 | 897       | 867    |
| 13  | P4        | 1012      | 956    | 460 | 975       | 864    |
|     | **Platform Owner** |          |        |     |           |        |
| 14  | PO1       | 859       | 1003   | 547 | 982       | 884    |
| 15  | PO2       | 885       | 1015   | 522 | 980       | 873    |
|     | **Product** |          |        |     |           |        |
| 16  | PR1       | 789       | 960    | 619 | 995       | 912    |
| 17  | PR2       | 872       | 901    | 574 | 1023      | 905    |
| 18  | PR3       | 930       | 902    | 734 | 764       | 937    |
| 19  | PR4       | 866       | 992    | 772 | 711       | 946    |
|     | **Service Operation** |      |        |     |           |        |
| 20  | S1        | 920       | 1105   | 453 | 935       | 862    |
| 21  | S2        | 904       | 995    | 521 | 957       | 898    |
| 22  | S3        | 936       | 1066   | 425 | 933       | 915    |
|     | **Marketing and Sales** |        |        |     |           |        |
| 23  | MS1       | 909       | 1015   | 556 | 986       | 809    |
| 24  | MS2       | 890       | 863    | 643 | 963       | 904    |
| 25  | MS3       | 921       | 804    | 603 | 971       | 991    |
| 26  | MS4       | 1008      | 818    | 532 | 990       | 899    |
| 27  | MS5       | 962       | 1079   | 392 | 946       | 896    |
|     | **Payment** |          |        |     |           |        |
| 28  | PC1       | 875       | 887    | 582 | 1026      | 905    |
| 29  | PC2       | 942       | 892    | 740 | 764       | 937    |
| 30  | PC3       | 851       | 999    | 762 | 717       | 946    |
|     | **Environmental** |      |        |     |           |        |
| 31  | E1        | 890       | 863    | 643 | 963       | 904    |
| 32  | E2        | 921       | 804    | 603 | 971       | 991    |
| 33  | E3        | 1008      | 818    | 532 | 990       | 899    |

Source: Own elaboration.

Table 4 shows that each indicator in each e-marketplace has a multiplication value between the number of ranks and the weight of the ranks to produce the total rank value. By using SPSS to process these total rank values for the Correspondence Analysis, the result can be seen in Table 5 below.
Table 5: E-Marketplace Ranks

| No. | Indicator       | Tokopedia | Shopee | OLX  | Bukalapak | Lazada |
|-----|-----------------|-----------|--------|------|-----------|--------|
| 1   | TR1             | +         | +      | -    | -         | -      |
| 2   | TR2             | +         | +      | -    | -         | -      |
| 3   | TR3             | +         | +      | -    | -         | -      |
| 4   | TR4             | +         | +      | -    | -         | -      |
| 5   | TR5             | +         | +      | -    | -         | -      |
| 6   | TR6             | +         | +      | -    | -         | -      |
| 7   | TE1             | +         | +      | -    | -         | -      |
| 8   | TE2             | -         | -      | +    | -         | -      |
| 9   | TE3             | -         | -      | +    | -         | -      |
| 10  | P1              | +         | +      | -    | -         | -      |
| 11  | P2              | -         | -      | +    | -         | -      |
| 12  | P3              | -         | -      | -    | +         |        |
| 13  | P4              | -         | -      | +    | -         | -      |
| 14  | PO1             | -         | -      | -    | +         | -      |
| 15  | PO2             | -         | -      | -    | +         | -      |
| 16  | PR1             | -         | -      | -    | -         | +      |
| 17  | PR2             | -         | -      | +    | -         | -      |
| 18  | PR3             | -         | -      | +    | -         | -      |
| 19  | PR4             | -         | -      | -    | +         | -      |
| 20  | S1              | +         | +      | -    | -         | -      |
| 21  | S2              | -         | -      | -    | +         | -      |
| 22  | S3              | +         | +      | -    | -         | -      |
| 23  | MS1             | +         | +      | -    | -         | -      |
| 24  | MS2             | -         | -      | +    | -         | -      |
| 25  | MS3             | -         | -      | -    | +         |        |
| 26  | MS4             | -         | -      | -    | +         | -      |
| 27  | PC1             | +         | +      | -    | -         | -      |
| 28  | PC2             | -         | -      | -    | +         | -      |
| 29  | PC3             | -         | -      | +    | -         | -      |
| 30  | PC4             | -         | -      | +    | -         | -      |
| 31  | E1              | -         | -      | -    | -         | +      |
| 32  | E2              | -         | -      | -    | -         | +      |
| 33  | E3              | -         | -      | -    | +         | -      |
| 34  | Total           | 12        | 12     | 5    | 8         | 8      |
| Rank| 1               | 1         | 3      | 2    | 2         |        |

Source: Own elaboration.

It can be seen from table 5 that Tokopedia and Shopee share the same total score of 12, thus they get the first rank together. In second place, Bukalapak and Lazada also share the same total score of 8. Therefore, OLX places the third rank with a total score of 5.

Discussion

After analyzing the findings, one of the interesting findings is the trust factor that becomes the least important factor. This finding contradicts Prihastomo et al.’s (2018) study which mentions trust as the most important factor of the e-marketplace. This study found that payment and information quality are the indicators of trust which have the lowest average importance score. However, these average scores are still in the important category because they are above the score of 3 (three). This finding is relevant to Chang and
Wong (2010) who state that trust is a moderator in the e-marketplace. This finding also supports a study by Sfenrianto et al. (2018) where trust is considered as the important factor for utilizing the e-marketplace. In a more general condition, Tangananee and Rawsena (2016) also mention trust as the moderator factor to increase purchase intention while Skordoulis et al. (2018) emphasize the relation of trust to customer satisfaction. However, the factors examined in this study are the features of the e-marketplace.

By comparing the performance level to the importance level, there are only two factors of the e-marketplace that have bigger average performance scores than their average importance scores. These factors are the payment channel factor and environmental factor. The average performance score of the payment channel factor is 3.55 while its average importance score is 3.49. The average performance score of the environmental factor is 3.56 while its average importance score is 3.49. The importance level of marketing and sales factor whose average score was recorded as the second biggest is supported by the result of Karekla et al. (2021) that the biggest objective of early-stages businesses is to improve the understanding of customer preferences and behavior.

This study analyzes the prospective entrepreneurs who are predicted will start their businesses in the form of Micro Small and Medium Enterprises (MSMEs). The usage of e-marketplace by MSMEs is also discussed by Subawa and Mimaki (2019), Subawa et al. (2020), and Hossain et al. (2021). This study examines more factors and indicators in the technological factor than Subawa and Mimaki (2019) and Hossain et al. (2021), while these two studies analyze deeper in the organizational factor. Moreover, this study does not discuss the behavioral aspect to use an e-marketplace like Croitor et al. (2021).

Conclusion

The utilization of e-marketplace is significantly increasing following the usage of the internet around the globe, including in Indonesia. There are many e-marketplaces available to be used in Indonesia, although only five were chosen by the internet users as the favorite ones. At the same time, the number of prospective entrepreneurs is increasing and they are predicted will be the users of the e-marketplace. This study reveals the factors considered by the prospective entrepreneurs to utilize the e-marketplace. It is found that the trust factor becomes the least important factor as well as the worst performance factor at the same time. The technical factor becomes the most important factor while the environmental factor is recorded as the best performance factor. To utilize an e-marketplace, prospective entrepreneurs pay more attention to several indicators such as latency, user friendly, marketing, supply chain, price competitiveness, service quality, support/help desk, and bank transfer. Hence, the platform owners should consider these indicators as their main priority. Moreover, two of the popular e-marketplaces in Indonesia, Shopee is chosen as the most frequently used e-marketplace for shopping, and Tokopedia is chosen as the most frequently used for selling. However, they both are rated as the best e-marketplaces together by the prospective entrepreneurs since they have the same advantage scores.

From the findings found it can be seen that this study illuminates the prospective entrepreneurs’ consideration toward e-marketplace selection. The findings of the study can inspire the preparation steps for entrepreneurs to start their businesses and enrich the consumer buying decision theory on the online side. This study also contributes to conducting the ranking of the five most popular Indonesian e-marketplaces from the view of prospective entrepreneurs.

Since the findings of this study only present the implication of the indicators’ scores, it is needed to investigate the reasons and the comprehensive process behind each score of all indicators as well as factors in the future study. Further study can also explore why particular factors become the least and the most important factors. The background of particular factors become the worst and best performance factors are also interesting to be analyzed. This study is limited to one specific emerging market, although its process can be replicated anywhere.

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