The Influence of Brand Image, Perception of Trust, Perceived Convenience and Security Transactions on JD.ID Customer Purchase Decision during the Pandemic Covid 19

Gidion P. Adirinekso

Department of Management Faculty Economics and Business Universitas Kristen Krida Wacana, Jakarta, 11470 Indonesia gidion.adirinekso@ukrida.ac.id

John Tampil Purba

Department of Management Faculty of Economics and Business Universitas Pelita Harapan, Tangerang 15811, Indonesia john.purba@uph.edu

Sidik Budiono

Department of Management Faculty of Economics and Business Universitas Pelita Harapan, Tangerang 15811, Indonesia sidik.budiono@uph.edu

Wilson Rajaguguk

Department of Management Faculty of Economics and Business Universitas Kristen Indonesia, Jakarta 13630, Indonesia wilson.rajagukguk@uki.ac.id

Abstract

This study aims to determine the effect of brand image, trust perception, ease and security of transactions, and convenience perception on purchasing decisions at JD.ID during the Covid-19 pandemic. The population of this study is consumers who have shopped at JD.ID. The non-probability sampling technique was used in this study, namely accidental sampling with 170 respondents. The data collection method used a questionnaire with google forms distribute to social media. The model used in this research is Partial Least Square Structural Equation Modeling (PLS-SEM). The data processing tool is Smart PLS version 3.2. The results show that brand image, trust perception, and convenience, have a positive and significant effect on purchasing decisions at JD.ID. During the Covid-19 pandemic, the security of transactions only has a positive but not significant effect on purchase decisions. The other exogenous variable should be considered to include in the research model.

Keywords

Purchase decisions, Brand Image, Perceptions of trust, Ease and security transaction, Covid-19

1. Introduction

Technological advances have been attached to people's lives. Previously, business activities were only carried out conventionally. However, since the existence of the internet, business activities can be carried out online, which has led to a new trend, namely online shopping. According to data from databoks.co.id, it shows that the number of online transactions in Indonesia continues to increase from 25.1 trillion rupiahs in 2014 to 144.1 trillion rupiahs in 2018 or has increased by more than 500 per cent in 5 years. One of the factors that play a significant role in the growth of ecommerce in Indonesia is the internet user population which has reached more than 100 million users. So it can be

understood that the potential for e-commerce is still wide open (Fitriandi, n.d.). Figure 1 shows the competition between the top nine onlineshop from quarter 2, 2020 in Indonesia. There is e-commerce, including JD.ID, Lazada, Bukalapak, Zalora, Tokopedia, blibli.com and so on. One type of e-commerce that is quite well known and popular in Indonesia is JD.ID.

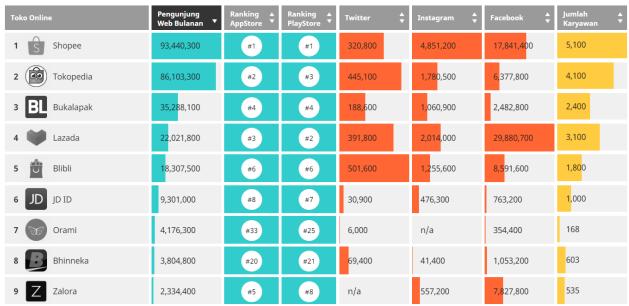


Figure 1. Competition Map in Indonesia's marketplaces Source: (Iprice.co.id, Q2, 2020)

During the Covid-19 pandemic, JD.ID has become an alternative place to shop online for the needs of the pandemic because people are trying to avoid public places and offline retail stores so that sales transactions for several sectors have increased (Sudaryono et al., 2020). In differentiating itself from other e-commerce sites, JD.ID positions itself as e-commerce that only focuses on selling original products. JD.ID has created a brand image in its business by providing the tagline #Dijaminori, a commitment and promise of JD.ID to state that JD.ID will only sell original products to its customers. JD.ID In 2017 boldly declared that it was the only e-commerce in Indonesia that dared to focus on providing original products to its consumers (JD.ID, 2017).

	Boliblicom	BukaLapak	JD.ID	LAZADA (Ffartiass Stopping)	Shopee	tokopedia
Good reputation	14.8%	13.0%	12.9%	13.7%	10.9%	14.3%
Cheaper product price	6.5%	15.1%	11.0%	13.5%	18.0%	13.3%
More product selection	6.5%	14.6%	5.2%	11.3%	13.0%	16.8%
Authentic products	13.9%	3.9%	19.5%	7.2%	4.2%	4.3%
Good customer service	12.0%	8.9%	5.2%	6.5%	7.7%	8.8%
Fast delivery	7.4%	6.0%	8.6%	10.0%	7.6%	5.8%
Free delivery	13.0%	6.8%	14.8%	10.6%	18.4%	3.2%
Easy return policy	6.5%	5.7%	2.9%	5.4%	4.5%	5.3%
Easy navigation on site	4.6%	7.0%	3.3%	3.8%	3.5%	9.3%
More payment options	9.3%	8.9%	11.0%	13.4%	5.3%	8.4%
Better mobile app	4.6%	9.6%	5.7%	4.4%	6.8%	9.4%
Loyalty program	0.0%	0.3%	0.0%	0.0%	0.1%	0.0%
More promo	0.9%	0.0%	0.0%	0.0%	0.2%	0.9%
More secure	0.0%	0.3%	0.0%	0.1%	0.0%	0.2%

Figure 2. A Comparison Between Marketplaces Source: www.softwareseni.com

In Figure 2, according to a survey conducted by Softwareseni, JD.ID has succeeded in strengthening the brand by guaranteeing that the products sold are original and getting the highest level of Authentic products compared to other e-commerce with a score of 19.5%. One of the problems online sales in Indonesia must face is building customer trust. According to Sonja & Ewald (Alwafi & Magnadi, 2016) in terms of uncertainty, lack of control, anonymity is what makes online shopping unique compared to conventional shopping. Not only that, Ease, in many ways, is a dream by everyone. Of course, technology was also created to help facilitate human work. Therefore, the internet should make it easier for people to carry out their daily activities and the ease of doing online transactions. And due to the increasing number of online fraud cases, the security factor for customers is also essential for customers who want to transact. So, in addition to brand image, several other factors influence consumer purchasing decisions online, including the perception of trust, convenience, and security of transactions.

1.1 Objectives

This study aims to determine the effect of brand image, perception of trust, perceived convenience, and secure transactions on JD.ID customer purchase decision during the pandemic Covid-19.

2. Literature Review

According to Kotler and Keller (S. Rahayu et al., 2015), Consumer Behavior is learning about buying, selecting, and using goods or services to satisfy their needs, which individuals or groups carry out. This behaviour can have an impact on consumer life decisions. Factors that can influence consumer behaviour in Purchasing Decisions According to Kotler & Armstrong (Kotler & Armstrong, 2018: 159), namely:

- 1. Cultural factors are divided into cultural class, sub-culture, and social class, influencing consumer purchasing behaviour.
- 2. Social factors are divided into reference groups, family, status, and roles, namely behaviour that is understandable for consumers to do and behaviour, in this case, creates status
- 3. Personal factors What is meant by personal characteristics that influence purchasing decisions include age and stage in the cycle; personality, gender and self-concept, occupation and economic circumstances, and lifestyle and values.
- 4. Psychological factors include perception, motivation, learning, behaviour, and beliefs. One of the psychological factors that are relevant to the decision-making process is perception. Perception results from consumers' interpretation of events or stimuli they receive based on their experiences and information on these stimuli, such as each generation having different incidents and stimuli (Firmansyah, 2019).

Buying decision

According to Kotler and Armstrong (Mudiar & Hervianto, 2019), a purchasing decision is a process that starts from problem recognition, information search, evaluation of several alternatives, which will then create a purchase decision and form post-purchase behaviour.

According to Kotler & Gary Armstrong in Susilawati (2018), Purchasing decision indicators are as follows:

- 1. The need to buy a product
- 2. The desire to buy a product
- 3. Sources of information
- 4. Evaluating products from various alternatives
- 5. Make a product purchase

Brand image

According to Firmansyah (2019: 42), consumers' brand image is what they think and feel when they hear or see a brand. The form of a positive brand image in the minds of consumers will allow consumers to make transactions. Indicators of the brand image, according to Keller (Tanady & Fuad, 2020)

- 1. Strength of Brand Association (Brand Strength
- 2. Favorability of Brand
- 3. Uniqueness of Brand Association

Convenience

According to Davis (Alwafi & Magnadi, 2016), convenience is a level where someone believes that using a system can be used easily without requiring a lot of effort.

The indicators of convenience, according to Suhir et al. (Rafidah, 2017), are as follows:

Proceedings of the International Conference on Industrial Engineering and Operations Management Bangalore, India, August 16-18, 2021

- a. ease of use.
- b. easy to learn.
- c. ease of making transactions.
- d. ease of obtaining products.
- e. easy to interact.

Trust

Trust is the willingness of one party to be sensitive to the actions of the other party. according to McKnight et al. (Naomi et al., 2016), indicators of trust are:

- 1. Honesty in managing online buying and selling sites
- 2. Competence, namely the site can be competitive and reliable
- 3. The information provided can be trusted

Security

According to Park and Kim (Adhitya, 2019), security is the ability of online stores to control and maintain security for data transactions. Safety indicators, according to Raman Arasu and Viswanathan A. (Yunita et al., 2019), are:

- 1. Do not abuse personal consumer data.
- 2. Provide protection and keep personal consumer data confidential from hackers.
- 3. Provide confidence in security guarantees.

Based on the description above and a conceptual framework in Fig 3, this study has the following several research hypotheses that can be formulated:

H1: Brand image has a positive effect on purchasing decisions at JD.ID during the Covid-19 pandemic A good brand image is essential for JD.ID in developing its business because of JD.ID is not the only e-commerce in Indonesia. According to Firmansyah (2019: 42), consumers' brand image is what they think and feel when they hear or see a brand. The form of a positive brand image in the minds of consumers will allow consumers to make transactions. So a brand image can have an impact on purchasing decisions; this is reinforced by previous research like Santosa et al. (2019), Rizki et al. (2017), Mudiar & Hervianto (2019).

H2: Perception of trust has a positive effect on purchasing decisions at JD.ID during the Covid-19 pandemic Trust is the foundation of a business. A transaction will never take place if there is no trust between the parties concerned. According to Egger in Ling (Alwafi & Magnadi, 2016), someone will consider several things before transacting online, and the first thing that person thinks about is whether the site visited. The seller can be trusted to make transactions. So it can be assumed that the perception of trust positively affects purchasing decisions at JD.ID during the covid-19 pandemic. This result is reinforced by previous research, namely Alwafi & Magnadi (2016), Susilo & Wardoyo (2017), Wulandari (2018), Lestari et al. (2015), Yunita et al. (2019), and Rafidah (2017).

H3: Perceived convenience has a positive effect on purchasing decisions at JD.ID during the covid-19 pandemic Ease can affect purchasing decisions because ease is a demand from technology users. The easier a technology is to use, the higher the interest of customers to continue using it. This convenience is expected to make consumers comfortable and settled to use JD.ID continuously compared to others. This is supported by previous studies, namely Alwafi & Magnadi (2016), Susilo & Wardoyo (2017), Lestari et al (2015), Rafidah (2017), H. Rahayu et al (2020), Adirinekso, Purba, Budiono (2020), and Adirinekso, Purba, Budiono, Rajagukguk (2020).

H4: Perception of transaction security has a positive effect on purchasing decisions at JD.ID during the covid-19 pandemic

In an online transaction, the security factor is very vulnerable and essential for consumers. According to Nuseir (Susilo & Wardoyo, 2017), Consumers hope that personal data security will not be misused when making transactions. According to Pratama (Lestari et al., 2015), security must be provided by all business actors in products, services, or both. Security will have the potential to increase sales. This result is also supported by previous studies, namely (Alwafi & Magnadi, 2016), (Susilo & Wardoyo, 2017), (Wulandari, 2018), (Lestari et al., 2015), (Yunita et al., 2019), (Rafidah, 2017), (H. Rahayu et al., 2020).

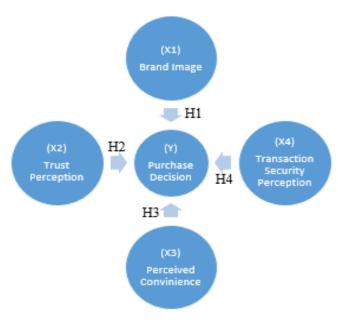


Fig 3: A Conceptual Framework Source: Author

3. Methods

The data analysis method used to answer the hypothesis is Partial Least Square. Structural Equation Modeling (PLS-SEM) tested with Smart PLS with the Evaluation of Outer Measurement Model and Evaluation of Inner Structural Model.

3.1. Evaluation of Outer Measurement Model

Evaluation of the measurement model or outer model is carried out to assess the validity and reliability. Outer models with reflective indicators were evaluated through convergent and discriminant validity of the latent construct-forming indicators and composite reliability and Cronbach alpha for the indicator block. At the same time, the outer model with formative indicators is evaluated through its substantive content, namely by comparing the relative weight and seeing the significance of the construct indicators (Latan, H., & Ghozali, 2012).

- 1. Convergent Validity
- a. Loading Factor

An indicator is considered to meet the convergent validity requirements in a suitable category if the outer loading value is> 0.70 for each variable. However, according to (Imam Ghozali, 2015), at the research stage of scale development, loading 0.50 to 0.60 is still acceptable.

b. Average Variance Extracted (AVE)

Another test to assess the validity of the construct by looking at the AVE value requires a good model if the AVE of each construct is more significant than 0.50 (Imam Ghozali, 2015).

c. Discriminant Validity Test

Discriminant validity of reflective indicators can be seen cross-loading between indicators and their constructs by selecting discriminant validity in the PLS Algorithm report, cross-loading, the following is the Smart PLS output ((Imam Ghozali, 2015).

2. Reliability Test

After testing the construct validity, the construct reliability test is then carried out by measuring the composite reliability and Cronbach Alpha test from the indicator block that measures the construct. Reliability test using the PLS Algorithm by selecting the results of composite reliability and Cronbach alpha in the form of a matrix and diagrams as follows:

a. Composite Reliability

The construct indicator is declared reliable if the composite Reliability value is> 0.70.

Proceedings of the International Conference on Industrial Engineering and Operations Management Bangalore, India, August 16-18, 2021

b. Cronbach's Alpha

The construct indicator is declared reliable if the Cronbach Alpha value is> than 0.70 (Imam Ghozali, 2015), the Cronbach's Alpha> 0.60 is still acceptable (Joseph F Hair et al., 2017).

3.2. Evaluation of Inner Structural Model

According to (Joseph F Hair et al., 2017), structural theory shows how latent variables are related to one another, showing the construction and path of the relationship between them in the structural model. In the structural model, the essential evaluation metrics are R2 (explained variance), size, and the statistical significance of the structural path coefficient.

1. Path Coefficient

The path coefficient test is used to see the effect of the relationship and the influence between each latent exogenous variable and the latent endogenous variable.

2. The coefficient of determination (R2)

It shows how strong the effect or influence of the independent variable is on the dependent variable. If the result is above 0.67, it is classified as vital, 0.33 - 0.67, then it is classified as moderate, and if it is 0.19 - 0.33, it is classified as weak (Imam Ghozali, 2015).

4. Data Collection

In this study, researchers used primary and secondary data. Primary data was obtained by distributing questionnaires. According to (Sugiyono, 2017) the questionnaire will be distributed on social media in the form of a google link and used as a source of research data. In this questionnaire, the writer will use a Likert scale in determining the respondent's answer with a scale of 1-5 as follows: strongly disagree, disagree, neutral, agree, strongly agree. The population in this study were all JD.ID users in Indonesia. Determination of the number of samples with what was said by (Hair 2010). In this study, the authors used 17 indicators, with each indicator containing 1 question so that a total of 17 x 10 equals 170 respondents. The sampling technique in this study is nonprobability sampling, which is incidental sampling. After determining the indicators that affect each variable, the researchers conducted a validation test and a reliability test which would be processed using Microsoft Excel's tools.

5. Results and Discussion

The results of data from 170 respondents were obtained from google form questionnaires distributed through social media. Respondents who have male gender dominate with a total population of 96 respondents or 55% of the total number of respondents, while respondents who have female gender only have a total population of 76 respondents or 45% of the total number of respondents. After getting 170 respondents who filled out the questionnaire, the researchers tested the validity and reliability of the questionnaire. The results show that the questionnaire used is valid and reliable. In other words, the questionnaire can be said to be reliable to continue collecting field data.

5.1 Numerical Results

Making this path diagram follows the previously proposed hypothesis and research model. This path diagram consists of 5 latent variables. Latent variables themselves are divided into two types, namely endogenous and exogenous variables. In Figure 3, the endogenous variable is Purchasing Decision (KP), while the exogenous variables are Brand image (BI), Perception of Trust (PE), Perception of Convenience (KU), Perception of Security (KA).

Evaluation of the Measurement Model

The evaluation of the measurement model is carried out in three stages, namely the convergent validity test, the discriminant validity test, and the reliability test. The loading factor value that must be achieved to state the reliability of an indicator with its construct must have a value greater than 0.7 (Imam Ghozali, 2015). In table 2, it can be seen that there is one indicator that has a value below 0.7. The indicator is Ku5 (0.311). Therefore, this indicator must be removed from the proposed research model.

Table 1. Loading Factor

Tuoie 1. Educing 1 actor						
Variable	Indicator	Loading		Variable	Indicator	Loading
		Factor				Factor
Brand Image	be1	0.706		Perceived	ku1	0.840
	be2	0.762		convenience	ku2	0.779

	be3	0.809		ku3	0.868
Perception of	kal	0.892		ku4	0.799
Security	ka2	0.874		ku5	0.311
	ka3	0.882	Purchase	kp1	0.846
Perception of	ke1	0.861	Decision	kp2	0.846
Trust	ke2	0.893		kp3	0.848
	ke3	0.838			

Source: Author, 2020

Evaluation of Convergent Validity

After all indicators in the proposed model already have a loading factor above 0.7, the next step is to evaluate the AVE value for each latent variable. The recommended AVE value is> 0.5 (Latan, H., & Ghozali, 2012). The AVE value for each latent variable can be seen in table 3. All latent variables in the proposed model already have an AVE value> 0.5.

Table 2. AVE and AVE²

Variable	AVE	AVE ²
Brand Image	0.578	0.760
Perception of Security	0.779	0.883
Perception of Trust	0.747	0.812
Perceived convenience	0.688	0.829
Purchase Decision	0.717	0.847

Source: Author, 2020

Discriminant Validity Evaluation

The value of the square root AVE of a latent variable must be greater than the correlation value with other latent variables to fulfill the discriminant validity (Latan, H., & Ghozali, 2012). In Table 2, the AVE squared value of each latent variable has fulfilled the requirement. According to Latan, H., & Ghozali (2012), a latent variable must have a Cronbach alpha value greater than 0.7 or composite reliability greater than 0.7. However, according to Chin (1998), composite reliability is a more accurate estimate (Latan, H., & Ghozali, 2012). Therefore, in this study, the reliability evaluation will refer to the composite reliability value. These values can be seen in Table 3.

Table 3. Composite Reliability, Cronbach's Alpha

Variable	Composite Reliability	Cronbach's Alpha		
Brand Image	0.804	0.638		
Perception of Security	0.914	0.859		
Perception of Trust	0.899	0.833		
Perceived convenience	0.898	0.849		
Purchase Decision	0.884	0.803		

Source: Author, 2020

As a comparison, Cronbach's Alpha values can be seen in Table 3. The Brand Image variable owns the smallest value, which has a Cronbach's alpha value of 0.638. Value> 0.6 is still considered acceptable according to Hair et al (2017).

Evaluation of Structural Model

Evaluation of the structural model is done by looking at the value of the path coefficient, the value of t-statistics, the coefficient of determination (R2).

The coefficient of determination (R2)

In this research model, the influence of exogenous variables (which influence) on endogenous variables (which are influenced) is classified as moderate because of the value of R²<0.67. The purpose of the R² value is the exogenous variables that affect the purchase decision in the model tested, representing 48.5% and the remaining 51.5% is the contribution of other exogenous variables that are not included in the study.

5.2 Validation

Path Coefficients and t-Statistics Value

The path coefficient is used to examine the significance of the relationship between latent variables and the bootstrapping process which produces a t-statistic value (the SmartPLS program produces a p-value). A positive value on the path coefficient indicates that the related variable has a positive effect, on the other hand, if the path coefficient value is negative, the related variable has a negative effect. The value of the t-statistic will be compared with the t-table. If the t-statistic value is greater than the t-table (or p-value $\leq \alpha$), the related variable is declared to have a significant effect. For the confidence level of 95% ($\alpha = 5\%$), the T-table is used as a reference of 1.96.

Table 4. t Statistic and p values

Variable		Sample	Standard	T Statistics	p_Values
	Sample	Mean	Deviation	(O/STDV)	
Brand Image > Purchase Decision	0.418	0.418	0.062	6.772	0.000
Perception of Security > Purchase Decision	0.138	0.137	0.076	1.813	0.070
Perception of Trust > Purchase Decision	0.164	0.165	0.066	2.465	0.014
Perceived covenience > Purchase Decision	0.182	0.185	0.074	2.449	0.015

Source: Author, 2020

Judging from the evaluation results using the Path Coefficient output in Figure 5, it can be concluded that the variable Brand Image, Perception of Transaction Security, Perceptions of Ease, Perception of Trust have a positive effect on Purchasing Decisions. And in the evaluation value of T-statistics, it is concluded that the variable Brand Image, Perceived convenience, Perception of Trust has a significant effect on purchasing decisions because it is> 1.96. while the perception of security has no significant effect because the T-statistical value is 1.813 < 1.96.

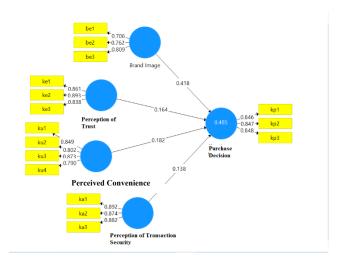


Figure 4. Path Analysis

5.3 Results & Discussion

Brand image has a positive and significant effect on purchasing decisions during the pandemic Covid-19

There are 3 indicators of brand image in this study: Strength of Brand Association, Favorability of Brand, and Uniqueness of Brand Association. Based on the results obtained from the respondents' answers in the brand strength indicator, it was found that 148 or 87% of respondents agreed that the name JD.ID was already known and used by various groups in Indonesia. This result proves that the name JD.ID is well known to the Indonesian people according to the respondents. In the brand preference indicator, 72 or 42% of respondents agreed to prefer JD.ID over other ecommerce, while 32 or 19% of respondents disagreed and 66 respondents or 39% answered neutral, which means JD.ID is quite liked by its customers and only a small proportion of JD.ID customers who choose other e-commerce.

In the indicator of brand uniqueness, 144 or 85% of respondents agree that JD.ID has a distinctive tagline #dijaminori, which is different from other e-commerce. This result proves that according to respondents, JD.ID has its uniqueness compared to other e-commerce in terms of the tagline created by JD.ID. Therefore, in table 6 where a brand image has a positive and significant effect on purchasing decisions, brand image positively and significantly influences respondents in determining purchasing decisions during the Covid-19 pandemic. These results are under previous studies conducted (Santosa et al., 2019), (Rizki et al., 2017), (Mudiar & Hervianto, 2019). That results in the conclusion that brand image has a positive and significant effect on purchasing decisions.

Perceptions of trust have a positive and significant effect on purchasing decisions during the pandemic Covid-

In the perceived trust variable, there are 3 indicators: honesty in managing online buying and selling sites; Competence ie the site can be competitive and reliable; The information provided can be trusted. Based on respondents' answers in the indicators of honesty, it was found that 140 or 82% of respondents agreed that JD.ID was honest in processing its e-commerce. This result shows that most respondents believe in the honesty of JD.ID in managing their e-commerce. In the competency indicator, it was found that 139 or 82% of respondents agreed that JD.ID was reliable. Therefore it can be concluded that most of the respondents believe that they can rely on JD.ID in meeting their needs.

For reliable information indicators, it was found that 145 or 85% of respondents agreed with the information provided by JD.ID was reliable. This result proves that most respondents believed the information provided by JD.ID. And in the results of the analysis in Table 4:13, it can be found that the variable perception of trust has a positive and significant effect on the purchasing decision variable. This result means that JD.ID consumer confidence perceptions have a significant effect on their purchasing decisions during the covid-19 period. The results of this study are following previous studies conducted (Alwafi & Magnadi, 2016), (Susilo & Wardoyo, 2017), (Wulandari, 2018)), (Lestari et al., 2015), (Yunita et al., 2019), (Rafidah, 2017) who concluded that trust has a significant and positive influence on purchasing decisions.

Perceived convenience has a positive and significant effect on purchasing decisions during the pandemic Covid-19

The perceived convenience variable has 4 indicators: ease of use, ease of learning, ease of making transactions, and ease of obtaining products.

The survey results on the ease of learning indicator show 145 or 85% of respondents agree that JD.ID e-commerce is easy to use. This result means that most respondents find it easy to use JD.ID e-commerce.

On the ease of learning indicator, it was found that 148 or 87% of respondents agreed that JD.ID e-commerce is easy to learn. This result means that most respondents do not find it challenging to learn about JD.ID e-commerce.

The same thing also applies to the ease of transaction indicator; it was found that 147 or 86% of respondents agreed that they found it easy to transact on e-commerce JD.ID. This result shows that most respondents find it easy to transact in JD.ID e-commerce. Whereas on the indicator of the ease of obtaining products, it was found that 138 or 81% of respondents agreed that they felt JD.ID e-commerce made it easier for them to obtain products. This result suggests that most JD.ID customers find it easy to get the products they want with the JD.ID e-commerce.

According to Amijaya (Mulyadi et al., 2018), this perception of convenience will impact behaviour. The higher a person's perception of the ease of using the system, the higher the level of information technology utilization. Even according to Celik and Yilmaz (Setyarko, 2016) consumers will avoid devices that are difficult to use. Judging from the results of the analysis carried out, the perceived convenience variable has a positive and significant effect on the purchasing decisions of JD.ID customers during the Covid-19 pandemic. Therefore, it can be concluded that JD.ID customers believe that the ease of online shopping that is easy to use, learn, and ease of transactions, as well as the ease of obtaining products, will affect their purchasing decisions during the Covid-19 period. This result means that the better the convenience provided by JD.ID, the stronger the purchasing decision by consumers because convenience will reduce the customer's effort (both time and effort). This research is consistent with previous studies conducted (Alwafi & Magnadi, 2016), (Susilo & Wardoyo, 2017), (Lestari et al., 2015), (H. Rahayu et al., 2020).

Security perceptions have a positive but insignificant effect on purchasing decisions during the pandemic Covid-19

In the security perception variable, there are 3 indicators, namely not misusing personal consumer data, providing safeguards and keeping personal consumer data confidential from hackers, providing confidence in security guarantees. Based on the results obtained from the respondents 'answers in the indicators not to abuse consumers' data, it was found that 134 or 79% of respondents believed that JD.ID e-commerce did not abuse their consumers' data, this meant that respondents believed in JD.ID in their data security. Furthermore, on the indicator of keeping personal consumer data from hackers, 126 or 74% of respondents agreed that JD.ID E-commerce will protect consumer data from hackers. This result means that most respondents believe that JD.ID will protect them from hackers. Then the indicator gives confidence in security guarantees, found as many as 142 or 84% of respondents believe JD.ID will provide security guarantees for all transaction processes and administration. It means that in all transaction processes in JD.ID e-commerce, respondents believe that JD.ID will guard them. However, the analysis results in Table 6 show that the perception of security positively affects purchasing decisions, but it is not significant. It means that security perceptions do not have a significant effect on purchasing decisions during the Covid-19 pandemic. It is different from previous studies conducted by Alwafi & Magnadi (2016), Susilo & Wardoyo (2017), Wulandari (2018), Lestari et al. (2015), Yunita et al. (2019), Rafidah (2017), H. Rahayu et al (2020) which resulted in the conclusion that the security variable has a positive and significant effect on purchasing decisions.

6. Conclusion

Based on the previous discussion, it can be concluded

- 1. Brand image affects the purchasing decisions of JD.ID customers during the Covid-19 pandemic.
- 2. Perceptions of trust affect the purchasing decisions of JD.ID customers during the Covid-19 pandemic.
- 3. Perceptions of convenience affect the purchasing decisions of JD.ID customers during the Covid-19 pandemic.
- 4. There was no effect of security perceptions of transactions on purchasing decisions of JD.ID customers during the Covid-19 pandemic.

The following are the authors' suggestions for further research that discusses the topic of JD.ID and its derivatives might improve the deficiencies in this study. a). For further research, it is recommended to use a larger sample size, this study uses a sample of 170. It is hoped that further research can get a bigger and better sample from this study with many samples. b). For further research, it is advisable to use other exogenous variables that can influence purchasing decisions. When viewed from R², the variables used in this study represent only 48.5%. The remaining 51.5% is the contribution of the variables - other exogenous variables not included in the study.

References

Adirinekso, GP; Purba, J.T, Budiono, S. Measurement of Performance, Effort, Social Influence, Facilitation, Habit and Hedonic Motives toward Pay later Application Intention: Indonesia Evidence http://www.ieomsociety.org/harare2020/papers/94.pdf, 208 – 219

Adirinekso, GP; Purba, J.T, Budiono, S, Rajagukguk, W. The Role of Price and Service Convenience on Jakarta's Consumer Purchase Decisions in Top 5 Marketplace Mediated by Consumer's Perceived Value. http://www.ieomsociety.org/detroit2020/papers/429.pdf

Alwafi, F., & Magnadi, R. H. (2016). Pengaruh Persepsi Keamanan, Kemudahan Bertransaksi, Kepercayaan Terhadap Toko Dan Pengalaman Berbelanja Terhadap Minat Beli Secara Online Pada Situs Jual Beli Tokopedia. Com. *Journal of Management*, 5(2), 1–15.

Firmansyah, M. A. (2019). Buku Pemasaran Produk dan Merek. August, 336.

Fitriandi, P. (n.d.). Pemajakan atas transaksi melalui online marketplace. 14–20.

Hair, J. et. a. (2010). Multivariate Data Analysis (7th edition).

Imam Ghozali, H. L. (2015). *Partial Least Squares Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0.* Universitas Diponegoro Semarang.

Iprice. (2020). Peta E-Commerce Indonesia. www.Iprice.Co.Id.

JD.ID. (2017). *JD.ID Berikan Jaminan Produk Asli Lewat Kampanye #DijaminOri*. Www.Jd.Id. https://www.jd.id/blog/jd-id-berikan-jaminan-produk-asli-lewat-kampanye-dijaminori_90.html

Joseph F Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). In *Journal of Chemical Information and Modeling* (Vol. 01, Issue 01).

Kotler, P., & Armstrong, G. (2018). Principles of Marketing 17th Global Edition. In Pearson Education Limited.

Latan, H., & Ghozali, I. (2012). Partial Least Squares Konsep, Teknik dan Aplikasi menggunakan Program SmartPLS 2.0 M3. Badan Penerbit Universitas Diponegoro.

Lestari, V. W., Hidayati, N., & Rizal, M. (2015). Pengaruh Kepercayaan Konsumen, Keamanan, dan Kemudahan

- terhadap Keputusan Pembelian Online (Studi pada Pengguna Lazada.co.id di Fakultas Ekonomi dan Bisnis Universitas Islam Malang). 102–117. file:///C:/Users/phili/Downloads/tambahan jurnal 5 keamanan.pdf
- Mudiar, W., & Hervianto, D. R. (2019). Pengaruh Citra Merek dan Kualitas Pelayanan terhadap Keputusan Pembelian Konsumen Toko Online Tokopedia (Studi pada Konsumen Tokopedia Jakarta). *Jurnal Simposium Nasional Ilmiah*, *November*, 415–423. https://doi.org/10.30998/simponi.v0i0.350
- Mulyadi, A., Eka, D., & Nailis, W. (2018). Pengaruh Kepercayaan, Kemudahan, Dan Kualitas Informasi Terhadap Keputusan Pembelian Di Toko Online Lazada. *Jembatan*, 15(2), 87–94. https://doi.org/10.29259/jmbt.v15i2.6656
- Rafidah, I. (2017). Analisis keamanan kemudahan dan kepercayaan terhadap keputusan pembelian secara online di lazada Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya. 6.
- Rahayu, H., Adi Sismanto, & Arianto, T. (2020). The effect of prices, product reviews, ease of use, and security of transactions on purchasing decisions online in shopee (Studi Kasus Mahasiswa Fakultas Ekonomi Manajeme. 2, 34–48.
- Rahayu, S., Zuhriyah, & Bonita, S. (2015). Pengaruh gaya hidup dan persepsi mahasiswa terhadap keputusan pembelian secara online di kota palembang. *Journal of Chemical Information and Modeling*, 110(9), 1689–1699.
- Rizki, A. G., Hidayat, K., & Devita, L. D. R. (2017). Pengaruh citra merek dan harga terhadap keputusan pembelian pada e-commerce Shopee Indonesia (Survei pada mahasiswa S1 fakultas Ilmu Administrasi Universitas Brawijaya angkatan 2015/2016 dan 2016/2017 yang membeli barang secara online di e-commerce). *Jurnal Administrasi Bisnis (JAB)*, 72(2), 49–56.
- Santosa, A. D., Bintari, V. I., & Risna Amalia Hamzah. (2019). Peran kepercayaan dan brand image dalam pengambilan keputusan pembelian secara online di instagram. 5(Mei), 60–68.
- Setyarko, Y. (2016). Analisis Persepsi Harga, Promosi, Kualitas Pelayanan, dan Kemudahan Penggunaan Terhadap Keputusan Pembelian Produk Secara Online. *Ekonomika Dan Manajemen, ISSN: 2252-6226, 5*(2), 128–147.
- Sudaryono, Rahwanto, E., & Komala, R. (2020). E-commerce dorong perekonomian indonesia, selama pandemi covid 19 sebagai entrepreneur modern dan pengaruhnya terhadap bisnis offline. *Jurnal Manajemen Bisnis (JUMANIS) Prodi Kewirausahaan*, 2(1), 200–213.
- Sugiyono, P. (2017). metode penelitian bisnis: pendekatan kuantitatif, kualitatif, kombinasi, dan R&D. CV.Alfabeta. Susilo, M. D., & Wardoyo. (2017). Faktor-faktor yang Berpengaruh Terhadap Keputusan Pembelian Secara Online. Conference on Management and Behavioral Studies, 293–302.
- Wulandari, Y. T. (2018). Pengaruh Kepercayaan, Keamanan, Persepsi Resiko Dan Kualitas Pelayanan Terhadap Keputusan Pembelian Secara Online Melalui Media Sosial Instagram. *Manajerial*, 4(1), 91. https://doi.org/10.30587/manajerial.v4i1.310
- Yunita, N. R., Sumarsono, H., & Farida, U. (2019). Pengaruh persepsi risiko, kepercayaan, dan keamanan terhadap keputusan pembelian online di buka lapak (Studi Kasus Pada Komunitas Buka Lapak Ponorogo). *ISOQUANT:* Jurnal Ekonomi, Manajemen Dan Akuntansi, 3(1), 90. https://doi.org/10.24269/iso.v3i1.243

Biographies

Gidion P. Adirinekso joint with the Department of Management Faculty of Economics and Business Krida Wacana Christian University in Jakarta. Dr Adirinekso graduated with his master's and a doctoral degree from the Department of Economics Faculty of Economics and Business Universitas Indonesia Jakarta after completing his bachelor's degree from the Department of Economics, Satya Wacana Christian University. His interests in research on economic behaviour, urban dan regional economics, also urban community development and economic development.

Sidik Budiono currently serves as an Associate Professor in Economics at the Department of Management Faculty of Economics and Business Pelita Harapan University, Lippo Karawaci Tangerang Banten. Dr Budiono has graduated Bachelor of Economics from the Department of Economics, Universitas Kristen Satya Wacana, Salatiga Central Java, Master and Doctor of Economics from Faculty of Business and Economics Universitas Indonesia, Jakarta. He interests in research around national, regional development, and international economics.

John Tampil Purba obtained a degree Doctor (S3) majoring in Management from De La Salle University Systems Manila, the Philippines, in 2002. Dr Purba also has several certifications international competition in management information systems and technology, among others; MCP, MCSA, MCSE, MCSES, MCSAS, MCDL, and MCT from Microsoft Technologies, USA and CSE from Cisco System USA. **He has also had Professional Membership of the**

Proceedings of the International Conference on Industrial Engineering and Operations Management Bangalore, India, August 16-18, 2021

IEOM Society since the last year of 2019. He has many managerial experiences in Service Industries for more than 25 years. He is currently a senior lecturer at the Faculty of Economics and Business Pelita Harapan University, Karawaci Banten, Indonesia.

Wilson Rajagukguk currently serves as Associate Professor in Economics Faculty of Economics Vice-Rector for Academic Affairs at the Universitas Kristen Indonesia, Jakarta, Indonesia. Dr Wilson Rajagukguk holds two Masteral Degree in Demographic and Labor Economics and also in Theology. His Doctoral degree in Economics from the Departement of Economics Faculty of Business and Economics Universitas Indonesia, Jakarta. His research interests in demographic-economic growth, religion, economics, statistics, econometrics, and mathematics.