The Role of Price and Service Convenience on Jakarta's Consumer Purchase Decisions in Top 5 Marketplace Mediated by Consumer's Perceived Value

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 mainly discussed two marketing mixes of price and convenience of services offered by the top 5 E-marketplace (such as Tokopedia, Bukalapak, Shopee, Lazada, and Blibli) and their impact on consumer purchasing decisions in Jakarta mediating by perceived value. One thousand samples obtained in this study, with more than 700, were collected from online and offline surveys for the rest—the data obtained from questionnaires with 19 questions representing four variables used. SEM-PLS use in this study. The results revealed the variable price and service convenience positively and significantly affecting consumer purchasing decisions in several e-marketplaces. At the same time, the mediating variable perceived value partially mediated the price and convenience of services on consumer purchasing decisions for some e-marketplaces. This research finds that the occurrence of purchasing decisions influenced by the price and convenience of services and would increase along with the mediation of perceived value. The service convenience is the most exciting variable to influence consumer decision to purchase for the top 5 e-marketplaces in Jakarta. A Multi-Group Analysis implemented on gender and generation. There are no differences between gender, but the generation should consider the market place.

Keywords
price, convenience services, purchasing decisions, perceived value.

1. Introduction

Indonesia, a country with a population of 262 million, 54.68% of them are internet users, and 37.12% using the internet from 2014-2016. The Central Bureau of Statistics Republic of Indonesia (BPS) data on the highest

percentage of households accessing the internet in 2017 is DKI Jakarta, with a figure of 85.7% (BPS, 2019). E-commerce buyers have also increased. There are 28.07 million e-commerce consumers in 2017 made a total expenditure of 7.056 billion USD (an increase of 22% over the previous year). Annual Revenue Per User (ARPU) of Consumer Goods is 251 USD per year, which has increased by 8% compared to last year (Kemp, 2018).

We choose the big five marketplaces in Indonesia, Tokopedia, Shopee, Lazada, Bukalapak, and Blibli, according to the I-Price survey. From quarter 3 (three) 2018 up quarter 4 (four) 2019, they always on big five from monthly numbers of visitors (IPriceGroup, 2020). Even they always on big five, but their customer behavior may differ. So, it intrigues to capture in this study.

This study will examine consumer purchasing decisions in DKI Jakarta on those marketplaces that are influenced by price perception, service convenience, and consumer's perceived value. Due to Royle and Laing (Kumar, Mangla, & Luthra, 2018), consumer behavior has transformed from traditional purchases to internet-based purchases. It has brought growth in the volume of internet-based purchases and changed the pattern of consumer's decisions. The type of marketplace moderate for service convenience to impact perceived value. The presence of Information Technology is very influential on human life on this planet, which results in changes in lifestyle in various people's lives. ICT forces many people to prepare and adapt themselves to the development technology (Purba & Panday, 2015) and (Panday & Purba, 2015).

With the presence of various technologies and their applications that synergize with the internet, small, medium and large entrepreneurs adopt the use of the technology referred to in their efforts to survive and develop and to retain their consumers (Tan et al. 2019, Kim, et al., 2019, Purba, et al., 2019). Consumers become dependent on the internet to meet their daily needs. The purchasing decision is an individual activity that is directly involved in getting and using the goods offered. Kumar *et al.* (2018) suggested that technological advances and penetration, consumer behavior, and their busy and busy schedules and trust in e-commerce are some of the factors that lead to changes in consumer purchasing decisions. The reason consumers choose to shop online, as stated by the Australian Government, E-Commerce in Indonesia. A Guide for Australian Business from the largest to the smallest is the convenience, wide range of product choices, promotions, and low and competitive prices. As for the convenience of online shopping services, a study on the reasons for the convenience of consumers in making online purchases found that five factors influence the comfort of consumers in shopping online, namely: access, search, evaluation of their transactions, and the convenience after a purchase (Jiang, Yang, & Jun, 2014).

The relationship between price perception and perceived value and purchasing decisions put forward by Kotler and Keller (2016) offers will succeed if they provide value and satisfaction to consumers. The selection of offers by consumers will vary based on the perception of the proposition that provides the highest value. The value perceived by consumers when shopping online in previous studies is said not only to be based on price but includes the time required, the effort made, and the use of products and services.

Some research found in Kumar et al. (2018) revealed several factors that influence consumers' online purchasing decisions. There are namely the features that currently exist give consumers the freedom to search for and choice of products they want, gather information on specifications and comparisons, evaluate options before making a purchase (Filieri, 2014). E-commerce helps consumers to simplify the purchasing process (Khare, Mishra, & Parveen, 2012).

In this study, the author tries to research the big five e-commerce in Province Jakarta. Those are Tokopedia, Bukalapak, and Shopee BliBli and Lazada. Also, according to Kotler et al. (2017), marketing 4.0 discusses human-centric marketing, where consumers will choose to make transactions that offer convenience services in accessing and making transactions.

Genders, of course, also have different ways when purchasing online. The differences are guys already know what they want to buy but the girls, they are usually still confused about what to buy; the guys tend to straight to the point, but the girl is often tempted by discounts or flash sales when shopping online. Women are affected by flash sales when men are not. Men prefer unique products. The matter of buying groceries online, guys tend to choose automotive categories, computers and accessories, sports, and related hobbies. For the fashion category, guys are also quite fond of and not their priority, and it is different from girls who are more fond of shopping for fashion goods.

Millennials, in almost all aspects of their lives, uses the internet for social media, research, or shopping. Online shopping becomes a social activity, which is fun and encourages them to share it with family or friends. On the other hand, Generation Z, who did not know the time before the internet, their shopping process was more to compare prices, so it was useful in shopping. They take advantage of buying moments when there is a sale. So we consider to know, is there any different behavior between generation Y or millennials and generation Z.

2. Literature Review

Online shopping. According to Jusoh and Ling (Jusoh & Ling, 2012), online shopping is the process of purchasing goods or services from sellers who sell their products and services via the internet. Shoppers can visit the store on the website comfortably at home and shop while sitting in front of the computer.

In the same research mentioned, e-commerce provides many tangible benefits for consumers, such as time savings in product sorting and transactions, better decision making, alternative product choices. Cash holding also crucial in the online shopping process (Suk, Haryanto, & Purba, 2019). Online shopping provides more convenience for consumers compared to shopping at a physical store; they just simply click the mouse without having to transport out of the house.

Marketplace. The electronic marketplace is an inter-organizational information intermediary that enables the exchange of information from buyers and sellers about prices and product offerings to cooperate in the commodity exchange (Zheng, 2006). The following are the utility value propositions offered by e-marketplaces in general: 1. An increase in communication was related to the speed of transmission to access vast amounts of information at a low cost; 2. Transaction automation is automation in business transactions and order execution, which includes savings in logistics, transportation, distribution, inventory, and payment system costs; 3. Coordination of intermediaries, including access to a large number of buyers and sellers, the provision of alternatives, and the selection of the best and most efficient options; 4. Process integration, a close alliance between buyer and seller processes that enables lower inventory levels and higher responsive levels (Zheng, 2006).

Purchase Decision. Purchasing decisions are actions of consumers in a willingness or unwillingness to buy a product or service (Kotler & Keller, 2016). In making purchasing decisions, consumers will take into consideration the quality, price, and products known to the public. Kumar et al. (2018) examined the existence of 8 factors that determine consumer decisions in making online purchases, namely: 1. Innovation and trends; 2. Quality and brand; 3. Fulfillment and time energy; 4. Reputation system; 5. Information overload; 6. Price and value for money; 7. Face and aversion; 8. Social aspects.

Several studies (Darley, Blankson, & Luethge, 2010) reveal that the usefulness of a website is very influential on consumer buying behavior. The frequency of purchases and interest in online purchases will significantly be influenced by innovations that also affect internet use. There are essential differences in an immersive, hedonic aspect that is more than traditional shopping motivations. Navigation, service convenience, and the stability of the electronic experience felt when searching for products are essential elements of online shopping behavior. In this study, the authors used the purchase decision concept, which discusses online purchasing decisions (Kumar et al., 2018).

Price. Price is one element of the marketing mix that generates income; in other aspects, it means production costs (Kotler & Keller, 2016). Price also communicates the value positioning to be achieved by a company through the brands and products sold.

In the era of consumers who are increasingly aware, making most consumers become price sensitive and always search for products with the best and lowest prices. If the price is not in line with expectations, then their buying interest will decrease (DiRusso, Mudambi, & Schuff, 2011). Accurate pricing for new products and services, it is necessary to have detailed knowledge about the perceptions and characteristics of potential consumers (Munnukka, 2008). There are four indicators to identify prices (Kotler & Keller, 2016):1. Affordable; 2. Price competitiveness; 3. Price compatibility with product quality; 4. Price match with benefits

Kotler & Keller (2016) also states that there are differences in interactions between buyers and sellers caused by the internet. Here are the effects of the internet that affect buyer side:1. Buyers can quickly compare prices from multiple sellers; 2. Buyers can check prices just before making a purchase; 3. The buyer can specify the price; 4. Buyers can get free products, whereas the seller can do:1. Monitor consumer behaviour and make special offers for each individual; 2. Giving access to exclusive prices to satisfied consumers;

Better prices also contribute to the growth of online retail, and lower operational costs allow online retailers to use various promotional strategies to increase their sales compared to brick-and-mortar stores (Lin, Wang, & Chang, 2011). Meanwhile, internet growth and online sales lead to lower prices compared to conventional stores (Kung, Monroe, & Cox, 2002). The increasing use of the internet for e-commerce based on expectations of reduced distribution costs, as well as the cost of searching for product information by consumers and sellers to be more

accessible and possibly free, especially for price information. The Internet has made the process of finding and comparing prices in online marketplaces easier (DiRusso, Mudambi, & Schuff, 2011).

Service Convenience. Kotler and Keller (2016), defining service quality is a statement of attitude towards the comparison between expectations and performance. Before consumers buy a product or service, consumers have expectations about the quality of service based on personal needs, previous experiences, word of mouth recommendations, and service provider advertisements. Customer service is everything that is done by the company, so that customer experience increases and obtains a better experience than before, should customers not experience ordinary skill.

Their desire for comfort is rooted in, and their attention diverted towards practical expenditure alternatives because consumers have shorter time allocation and more comfortable effort (Jiang, Yang, & Jun, 2014). Intrinsically, consumers' perceptions about service convenience are about the time and effort that must sacrifice to buy or use a product. Service convenience stated to have a non-monetary value from customer service offerings. Moreover, service convenience generally is seen as an essential factor for consumer behavior (Chen, Chang, Hsu, & Yang, 2011). Delivery services through a wide selection of home delivery services have adopted to create greater convenience for customers.

Delivery services through a wide variety of home delivery services have select to create greater convenience for customers. Kotler, Kertajaya, and Setiawan (2017) state it as the development of consumers is increasingly mobile and connected, and time becomes scarce in their lives. Consumers will choose a brand that provides convenience in access and transactions**.** **T**he dimensions of service convenience divided into 5, which reflected in the level of consumer activity processes that correlate with buying and using services. Consumer perceptions and values regarding time and effort affect evaluating consumer convenience where the five dimensions are: Convenience in making decisions; Comfort in accessing; Convenience in transactions; Convenience benefits; Satisfaction after making a transaction.

Research on the five dimensions outlined above concluded that the five aspects could influence consumer decisions and satisfaction in different ways. These findings can indicate in the evaluation of satisfaction; consumers see comfort in decision making, and enjoyment in getting benefits are the essential aspects to decide to make a purchase and satisfaction (Colwell, Aung, Kanetkar, & Holden, 2008).

Internet-based services provide varied and innovative services, convenience, low-cost, high quality, and fast and reliable services (Jin & Oriaku, 2013). Because of the flexibility of profits and satisfaction, consumers often choose to use internet-based services. Meanwhile, there is a motive for service convenience in the area of electronic banking, online shopping, and product choices in retail (Chen, Chang, Hsu, & Yang, 2011). Another study shows five dimensions of online shopping service convenience, namely access, search, evaluation of transactions, and service convenience after making a purchase (Jiang, Yang, & Jun, 2014).

The author uses the concept of the perceived value of consumers based on the nine indicators above. These indicators use to relate their research objectives in the realm of value perceived by consumers in the purchasing experience in the online world where the nine indicators above represent the values that will be obtained by consumers when making online purchases.

From some literature above, this research will analyze a conceptual model in Figure 1. Multi-Group Analysis by generation and gender will apply to this model.

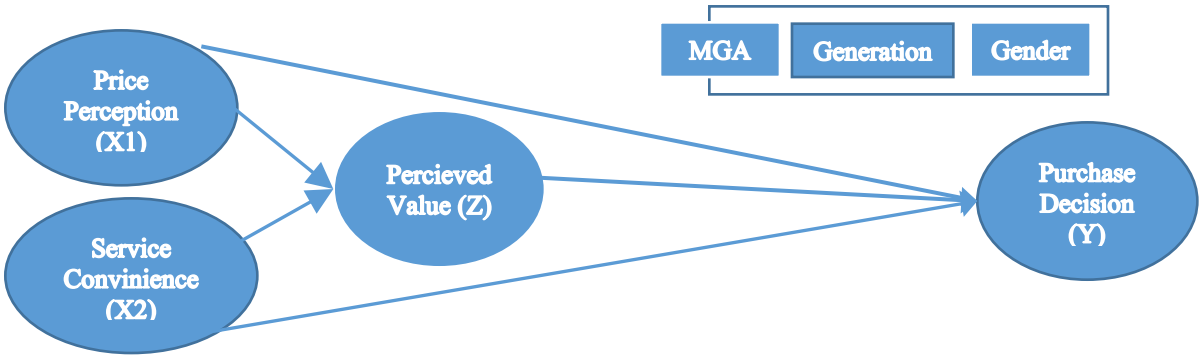

Figure 1. A Conceptual Model

The Hypothesis. Based on the description of previous research, the following is a framework of the concept model that the researcher wants to develop. Where, the independent variable is the price (X1) and service

convenience (X2) which influence the purchasing decision (Y) with the perceived value variable (Z) as a mediating variable. Here is a conceptual model proposed by the author as a reference in the research conducted.

Price is one element of the marketing mix that generates income. Price also communicates the value positioning to be achieved by a company through the brands and products sold. Kotler & Keller (2016). Previous research shows that prices have a positive effect on the value perceived by consumers (Naami, Rahimi, & Ghandvar, 2017). From them, we construct the hypothesis: H1: Price has an impact on the value perceived by consumers.

According to Jiang et al. (2014), with shorter time allocation and more effortless, their desire for comfort is rooted in, and their attention has diverted towards practical expenditure alternatives. It proves that perceived convenience retailer innovativeness has a positive relationship and affects perceived value (Lin C.-Y. , 2016). So we have another two hypotheses: H2: Service convenience has an impact on the perceived value of consumers.

According to previous research, it found that the perceived value had the highest significant and direct impact on purchasing interest (Chen, Hsiao, & Wu, 2018). Meanwhile, a perceived value significantly influences buying intention. Another three hypotheses are, H3: Perceived value influences purchasing decisions; H4: Perceived value mitigates the effect of prices on purchase decisions (Pham, Tran, Misra, Maskeliunas, & Damaševiˇcius, 2018). H5: The perceived value mediates the impact of service convenience on purchase decisions (Bai, Li, & Niu, 2016; Dhanabalan, Subha, Shanti, & Sathish, 2018)

3. Methods

Data. In this study, the author uses five marketplaces user population in DKI Jakarta, who have made online purchase transactions. Data was collecting by a questionnaire, and the respondent chooses the convenience sampling method. The survey distributes to online buyers in Province Jakarta, which are the consumer of the big five marketplaces in Indonesia. Questionnaire related to main variables, such as price, service convenience, perceived value, and purchase decision, use close questions with Likert scale. Likert scale is a scale that can measure the attitudes, opinions, and perceptions of a person or group of people about a symptom or phenomenon (Djaali, 2008). The author uses five levels of scale in this study.

Operational Variables. In this research, we try to develop indicators from particular variables. The purchase decision variable includes some indicators, such as innovation and trend, quality and brand; fulfillment and time energy; reputation; information overload; price and value for money, face and aversion, and social aspect. Meanwhile, Price perception includes the affordability of prices, price competitiveness, price match, and price match with benefits. Service convenience has some indicators, accessibility in making decisions, comfort in accessing, convenience in transactions, convenience benefits, and convenience after making a transaction. Perceived value has some indicators, like a lower price, time-saving, instant deals, comfort, open 24 hours, information about the vendor, private shopping, and instantly download digital products or services or physical products

"Table 1. Operational Variables"

Variable	Indicators	
Purchase Decision	1. Innovation and trend 2. Quality and brand	3. Fulfillment and time energy
Price Perception	1. Price competitiveness 2. Price match	3. Price match with benefits
Service Convenience	1. Convenience in making decisions 2. Comfort in accessing	3. Convenience in transactions 4. Convenience benefits 5. Satisfaction after making a transaction
Perceived Value	1. Lower price 2. Time-saving 3. Instant transactions 4. Comfort	5. Open 24 hours 6. Information about the vendor 7. Private shopping 8. Instantly download digital products or services or physical products

The analytical method in this study uses SEM-PLS (Henseler, Ringle, & Sinkovics, 2009). Structural Equation Modeling (SEM) is one of the methods currently used to cover the weaknesses of the regression method. SEM is an evolution of multiple equation models developed from the principles of econometrics and combined with the organizing principles of psychology and sociology (Ghozali, 2014). SEM has emerged as an integral part of academic, managerial research. The indicator approach in this study is the reflective approach, where the indicators

can reflect latent variables. The reflective model indicates that each indicator is a measurement of the error imposed on hidden variables (Anderson & Gerbing, 1988).

The type of SEM used in this study is PLS with Multi-Group Analysis. SEM uses PLS consisting of three components, namely structural models, measurement models, and weighting schemes. (Monecke & Leisch, 2012). The author uses SmartPLS 3.2.8 is software that presents a graph display of variance-based and factor-based SEM (structural equation modeling) using partial least squares and factor-based methods to its users (Wong, 2013).

Outer Model Test. The outer model analysis carried out to ensure that the measurements used are appropriate to be made measures (convergent and discriminant validity test and reliable test). In the SEM PLS approach, a measurement meets convergent validity if it meets the following conditions: Loading Factor Parameters with the rule of thumb> 0.7; Average Variance Extracted parameter with the rule of thumb> 0.5; Communality parameter with the rule of thumb> 0.5. (Hair, Hult, Ringle, & Marko, 2017).

Discriminant validity achieved if the AVE value is higher than the correlation value squared (Hair, Black, Babin, & Anderson, 2014). In summary, the measurement of the discriminant validity test formulated as follows: AVE root parameters and correlation of latent variables with the rule of thumbs of AVE roots> potential variable association. Cross loading parameters with the rule of thumb> 0.7 in one variable.

Reliability testing in PLS can use two methods, namely Cronbach's alpha and composite reliability. Cronbach's alpha measures the lower limit of a construct's reliability value, while composite reliability measures the actual value of a construct's reliability. Rule of thumb alpha value or composite reliability must be higher than 0.7, although the amount of 0.6 is still acceptable Hair et al., (2014).

Inner Model Test. Tests on structural models carry out to test the relationship between latent constructs. There are several structural model tests (inner model), namely: a) R Criteria for the value of R Square worth 0.67 (strong), 0.33 (moderate), 0.19 (weak) (Abdillah & Jogianto,2009); b) Estimate for Path Coefficients performed by the Bootstrapping procedure; c) Prediction Relevance (Q Square) or also known as Stone-Geisser's. d). Q Square if the values obtained are 0.02 (small), 0.15 (medium) and 0.35 (large) (Vincenzo, Chin, Henseler, & Wang, 2010)

Hypothesis testing. To test the hypothesis will be analyzed from the P-value of the SEM PLS test. To test this hypothesis, the value of P must be greater than 0, with a significance level of 1-95% or 0.05. In the P-value test, to test hypotheses often use $P < 0.05$ rather than $P \leq 0.05$ (Kock & Hadaya, 2018).

Mediation Test. The mediation calculation in this thesis uses t-Table and P-Value to analyze the independent variable Price (X1) on its influence on purchasing decisions (Y) mediated by the perceived value of consumers (Z) as well as the independent variable service convenience (X2) on its effect on purchasing decisions (Y) mediated by the consumer's perceived value (Z). A variable called an intervening variable if the variable affects the relationship between endogenous variables and exogenous variables (Ghozali, 2014). To test the significance of the indirect effect, we compare the t-test and t table or compare p-value with a 5% significance level. If the P-value is <0.05, then it can be said that the variable is influential and significant (Hair, Hult, Ringle, & Marko, 2017).

4. Result and Discussion

4.1 Characteristics of Respondents

The most significant sample of respondents who filled out this questionnaire was age 19-37 years, then age 38-53 years. Following data presented by APJII data in 2017, which shows that most internet users in Indonesia are those aged 19-54 years. When viewed from the age of those who do online shopping at Tokopedia is Generation Y, who was born in 1981-1994 (currently aged 25-38). In the data presented, it concludes that 81% of Tokopedia consumers are those who have an income of more than Rp3,000,000. According to research conducted by Deloitte Southeast Asia (2015). Social class classifies according to income, is divided into four (4) categories (Triwijayati & Pradipta, 2018): Higher-income with income above Rp. 120,000,000 per year; Upper middle income with an income of Rp. 60,000,000 - Rp. 120,000,000 per year; Lower middle income with income of IDR 36,000,000- IDR 60,000,000 per year; Lower-income with an income of less than Rp. 36,000,000 per year.

Tabel 2. Respondent Characteristic

No	*Variable*	*Levels*	*Number*	*Percentage*
1	*Age*	13 - 18	10	0.5
		19 - 37	1830	91.5
		38 - 53	160	8
2	*Monthly Household*	< 3	230	11.5

	Income (in million rupiahs)	3 - < 5	340	17
		5 - < 7	500	25
		7 - < 10	330	16.5
		≥ 10	600	30
		Employee	1350	67.5
		Student/College	360	18
3	***Occupation***	Entrepreneur	160	8
		Others	120	6
		Housewife	10	0.5
		West Jakarta	730	36.5
		Center Jakarta	510	25.5
4	***Locations***	South Jakarta	280	14
		East Jakarta	220	11
		North Jakarta	260	13

4.2 The Outer Model Test

Validity Test. Based on the data presented in table 3, convergent validity can see from the loading factor for each construct indicator. Ghozali (2014), states a loading factor value between 0.5 - 0.6 is considered sufficient to meet the concurrent validity requirements. The data above shows there are no indicator variables that have an outer loading value below 0.5. It can say that all indicators have valid values.

"Table 4. ***Average Variance Extracted (AVE)***

Variable	***AVE***
Price Perception (X1)	0,527
Service Convinience (X2)	0,635
Perceived Value (Z)	0,512
The decision to Buy (Y)	0,659

Reliability Test. Based on the composite reliability values below, it can conclude that the variables in this study are reliable because they have a composite reliability value above 0.70 (Hair, Black, Babin, & Anderson, 2014). The results of composite reliability strengthened by looking at the value of Cronbach Alpha. A variable can be said to be reliable if it has a value> 0.70 (Ghozali & Latan, 2015). From table 5, it shows that the Cronbach's Alpha value of each variable has a value> 0.70, so all the variables in this study are reliable.

Tabel 5. ***Composite Reliability & Cronbach's Alpha***

Variable	***Composite Reliability***	***Cronbach's Alpha***
Price Perception (X1)	0,852	0,667
Service Convinience (X2)	0,897	0,856
Perceived Value (Z)	0,882	0,843
The decision to Buy (Y)	0,906	0,741

4.3 The Inner Model Test

The inner model test (structural model) is a model to see the relationship between latent variables through the bootstrapping method. The higher the value of R-square, the greater the ability of independent latent variables can explain the latent dependent variable.

Table 6. ***R-squared Coefficients***

Variable	***R – Square***
Perceived Value (Z)	0,528
The decision to Buy (Y)	0,400

Based on the R-Square table above, it can seem that the ability of the price variable and service convenience in explaining the perceived value variable is 0.648 or 64.8%, and other factors outside this study explain 35.2 %. Whereas the ability of the variable price, service convenience, and perceived value in explaining purchase decisions amounted to 0.733 or 73.3%, and other factors outside this study explained 26.7 %.

Q-square Test. Q-Square can be calculated using the following formula: Q-Square = 1- [(1-R21) x (1-R22)]= 1 - [1-0,648) x (1-0,733)]= 1- (0.352 x 0.267)= 1 - 0.094= 0.906. Based on the calculation, the Q-Square value of 0.906 is known. Q-Square shows the magnitude of the diversity of research data explained from this study is 90.6%, and other factors outside this study explain the remaining 9.4%.

Mediation Test. Based on the Specific Indirect Effects on table 7, the two mediating effects, each mediated variable is declared to have a significant impact. A hypothesis is declared acceptable or has a substantial impact if the t-statistic is following the standard t-table, which has a value> 1.96 and has a P-value <0.05.

Table 7. ***Specific Indirect Effects***

	Original Sample (O)	***Sample Mean***	***Standard Deviation***	***t Statistics***	***P Values***
PP (X1) -> PV (Z) -> PD (Y)	0.039	0.041	0.015	2.658	0.008
SC (X2) -> PV (Z) -> PD (Y)	0.434	0.434	0.017	25.457	0.000

t-Test. Based on the table below, the results of the PLS calculation, which states the direct effect between variables. It said there was an immediate effect if the t-statistic value> 1.96 and said there was no effect if t-statistic <1.96. All variables influence one another, based on table 8.

Table 8. ***Path Coefficients***

	Original Sample (O)	***Sample Mean (M)***	***Standard Deviation***	***Standard Error***	***t-Statistics***	***P Values***
PP (X1) -> PV (Z)	0,243	0,244	0,084	0,084	2,880	0,003
PP (X1) -> PD (Y)	0,278	0,282	0,077	0,077	3,632	0,000
SC (X2) -> PV (Z)	0,635	0,633	0,079	0,079	7,998	0,000
SC (X2) -> PD (Y)_	0,589	0,584	0,072	0,072	8,148	0,000
PV (Z) -> PD (Y)_	0,563	0,578	0,099	0,099	5,682	0,000

Testing hypothesis. Hypothesis testing was done by looking at the probability and t-statistics in table 8. For the probability value, the p-value with alpha 5% is <0.05. The t-table value for alpha 5% is 1.96. So the hypothesis acceptance criteria are when t-statistic> t-table. The five hypotheses will test using the criteria. 1). Price has a positive impact on perceived value; 2) Price perception has a positive impact on the decision to buy; 3) Service

convenience has a positive impact on perceived value; 4). service convenience has a positive impact on buying decisions, and 5). Perceived value has a positive impact on buying decisions.

4.4 The Parametric Test

To test between the observed models, namely gender and generation, parametric tests are used. Based on parametric tests using Multi-Group Analysis, shown in table 9.

Table 9. *The Parametric Test*

Variable	p-Value (Male vs. Female)	p-Value (Gen_y vs. Gen_z)
PV (Z) -> PD (Y)_	0.635	0.002
PP (X1) -> PV (Z)	0.400	0.319
PP (X1) -> PD (Y)	0.419	0.011
SC (X2) -> PV (Z)	0.510	0.684
SC (X2) -> PD (Y)_	0.478	0.233

Based on table 9, there is no significant difference between males and females. It means that all the hypotheses have proven earlier apply equally to men and women. The implication, gender in the model studied has the same impact between men and women.

The results of group analysis based on generation turned out to have a different impact. There is a difference between generation Y and generation Z in terms of how perceived value influences purchasing decisions. The second different thing is related to the price of influencing purchase decisions. The difference in terms of the perceived value of generation Y is likely to be still very concerned compared to generation Z in Jakarta. The price perceived by Generation Y has had an impact on making decisions that may not be as easy as Generation Z to decide to make a purchase.

5. Conclusions

After analyzing and researching the effect of prices, service convenience that is mediated by the perceived value of consumers to consumer purchasing decisions at Tokopedia in DKI Jakarta, the conclusion is that all hypotheses can be accepted. Then it can be taken the suggestion that the relationship between variables that have a high number of influences of service convenience perceived by consumers. Therefore the top five E_commerce need to increase the impact of the price offered to improve purchasing decisions from consumers. If examined through the lowest points of the price indicator, it is found that the most economical value obtained from the price indicator offered in the top five E_commerce is following the quality of the product purchased. Therefore, the author recommends that Tokopedia be able to screen sellers by providing a document that must be signed by the seller regarding the authenticity of the product and information following the description described in the product detail page with the product sent to the consumers.

The top five E_commerce also can provide a badge to guarantee the authenticity of products and guarantees within a specified period, which further informs about the quality of what will be obtained by consumers.

Existing E-Commerce needs to pay attention to the different behavior patterns between generation Y and generation Z in terms of perceived price and value. This will have implications for their purchasing decisions.

The authors also suggest further research to divide between BtoC and CtoC types, consider the five different cities in the national capital city. Research with a more nationally spread sample and a variety of variable choices, such as shipping costs, time, and. This is intended to be able to complement the results of this study, as well as to study the different characteristics and behavior of consumers from various locations in spending on e-marketplaces. Although gender analysis did not show significant differences in the hypotheses tested, this might result in differences when the study was continued by considering the type of e-commerce.

References

Abdillah, W., & Jogiyanto, H. (2009). *Konsep dan Aplikasi PLS (Partial Least Square) untuk Penelitian Empiris.* Yogyakarta: BPFE.

Anderson, J., & Gerbing, D. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two Steps Approach. *Psychological Bulletin*, 411 - 423.

Bai, Y., Li, C., & Niu, J. (2016). Study on Customer-Perceived Value of Online Clothing Brands. *American Journal of Industrial and Business Management*, 914-921.

BPS. (2019, December 2). *Badan Pusat Statistik*. Retrieved from BPS web site: http://www.bps.go.id

Chen, C.-C., Hsiao, K.-L., & Wu, S.-J. (2018). Purchase intention in social commerce: An empirical examination of perceived value and social awareness. *Library Hi Tech*, 583-604.

Chen, M.-C., Chang, K.-C., Hsu, C.-L., & Yang, I.-C. (2011). Understanding The Relationship Between Service Convenience and Customer Satisfaction in Home Delivery by Kano Model. *Asia Pacific Journal of Marketing and Logistics*, 386-410.

Colwell, S. R., Aung, M., Kanetkar, V., & Holden, A. L. (2008). Toward a Measure of Service Convenience: Multiple-item Scale Development and Empirical Test. Journal of Services Marketing. *Journal of Service Marketing*, 160 - 169.

Darley, W. K., Blankson, C., & Luethge, D. J. (2010). Toward an Integrated Framework for Online Consumer Behavior and Decision Making Process: A Review. *Psychology & Marketing, Vol. 27(2)*, 94–116.

Dhanabalan, T., Subha, K., Shanti, R., & Sathish, A. (2018.). Factor Influencing Consumers' Car Purchasing Decision In Indian Automobile Industries. *International Journal of Mechanical Engineering and Technology Vol 8 (10)*, 53 - 63.

DiRusso, D. J., Mudambi, S. M., & Schuff, D. (2011). Determinants of Prices in An Online Marketplace. *Journal of Product & Brand Management Vol 20 (5)*, 420 - 428.

Djaali. (2008). *Psikologi Pendidikan.* Jakarta: Sinar Garfika Offset.

Filieri, R. (2014). What makes online reviews helpful? A diagnosticity-adoption framework to explain. *Journal of Business Research*, 1 - 10.

Ghozali, I. (2014). *Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS). Edisi 4. Semarang: Badan Penerbit Universitas Diponegoro.* Semarang: Universitas Diponegoro.

Ghozali, I., & Latan, H. L. (2015). *Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris.* Semarang: Badan Penerbit UNDIP.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis.* Essex: Pearson Education Limited.

Hair, J. F., Hult, G. T., Ringle, C., & Marko, S. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (Second ed.). Singapore: Sage.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing, Volume 20*, 277–319.

IPriceGroup. (2020, Maret 31). *IPrice*. Retrieved from IPrice: https://iprice.co.id/insights/mapofecommerce/

Jiang, L. (., Yang, Z., & Jun, M. (2014). Measuring Consumer Perceptions of Online Shopping Convenience. *Journal of Service Management, vol: 24 (2)*, 191-214.

Jin, Y., & Oriaku, N. (2013). E-service flexibility: meeting new customer demands online. *Management Research Review Vol 36 (11)*, 1123 - 1135.

Jusoh, Z. M. & Ling, G. H. (2012). Factors Influencing Consumers Attitude Towards E-Commerce Purchases Through Online Shopping. *International Journal of Humanities and Social Science, Vol. 2* (No. 4), 223 - 230.

Kemp, S. (2018, January 30). *we are social*. Retrieved from we are social: https://wearesocial.com/blog/2018/01/global-digital-report-2018

Khare, A., Mishra, A., & Parveen, C. (2012). Influence of Collective Self Esteem on Fashion Clothing Involvement Among Indian Women. *Journal of Fashion Marketing and Management Vol 16 (1)*, 42 - 63.

Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal, 28(1)*, 227–261.

Kotler, P., & Keller, K. L. (2016). *Marketing Management.* Harlow: Pearson Education, Inc.

Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0 Moving from Traditional to Digital.* New Jersey: John Wiley & Sons, Inc.

Kumar, A., Mangla, S. K., & Luthra, S. (2018). Predicting Changing Pattern: Building Model for Consumer Decision Making in Digital Market. *Journal of Enterprise Information Management.*, 1 - 31.

Kung, M., Monroe, K. B., & Cox, J. L. (2002). Pricing on The Internet. *Journal of Product & Brand Management, vol: 11 (5)*, 274-288.

Lin, C.-Y. (2016). Perceived convenience retailer innovativeness: how does it affect. *Management Decision, Vol. 54*(Iss 4), 946 - 964.

Lin, H.-H., Wang, Y.-S., & Chang, L.-K. (2011). Consumer Responses to Online Retailer's Service Recovery After a Service Failure: A Perspective of Justice Theory. *Journal of Managing Service Quality, vol: 21* (5), 511-534.

Monecke, A., & Leisch, F. (2012). Structural Equation Modeling Using Partial Least Squares. *Journal of Statistical Software*, 1-32.

Munnukka, J. (2008). Customers' purchase intentions as a reflection of price perception. *Journal of Product & Brand Management, 17*(3), 188 - 197.

Naami, A., Rahimi, Z., & Ghandvar, P. (2017). The Effect of Perceived Value, Perceived Risk, and Price on Customers Buying Intention (Case Study: Employees of Presov Electronics Company). *International Review of Management and Marketing*, 164 - 170.

Panday, R., & Purba, J. T. (2015). Lecturers and Students Technology Readiness in implementing Services Delivery of Academic Information System in Higher Education Institution:: A Case Study. *International Conference on Soft Computing, Intelligent System, and Information Technology* (pp. 539 - 550). Bali: Springer-Verlag Berlin Heidelberg.

Pham, Q. T., Tran, X. P., Misra, S., Maskeliunas, R., & Damaševiˇcius, R. (2018). Relationship between Convenience, Perceived Value, and Repurchase Intention in Online Shopping in Vietnam. *Sustainability*, 1 - 14.

Purba, J. T., & Panday, R. (2015). Innovation Strategy Services Delivery: An Empirical Case Study of Academic Information Systems in Higher Education Institution. *International Conference on Soft Computing, Intelligence Systems, and Information Technology. 516*, pp. 514-525. Heidelberg: Springer.

Purba, J. T., Hery, & Wijaya, A. (2020). E-commerce implementation in supporting business services strategy (case study at petshop gifaro evidence). *International Conference on*

Lesson Study of Science Technology Engineering and Mathematics. Journal of Physiscs: Conference Series.

Suk, K. S., Haryanto, M., & Purba, J. T. (2019). Cash Holdings of Business Group-Affiliated Firms in Indonesia. *DLSU Business & Economics Review 29(1)*, 40-57.

Tan, J. D., Supratikno, H., Pramono, R., & Purba, J. T. (2019). Nurturing Transgenerational Entrepreneurship in Ethnic Chinese Family SMEs: Exploring Indonesia. *Journal of Asia Business Studies*, 1-56.

Triwijayati, A., & Pradipta, D. B. (2018). Kelas Sosial Vs. Pendapatan: Eksplorasi Faktor Penentu Pembelian Consumer Goods dan Jasa. *Jurnal Ekonomi, XXIII*(2), 141-158.

Vincenzo, E. V., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of Partial Least Square.* Hiedelberg: Springer Verlag.

Wong, K. K.-K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin Vol 24*, 1 - 32.

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 2-22.

Zheng, W. (2006). "The Business Models of E-Marketplace. *Communications of the IIMA, 6*(4), 1-18.

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 Departement of Economics Faculty of Economics and Business Universitas Indonesia Jakarta after completing his bachelor's degree from the Departement of Economics, Satya Wacana Christian University. His interests in research on economic behavior, urban dan regional economics, also urban community development and economic development.

John Tampil Purba, obtained a degree in 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 is also Professional Membership of the IEOM Society since the last year 2019**. He has several managerial experiences in the 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.

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.

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 Departement of Economics Faculty of Business and Economics Universitas Indonesia, Jakarta. His research interests in the field of demographic-economic growth, religion, economic, statistics, econometrics, and mathematics.