

# BUYING BEHAVIOR IN ONLINE FOOD DELIVERY APPLICATIONS DURING THE COVID-19 PANDEMIC

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## ABSTRACT

This study aims to review the effect of discount framing, brand reputation, purchase intention, and actual behavior based on online food delivery applications during the COVID-19 pandemic. The population, in this study are users of online food delivery applications throughout Indonesia, with the unit of analysis being the individual. Sampling in this study used the purposive method, namely respondents who filled out online questionnaires with total of 119. The data analysis technique in this study used SEM-AMOS version 23. The results showed that discount framing had a positive effect on brand reputation and purchase intention, brand reputation has a positive effect on purchase intention, and purchase intention has a positive effect on actual behavior. The implications of the results of this study for application owners are to know the effect of discount framing, brand reputation, and purchase intention so that they can take strategies and policies related to these matters. For application, users are to be able to use applications that provide discount framing according to their needs.

**Keyword: Discount framing, brand reputation, purchase intention, actual behavior**

## ABSTRAK

Penelitian ini bertujuan untuk mengkaji kembali pengaruh pembungkian diskon, reputasi merek, niat beli dan perilaku aktual berdasarkan penggunaan aplikasi pesan-antar makanan daring selama pandemi COVID-19. Populasi dalam penelitian ini adalah pengguna aplikasi pesan-antar makanan daring di seluruh wilayah Indonesia dengan unit analisisnya adalah individu. Pengambilan sampel dalam penelitian ini menggunakan metode purposif yaitu responden yang mengisi kuesioner secara daring, seluruhnya berjumlah 119. Teknik analisis data dalam penelitian ini menggunakan SEM-AMOS versi 23. Hasil penelitian menunjukkan bahwa pembungkian diskon berpengaruh positif terhadap reputasi merek dan niat beli, reputasi merek berpengaruh positif terhadap niat beli, dan niat beli berpengaruh positif terhadap perilaku aktual. Implikasi dari hasil penelitian ini bagi pemilik aplikasi adalah mengetahui pengaruh pembungkian diskon, reputasi merek, dan niat beli, sehingga dapat mengambil strategi dan kebijakan yang terkait dengan hal-hal tersebut, dan bagi pengguna aplikasi adalah dapat menggunakan aplikasi yang memberikan pembungkian diskon sesuai dengan kebutuhan.

**Kata kunci: Pembungkian diskon, reputasi merek, niat beli, perilaku aktual**

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## Introduction

The World Health Organization (WHO) declared a global emergency due to the pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in January 2020 (Velavan and Meyer, 2020). Worldmeters data until August 6, 2021 officially recorded 201.643.179 cases of SARS-CoV-2 worldwide (Putri, 2021). The number of SARS-CoV-2 cases in Indonesia reached 5.939.082 cases as of March 18, 2022 (covid19.go.id, 2022).

The community changed a lot since the pandemic hit Indonesia, such as incessant calls to implement the 3M health protocol (wearing masks, washing hands and maintaining distance) and efforts to suppress the COVID-19 virus spread in Indonesia by restricting social activities, such as the Enforcement of Restrictions on

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Community Activities (PPKM) (Permatasari, 2021). Restrictions on social activities impacting various business sectors, one of which is the restaurant business sector. The policy for all restaurants that are prohibited from serving meals on the spot and can only accept orders for food delivery or take-away is also implemented (Sahara, 2021). The restaurant business sector needs to innovate during the pandemic by focusing on changing consumer behavior in ordering food because it is closely related to digital technology.

Digital technology currently plays a significant role in daily life (Saleem et al., 2022). Digital technology will change human attitudes towards the new lifestyles (Hoehe and Thibaut, 2020), which can affect buying behavior. Technological developments are also helping businesses to expand their economies and e-commerce is the substantial aspect of the global digital economy (Jun et al., 2021). The act of consumers in buying products or services via the internet, known as online shopping, is a substantial support for this, and this phenomenon has revolutionized the business world (Le et al., 2021). Changes in the business world must also be realized by food or restaurant business owners due to the development of digital technology.

Restaurant owners as marketers need to collaborate with online food delivery application services such as GoFood, GrabFood and ShopeeFood to keep up with changes in consumer behavior during the COVID-19 pandemic. This change in consumer behavior occurred in food preferences which began to shift to the routine need to order food through online food delivery applications (Kemenparekraf, 2020). The behavior of ordering food through online food delivery applications has been surveyed by the Demographic Institute of the Faculty of Business Economics, University of Indonesia, on 4.199 people. 97% of respondents stated that they have regular expenses ordering food through online food delivery applications (Jayani, 2021).

Online food delivery applications to attract consumer buying interest often carry out promotions by providing discounts formed into framing. The concept of framing is part of Prospect Theory (Kahneman and Tversky, 1979, 1974) which can support promotional activities and as one of the most influential decision-making theories (Taran and Betts, 2007). Consumers can be influenced in purchasing decisions through price framing, meaning that price promotion messages are framed in an offer (McKechnie et al., 2012 and Pasek and Kasih, 2021). The promotion of framed prices aims to facilitate consumers who like products at lower prices (Pasek and Kasih, 2021). Currently, discounts framing is also being carried out by online food delivery applications.

Online food delivery applications have a special way of offering discounts. Discounting is done by crossing out the original price and then creating a new price next to it with a slightly lower amount. Food discounts are also given through discounts in percentages and free shipping vouchers. Giving discounts will affect the consumer's perspective on the reputation of online food delivery applications first before making a decision to buy a product (ordering food) (Agmeka et al., 2019 and Jalilvand and Samiei, 2012).

According to Signaling Theory (Boulding and Kirmani, 1993) states that brand reputation serves as an important external signal to be used as a direction for consumers when evaluating a product that can influence purchase intention (Ryan

and Casidy, 2018). Purchase intention based on the point of view in the digital marketing literature and consumer behavior can be influenced by brand reputation (Jalilvand and Samiei, 2012). Brand reputation has a strong influence on consumer purchasing decisions based on several literature reviews (Ryan and Casidy, 2018).

Consumer purchasing decisions also need to be understood by online food delivery application companies in terms of consumer purchase intentions and the determinants of actual behavior (Agmeka et al., 2019). A person's intention to take or not to take any action is a direct determinant of the real action taken by a person (Pasek and Kasih, 2021). The relationship is based on the fact that humans always try to make rational decisions based on the information available to them (Pasek and Kasih, 2021), and the new system is no exception. The Theory of Reasoned Action is the most influential theory to explain and predict user acceptance of the new system (Patsiotis et al., 2020). This theory can be used to consider individual intentions to accept a particular system and can be relied upon to predict consumer behavior towards the adoption of new technologies (Saleem et al., 2022).

This research has theoretical gaps and methodological gaps. The theoretical gap in this study is based on the model built by Agmeka et al. (2019) that there is no relationship between discount framing and purchase intention, so the researcher adds this relationship in the context of testing food ordering behavior through online food delivery applications. The addition of the discount framing relationship and purchase intention in this study is based on the inconsistent relationship from the results of previous research conducted by Shakti and Zuliarni (2019) which showed that discount framing had a positive effect on purchase intention. In contrast, the results of other studies show that discount framing has no effect on purchase intention (Bhatti, 2018; Sheehan et al., 2019; Subagio and Hatari, 2021).

Several other literature reviews also showed inconsistent research results. They will test again in this study. A study from Agmeka et al. (2019) shows that brand reputation does not affect purchase intention. The results of another study conducted by Sugiharto et al. (2019) explain that brand reputation has a significant influence on purchase intention.

The methodological gap in this research is in the analytical tools used. Previous research from Agmeka et al. (2019) used PLS-SEM, while this study used AMOS SEM. The next gap is that discount framing has been extensively researched with experimental methods to add to the literature review. This research focuses on survey methods.

This study aims to re-examine the effect of discount framing, brand reputation, purchase intention, and actual behavior based on food delivery applications. Several literature studies that form the basis of this research show that there are different results in previous studies, so this research will contribute theoretically by filling the gap using similar variables in this study during the COVID-19 pandemic, where there has never been a study that has tested this. This research will also contribute methodologically by conducting tests using different analytical tools and research methods from previous studies. This research is also to build a conceptual model to provide an empirical description and confirm the use of online food delivery applications during the COVID-19 pandemic. This research also contributes practically, especially for marketers, to increase the number of new consumers and retain existing customers by using online food delivery applications based on discount framing as a positive promotional medium and company brand reputation.

## **Literature Review**

### **Prospect Theory (PT)**

Prospect Theory (PT) (Kahneman and Tversky, 1979) has become one of the most influential theories in decision making (Taran and Betts, 2007). This theory explains how people make choices among alternatives (prospects) by comparing them with reference points (Taran and Betts, 2007). The concept of framing is part of this theory (Kahneman and Tversky, 1979, 1974) and has been tested in various contexts with strong findings to support the effect of framing (Bahmanziari and Odom, 2015). The term “framing effect” refers to the findings that changes how a situation can influence a person's choices (Frisch, 1993).

This theory explains that people are more sensitive to the prospect of loss than to the profit prospect, so they will have a stronger tendency to avoid loss than to gain (Kahneman and Tversky, 1979). According to Weisstein et al. (2014) that promotions formed in price framing are similar to framing decision problems. The price promotion literature suggests that framing is tantamount to price promotion in the form of additional gain or loss reduction and can significantly influence consumer decision-making (Thaler, 1985). The discount framing carried out by the online food delivery application will affect consumer behavior in making decisions to order food.

### **Signaling Theory (ST)**

Signaling Theory (ST) emerged from the study of the information economy with conditions in which buyers and sellers have asymmetric information when facing market interactions (Spence, 1973). Consideration in market interactions occurs when sellers know the quality of their goods or services. But buyers are not fully informed about the quality of goods or services by the seller (Boulding and Kirmani, 1993). Consumers want information that can be used to distinguish between sellers of high-quality goods or services and sellers of low-quality goods or services (hereinafter referred to as high and low-quality sellers/companies) (Boulding and Kirmani, 1993). Studies of various works of literature have confirmed that brand reputation has a strong influence on consumer purchasing decisions (Ryan and Casidy, 2018) based on this theory. Previous studies by Del Río et al. (2001) revealed that consumers tend to prefer brands that have a better reputation. Consumers who perceive a reputable brand as more (less) will have more (less) reasons to order food through online food delivery applications.

### **Theory of Reasoned Action (TRA)**

Theory of Reasoned Action (TRA) is a model whose emergence is not only used to predict consumer intentions and behavior fairly but also provides a relatively simple basis for identifying where and how individuals seek to make behavior change (Sheppard et al., 1988). TRA assumes that consumer behavior is determined by consumer behavioral intentions (Chang, 1998). TRA is a substantial theory for predicting the expectations and probability of purchases made by consumers with reasonable considerations to buy any product (Tuu and Olsen, 2012). Purchase intention can be explained as an intention to behave in a certain way, such as a consumer's desire to place a food order through an online food delivery application. Actual behavior can be explained as consumer behavior ordering food through online food delivery applications.

### **Discount Framing**

According to Shakti and Zuliarni (2019) framing is one way used by companies to attract as many consumers as possible without intending to lie. All kinds of framed information can affect a person's perception of decision making (Frisch, 1993 and Pasek and Kasih, 2021). Pasek and Kasih (2021) explain that there is a close relationship between framing and reference points. In framing, there are reference points that become a frame for someone to consider a possibility. Shakti and Zuliarni (2019) stated that there would be no loss for consumers from price framing because consumers will see the difference between the reference point and the price paid. Discount framing can be defined as the way in which the offering price of a particular product is framed to influence consumer reactions (Gendall et al., 2006).

Price discount framing is presented in two types, namely absolute saving and percentage discount (Pasek and Kasih, 2021). McKechnie et al. (2012) stated that companies that use discount framing in absolute saving will increase the initial selling price and then cross out the price to be replaced with a new lower price, for example in online food delivery applications. It is such as GoFood, which writes the initial price of food products at Rp 25.000,00 then crossed out the price and replaced it with a new price placed beside it to become Rp 22.500,00. The framing discount in a percentage is also referred as percentage saving (Pasek and Kasih, 2021). McKechnie et al. (2012) suggest that companies can use percentages as a framing message. Framing discounts using percentages is usually done by companies by providing information to consumers about discounts, for example on online food delivery applications such as ShopeeFood, which offers food price discount claims through vouchers "60% discount up to Rp25K".

### **Brand Reputation**

Reputation is often considered a substantial factor in building trust with customers (Fedorko et al., 2017). Companies that want to have a good reputation need to pay attention to factors such as long-term investment of resources, effort, and attention to building customer relationships (Qalati et al., 2021). Companies can build a good name by producing and selling quality products and services or being reliable and responsible to their customers (Smolağ et al., 2016).

Agmeka et al. (2019) explain that brand reputation is a term that can be used as a signal or characteristic for consumers' attitudes towards good and reliable brands. Consumers will give perceptions of service quality and product quality related to brand names (Bang et al., 2014 and Rindell and Iglesias, 2014), which can lead to customer interest in product quality, which will affect their purchase intentions (Bang et al., 2014).

Customers will see the brand based on the added value offered by the product to identify the product and differentiate it from other products (Bang et al., 2014). When buying any product, consumers will think about the brand reputation of the selected product (Agmeka et al., 2019). When someone recommends a brand to others, it can be said that the brand has a good reputation (Sugiharto et al., 2019).

### **Purchase Intention**

Sugiharto et al. (2019) suggest that purchase intention is a buying process that occurs before the actual purchase. Dachyar and Banjarnahor (2017) define purchase intention as the buyer's intention to engage in exchange relationships on shopping sites, such as sharing information, maintaining business relationships, and creating business transactions. Pasek and Kasih (2021) state that intention can be a behavioral tendency that is carried out by someone if there is the right time and opportunity and will be shown in the form of action.

### **Actual Behavior**

Behavior is defined as an individual's observable response in a given situation concerning a specific target. Ajzen (1991) says behavior is a function of intentions and perceptions that are compatible with behavior control. Liu et al. (2017) state that actual behavior is a consumer behavior that affects their intention to act and is influenced by their attitude. Actual behavior refers to the way people make decisions in spending time, money, and effort to consume products or services (Liu et al., 2017).

### **Hypothesis Development**

#### **The Effect of Discount Framing On Brand Reputation**

Prospect Theory describes the term framing effect as a phenomenon that occurs when there is a change in an individual's preference for two or more alternatives caused by the way the problem is presented (Tversky and Kahneman, 1981). Discount framing will change individual preferences based on the choices provided by online food delivery applications in ordering food. The more discount framing offered to consumers will increase individual preferences in choosing discounts to use in ordering food through online food delivery applications. Discount framing is a form of promotion that focuses on attracting individual reactions.

McKechnie et al. (2012) suggest that when consumers see discount framing by reducing prices in terms of price and percentage, consumers will look at the brand name first and then think about the brand reputation of the store. The existence of discount framing based on Prospect Theory will affect individual preferences in choosing alternative brands of online food delivery applications used to order food. This consideration is based on the tendency of consumers to choose a brand with a better reputation (Del Río et al., 2001) based on the Signaling Theory. Companies that want to have a good reputation in the eyes of consumers need to build relationships with customers, offer quality products, the products offered have added value, and consumers are willing to recommend the brand to others (Bang et al., 2014; Qalati et al., 2021; Rindell and Iglesias, 2014; Sugiharto et al., 2019). Based on previous research from Agmeka et al. (2019) shows that discount framing has a positive effect on brand reputation. Lv et al. (2020) explain that e-commerce platforms with a low reputation will use price discounts as the main motivation for consumers to make purchases. The hypotheses built in this study are as follows:

**H<sub>1</sub> : Discount framing has a positive effect on brand reputation**

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### **Effect of Discount Framing on Purchase Intention**

Framing is a form of promotion to influence consumer decision-making based on Prospect Theory. Discount framing refers to the extent to which individuals have a good preference for making decisions on the use of discounts in ordering food in online food delivery applications. The better the individual preference, the stronger the individual's intention to perform the behavior. TRA considers consumer behavior to be determined by consumer behavioral intentions (Chang, 1998). Therefore, the better the individual's preference for discount framing, the stronger the individual's purchase intention to decide to order food in online food delivery applications.

The use of price discounts aims to encourage consumers to make purchases in large quantities, add or retain customers and attract the attention of potential consumers (Schiffman and Wisenblit, 2019). The relationship between discount framing and purchase intention is based on Prospect Theory and TRA, which states that consumer decision-making can influence consumers' purchase intentions. Discount framing also aims to influence consumer reactions to the way the price of a particular product offering is framed (Gendall et al., 2006). Pasek and Kasih (2021) state that giving discounts for faster payments is a way for companies to attract consumers' purchase intentions. Based on the results of research conducted by Shakti and Zuliarni (2019), it is explained that discount framing has a positive effect on purchase intention. The hypothesis that is built based on this is as follows:

**H<sub>2</sub> : Discount framing has a positive effect on purchase intention**

### **Effect of Brand Reputation on Purchase Intention**

The signaling theory states that brand reputation strongly influence consumer purchasing decisions (Ryan and Casidy, 2018). Consumers who perceive a brand with a good reputation will have more reasons to order food through an online food delivery application. TRA can be used to calculate the probability of purchases made by consumers with reasonable considerations to buy any product (Tuu and Olsen, 2012). One of the things that consumers consider in purchasing a product is brand reputation. The better the assessment of the brand reputation of the online food delivery application, the higher the purchase intention of individuals in ordering food.

Agmeka et al. (2019) stated that a store with a high brand reputation means that consumers are likely to buy a product higher. On the other hand, if a store's brand reputation is low, the purchase of products from consumers is also lower. The relationship between brand reputation and purchase intention is based on Signaling Theory and TRA, which states that purchasing decisions can be influenced by a reasonable consideration. The market position of a company can be influenced by the company's reputation (Fedorko et al., 2017), and if you want to get more sales and make profits, the company must be able to understand consumer buying intentions (Chen and Lee, 2015). The hypothesis that is built based on this explanation is as follows:

**H<sub>3</sub> : Brand reputation has a positive effect on purchase intention**

### Effect of Purchase Intention on Actual Behavior

Ajzen and Madden (1986) stated that TRA has a close antecedent to every behavior, namely the intention to perform the behavior. This theory explains that the stronger a person's intention, the more expected that person is to try, the more likely the behavior will actually occur (Ajzen and Madden, 1986). The stronger the individual's purchase intention for food products, the greater the effort in choosing a place to eat through online food delivery applications.

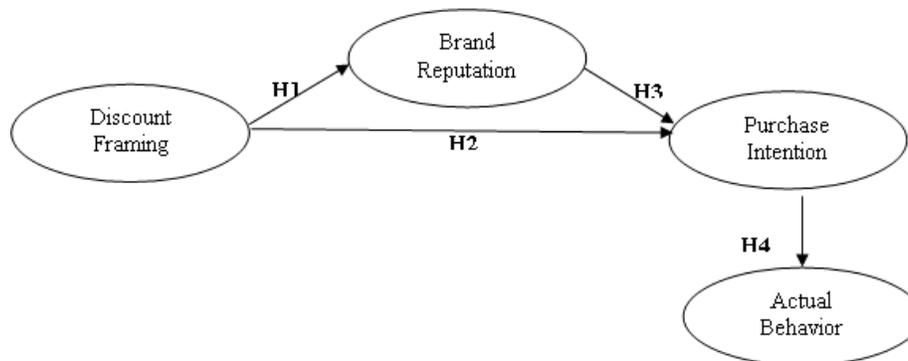
TRA states that individual behavior is influenced by intentions. TRA can be used to predict consumer intentions and behavior quite well. The greater the intention, the more likely the individual will behave. Purchase intention is a concept of intention related to the desire and encouragement of consumers to order food through online food delivery applications on each individual behavior.

Dachyar and Banjarnahor (2017) state that consumers' intention to engage in an exchange relationship on shopping sites aims to create business transactions. Gabriella and Agus (2020) state that purchase intention is an extension of what buyers need for purchases in the future. Barber and Taylor (2013) explain that actual buying behavior can accurately estimate the willingness of a consumer to pay for a product with the highest price. Based on previous research, it shows that purchase intention positively and significantly influences online shopping behavior through e-commerce for Generation Y in Malaysia (Lim et al., 2016); consumers in Pakistan (Rehman et al., 2019) and consumers in Indonesia (Gabriella and Agus, 2020). The hypothesis that is built based on this explanation is as follows:

**H4 : Purchase intention has a positive effect on actual behavior**

### Relationship Between Discount Framing, Brand Reputation, Purchase Intention, and Actual Behavior

The purpose of this study is to reveal the role of discount framing, brand reputation, and purchase intention in explaining the actual behavior of online food delivery application users, the theoretical model built in this study is as follows:



**Figure 1. Conceptual Framework**  
Source: Researchers Analysis

## **Research Methods**

### **Instrument**

The theoretical framework of this research consists of four variables. Each construction of the frame measurements is measured through various items. Several previous studies were used to adapt and adjust variable items. Each item is measured using a 5-Likert scale that has a range from strongly disagree (1) to strongly agree (5).

Discount framing consists of three items adapted from McKechnie et al. (2012). Brand reputation consists of four items adapted from Waddington (2011) in Agmeke et al. (2019). Purchase intention consists of four items adapted from Agmeke et al. (2019), Lu et al. (2014), and McKechnie et al. (2012). Actual behavior consists of four items adapted from Wee et al. (2014).

### **Population and Sample**

This study has a population element, namely users of online food delivery applications throughout Indonesia, with the unit of analysis being the individual. This study uses a purposive sample with reference to the respondent selection who must meet one requirement, namely having ordered food through an online food delivery application during the COVID-19 pandemic. Therefore, the respondent will be asked the following screening question: "Did you order food through an online food delivery application during the COVID-19 pandemic?". If you answer "Yes", then you can answer the next question and become a respondent in this study. Otherwise, if you answer "No", then you will not be a respondent.

### **Sample Size**

This study in determining the sample size is based on subjectivity and refers to the use of an analytical tool, namely Structural Equation Modeling (SEM). The use of a sample size of 100-200 has been included in the relative category in the use of SEM (Hulland et al., 1996). The number of constructs of 5 or less with a sample size of 100 can be stated as already usable in SEM (Hair et al., 2014).

This study uses a sample size between 100 to 200, which is considered adequate. The questionnaires were distributed online, and only 119 questionnaires could be used for analysis purposes. The remaining 13 questionnaires were excluded because the respondents did not meet the criteria. In other words, this study had met the requirements mentioned above. This study has a response rate of 90.2 percent for returning online questionnaires, and it can be said that the resulting response rate is high so that non-response bias can be avoided.

### **Validity and Reliability Test**

Validity testing in this study uses two validity tests, namely convergence validity and discriminant validity. The rule of thumb for convergence validity based on factor loading values is above 0.5 and the AVE value has a value above 0.5 (Hair et al., 2010) for each construct. The results of the comparison between the value of the square root of AVE and the correlation between constructs (Hair et al., 2010) will determine discriminant validity. Reliability testing is carried out by measuring internal consistency, which consists of a composite reliability value greater than 0.7 (Hair et al., 2010) to indicate good reliability.

### **Model Testing**

This study uses Structural Equation Modeling (SEM) with SPSS Amos version 23. Here also evaluates several goodness of fit indices, including chi-square statistics, RMSEA, GFI, CFI, TLI, and CMIN/DF. Chi-square has a cut-off value of less than 3.0 (Hu and Bentler, 1999). According to Hair et al. (2010) the better RMSEA value is between 0.05 to 0.08. GFI, CFI, and TLI values are suggested at 0.90, respectively (Hair et al., 2010). CMIN/DF scores are better between two and five (Hair et al., 2010).

### **Hypothesis Test**

Hypothesis testing in this study saw a positive or negative direction relationship that was hypothesized for significance testing to be carried out. The significance test was carried out based on the direct effect (path coefficient) derived from the standardized regression number with the comparison of the CR value equal to t count or t table. The calculation of t test greater than t table means significant. In calculations using the Critical Ratio (CR) value, the recommended CR value is 1.96 (Hair et al., 2010).

### **Results and Discussion**

#### **Characteristics of Respondents**

This study had 119 respondents consisting of 42 people, or 35.2% were male, and 77 people or 64.8% were female. This research is dominated by respondents who have an age range of 25-30 years, as many as 50 people or 41.3%. Respondents have used online food delivery applications during the COVID-19 pandemic more than 12 times, with a total of 76 respondents or 62.8%. The use of online food delivery applications is dominated by the Gofood application with 52 respondents or 43% and ShopeeFood as many as 41 respondents or 33.9%.

#### **Validity and Reliability Test**

Validity testing in this study uses construct validity, including convergence validity and discriminant validity. Convergence validity must meet a factor loading greater than 0.5 for each item. The results of the convergence validity test can be seen in Table 1. Based on the results of the convergence validity test, fifteen items were declared valid with a factor loading value of more than 0.5, ranging from 0.684 (FM4) to 0.865 (BR2).

This study also tested discriminant validity by comparing the value of the AVE square with the correlation value between constructs. The results of the discriminant validity test showed that the overall constructs in this study, namely discount framing, brand reputation, purchase intention and actual behavior for the square root of AVE, were higher than the correlations between constructs (see Table 2). Discriminant validity in the study shows good results.

**Table 1. Convergence Validity Test Results and Composite Reliability**

Construct	Items	Measurement Indicator	Factor Loading	AVE	Composit Reliability
<b>Discount Framing</b>	DF1	I ordered food from an online food delivery application that gives discounts on the products they sell	0,687	0,530	0,771
	DF2	I prefer to order food from an online food delivery application because the price is cheaper than ordering directly at a place to eat	0,806		
	DF3	I ordered food from an online food delivery application that offers affordable prices	0,684		
<b>Brand Reputation</b>	BR1	This online food delivery application is trusted	0,817	0,675	0,892
	BR2	This online food delivery application has a good reputation	0,865		
	BR3	This online food delivery application is reliable	0,860		
	BR4	I know how this online food delivery application looks like	0,738		
<b>Purchase Intention</b>	PI1	I intend to order food from this online food delivery application	0,700	0,511	0,850
	PI2	I will recommend this online food delivery application to others to order food	0,658		
	PI3	I will use an online food delivery application when I want to order food	0,782		
	PI4	I intend to keep ordering food through this online food delivery application	0,741		
<b>Actual Behavior</b>	AB1	I often order food from this online food delivery application	0,743	0,669	0,991
	AB2	I often order food from this online food delivery application because it's easy to do	0,896		
	AB3	I often order food from online food delivery application because it's more practical	0,808		
	AB4	I often order food from this online food delivery application for my needs (snacks, breakfast/lunch/evening/dinner)	0,741		

Source: Output AMOS 23 (2022)

**Table 2. Discriminant Validity Test Results**

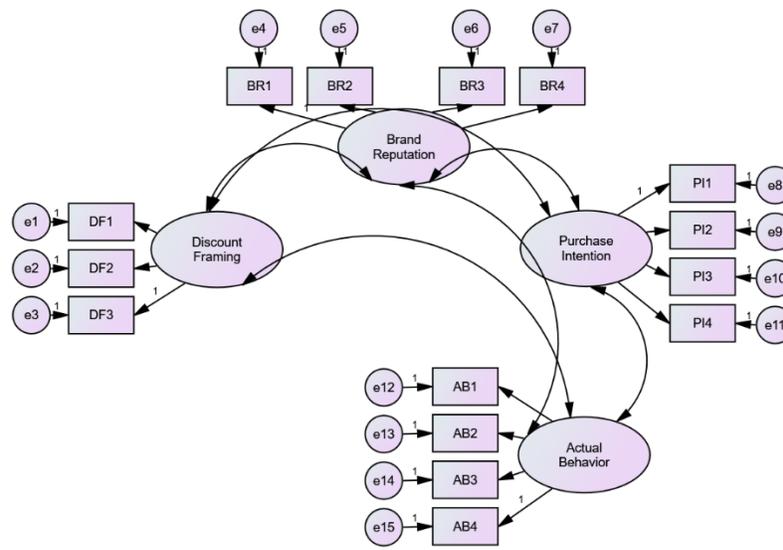
	Discount Framing	Brand Reputation	Purchase Intention	Actual Behavior
Discount Framing	(0,728)	0,232	0,444	0,473
Brand Reputation	0,232	(0,822)	0,729	0,713
Purchase Intention	0,444	0,729	(0,895)	0,887
Actual Behavior	0,473	0,713	0,887	(0,898)

Source: Output AMOS 23 (2022)

Based on the reliability test with Composite Reliability (see Table 1), it shows that each of the constructs contained in this study can be declared good (reliable). Values for each construct in this study include discount framing of 0.771, brand reputation of 0.892, purchase intention of 0.850, and the actual behavior of 0.991.

### Model Test Results

The model testing at this stage uses SEM-AMOS. Based on the results of the maximum likelihood estimation, the model in this study has a good category according to the data that has been generated ( $\chi^2 = 162.174$ ,  $df = 86$ ,  $p = 0.000$ ,  $RMSEA = 0.078$ ,  $CFI = 0.925$ ,  $GFI = 0.944$ ,  $TLI = 0.906$ ,  $CMIN/DF = 2.886$ ), therefore, all are significantly and positively connected (see Figure 2).



**Figure 2. Model Testing**

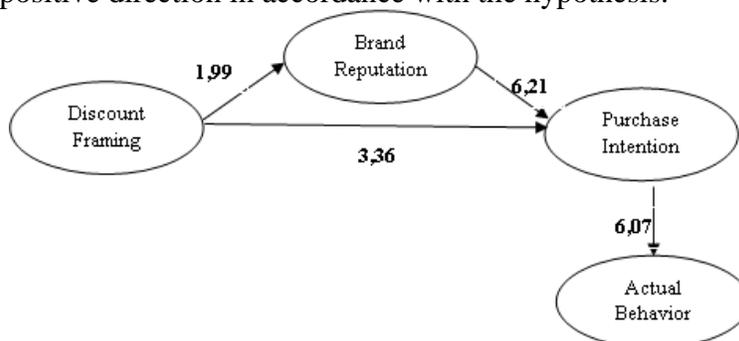
Source: Researchers Analysis

### Hypothesis Testing Results

This research is in testing the hypothesis based on the results of the Critical Ratio, which shows a significance level of more than 1.96 (Hair et al., 2010). The results of hypothesis testing in this study are presented in Table 3.

The results of hypothesis testing in Table 3 show that the four hypotheses, namely the effect of discount framing on brand reputation has a CR value of 1.992, the effect of discount framing on purchase intention has a CR value of 3.365, the effect of brand reputation on purchase intention has a CR value of 6.214 and purchase

intention on actual behavior has a CR value of 6.079. The explanation shows that the four hypotheses built in this study are supported with a CR value of more than 1.96 and have a positive direction in accordance with the hypothesis.



**Figure 3. User Model of Online Food Delivery Application**

Source: Researchers Analysis

**Table 3. Hypothesis Testing Results**

Variable	CR = t	Direction	Hypothesis Decision
Discount framing → Brand reputation	1,992	Appropriate, positive	Supported
Discount framing → Purchase intention	3,365	Appropriate, positive	Supported
Brand reputation → Purchase intention	6,214	Appropriate, positive	Supported
Purchase intention → Actual behavior	6,079	Appropriate, positive	Supported

Source: Output AMOS 23 (2022)

### Discussion

The results of hypothesis testing in this study indicate that all hypotheses are significantly and positively supported, which consist of discount framing proven to have a positive and significant effect on brand reputation and purchase intention. Brand reputation is proven to have a positive and significant effect on purchase intention. And purchase intention is proven to have a positive and significant effect on actual behavior.

#### The Effect of Framing Discounts On Brand Reputation

The research results on hypothesis 1 show that discount framing has a positive effect on brand reputation and has been proven (see Table 3). The analysis results show that the CR value is significant (CR = 1.992). The figure shows that discount framing has a positive effect on brand reputation. The results of this study support the results of previous studies conducted by Agmeka et al. (2019) that discount framing has a positive effect on brand reputation in the context of purchasing on Lazada e-commerce. Research Agmeka et al. (2019) is in line with this research because Lazada has a lot of discount framing, and Lazada is a brand that is well known to the public. Lazada's discount framing has further strengthened its brand reputation, which was previously well known to the public.

The framing in this study was carried out by an online food delivery application. The results of this study indicate that the more positive the discount framing, the greater the brand reputation for online food delivery applications. More discount framing will increase the brand's reputation because by providing more discount framing, the brand's reputation will be stronger.

This research is in line with the Prospect Theory, which states that the concept of framing effects as a form of promotion, namely discount framing can affect individual preferences in assessing the brand reputation of online food delivery applications based on Signaling Theory. With a good individual preference, it will result in an assessment of a good brand reputation and be beneficial as a basis for consideration in making decisions because discount framing is the main source of preference formation used by individuals to make decisions on brand reputation assessments for online food delivery applications.

GoFood, ShopeeFood and GrabFood have used discount framing as a form of promotion and as a way to attract consumers' attention during the COVID-19 pandemic. For consumers, the more discount framing is given in the food ordering process, the more consumers will give a higher assessment of the reputation of online food delivery applications. The statement of the results of this study was strengthened by McKechnie et al. (2012) that consumers tend to judge discount framing by looking at the brand name first, which continues on thinking about the brand reputation of the store.

### **Effect of Discount Framing on Purchase Intention**

The research results on hypothesis 2 show that discount framing has a positive effect on purchase intention and has been proven (see Table 3). The analysis results have shown that the CR value is significant (CR= 3.365), which indicates that discount framing has a positive effect on purchase intention. The results of this study support a previous study by Shakti and Zuliarni (2019) which stated that discount framing has a positive effect on consumer purchase intentions at Ramayana Department Stores. Discount framing in retail stores attracts people, thereby increasing purchase intention because with discount framing, prices become affordable. The results of this study also support previous research from Liu et al. (2022) which shows that framing in the form of premium promotions can influence consumers' purchase intentions for packaged products. Consumers have higher purchase intentions when the target product is offered as a free gift, as explained by the consumer's feeling of luck when facing a promotion (Liu et al., 2022). Giving discounts by companies is a way to attract consumer buying interest (Pasek and Kasih, 2021 and Schiffman and Wisenblit, 2019).

This research is in line with the theory of Prospect Theory and TRA, which explains that a person can choose among the alternatives (prospects) that exist by making reasonable considerations in purchasing any type of product. The results of this study indicate that the better the discount framing carried out by the online food delivery application, the higher the intention of online food delivery application users to order food during the COVID-19 pandemic. GoFood, ShopeeFood, and GrabFood to date have used various kinds of discount framing to increase the number of consumer purchases in ordering food during the COVID-19 pandemic. Discount

framing is highly considered by consumers, especially during the COVID-19 pandemic, where consumer purchasing power has decreased. Discount framing increases purchase intention because, with discount framing, people's purchasing power increases with more affordable prices.

Based on this study results, there are different results from Bhatti's (2018) research because the hypothesis built is not supported. The reason is that research respondents are only limited to students in Gujranwala, with a sample size of 250 respondents. Another cause is that it only uses two independent variables and one dependent variable. There is a moderating factor included but does not test the price discount variable as a form of framing. The results of this study are not in line with the research of Sheehan et al. (2019) which states that consumers need time to understand discount framing before finally making a purchase. Sheehan et al. (2019) show that the amount of price discounts predicts consumer purchase intentions less beforehand but becomes more predictive during online shopping trips. Research from Subagio and Hastari (2021) also shows unsupported results for online marketplace purchases in Indonesia during the COVID-19 pandemic. The hypothesis is not supported because of the domination of the upper middle class as respondents. For respondents who have a source of income at the upper middle class level, purchasing products during the COVID-19 pandemic for the price aspect is considered not too important. Even in promotions using price discounts with programs such as "Free Shipping" or other promos. Consumers in the upper middle class only make purchases based on the quality of the products and services provided by the seller under the wishes of the buyer.

### **Effect of Brand Reputation on Purchase Intention**

The research results on hypothesis 3 indicate that brand reputation has a positive effect on purchase intention and has been proven (see Table 3). The analysis results have shown that the CR value is significant (CR = 6.214). The figure shows that brand reputation has a positive influence on purchase intention. This study results support the research of Sugiharto et al. (2019) which explains that there is a positive and significant effect of the influence of brand reputation on purchase intentions in well known brand products that are mostly caught by e-commerce customers. This study is also in line with previous research conducted by Rani and Suradi (2017) which revealed that in buying intentions, brand reputation is the last consideration of customers while customer satisfaction and brand trust are the main factors that must be considered for future purchase intentions of customers in Malaysia.

This research is in line with Signaling Theory and TRA, which states that brand reputation determines consumer purchasing decisions based on consumer curiosity about product quality so that it will affect consumer purchase intentions. The better the individual's perception of the brand reputation of the online food delivery application, the higher the purchase intention in ordering food through the online food delivery application during the COVID-19 pandemic. According to Chen and Lee (2015) understanding consumer purchase intentions is a way for companies to be able to get more sales and profits. The positive influence of the online food delivery application's brand reputation will increase consumers' purchase intention

to order food. GoFood, ShopeeFood, and GrabFood have good brand reputations if they can provide fast service in food delivery and fulfill orders according to consumer desires. Brand reputation affects people's purchase intentions because people will only make purchases with proven quality, in this case, the brand reputation. Belief in brand reputation influences people's purchase intention.

This study showed different results from the research of Agmeka et al. (2019) which shows that brand reputation does not affect purchase intention on the Lazada platform. The cause of this hypothesis is not supported because there is no significant effect, and there is a negative reputation on purchase intention.

### **Influence of Purchase Intention on Actual Behavior**

The research results on hypothesis 4 show that purchase intention has a positive effect on actual behavior and has been proven (see Table 3). The analysis results have shown that the CR value is significant (CR = 6.079). This figure shows that purchase intention has a positive influence on actual behavior. This study is in line with the results of research from Lim et al. (2016) examined online shopping behavior in Perlis, Malaysia; Rehman et al. (2019) which examines Pakistani consumer behavior in online shopping; and Gabriella and Agus (2020) researched customers who had shopped at Shopee Indonesia.

This research is in line with the TRA, which states that a person's strong intention will make the behavior actually happen. The stronger the consumer's purchase intention in ordering food products through online food delivery applications, the better their purchasing behavior with the efforts made in choosing places to eat through online food delivery applications. The buying behavior is getting better, in this case, it can be described by consumers giving good reviews, consumers giving good ratings, and even giving bonuses to online food delivery application partners. The higher the consumer's purchase intention in ordering food through online food delivery applications, the better their purchasing behavior during the COVID-19 pandemic.

### **Conclusion**

Based on the results of the research conducted, there are several conclusions as follows:

1. Discount framing has a positive effect on brand reputation.
2. Discount framing has a positive effect on purchase intention.
3. Brand reputation has a positive effect on purchase intention.
4. Purchase intention has a positive effect on actual behavior.

### **Limitation**

There are two main limitations in this study. First, the use of a quantitative approach through the survey method by distributing online questionnaires through Google Docs. Based on this, this research cannot capture unique information and can be studied more deeply because the responses given by respondents are different. Second, this research was conducted only at one point in time, so it cannot properly capture the behavioral changes that occur in online food delivery application users during the COVID-19 pandemic.

## Suggestion

This study provides suggestions for online food delivery application owners to add a system in the application that is integrated with the place of order so that when the place of order gives a certain bonus it will be known by the user through the application. In addition, there are three recommendations for further studies. First, further research can use qualitative methods to obtain more in-depth information regarding the use of online food delivery applications during the COVID-19 pandemic. Second, further research can replicate the model built by making comparisons of online food delivery applications during the COVID-19 pandemic to be able to generalize the model more. Third, testing on the brand reputation variable can be tested by adding other variables such as brand trust, satisfaction, and loyalty in various contexts of online food delivery applications.

## Implication

The implication of the results of this study for application owners is to know the effect of discount framing, brand reputation, and purchase intention. They can take strategies and policies related to these matters, for example, whether consumers will be given a bigger discount or with a longer duration, advertising to make the brand more widely known, or to make the app look more attractive. Users will stay in the app longer and can order more products. The implication of the results of this study for application users is to use applications that provide the right discount framing according to their needs.

## References

- Agmeka, F., Wathoni, R. N., and Santoso, A. S. 2019. The influence of discount framing towards brand reputation and brand image on purchase intention and actual behaviour in e-commerce. *Proceeding of The Fifth Information Systems International Conference 2019*. Tenth of November Institute of Technology, Surabaya, 23-24 July 2019.
- Ajzen, I. 1991. The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*. Vol.50 No.1. Pp.179–211.
- Ajzen, I., and Madden, T. J. 1986. Prediction of Goal-Directed Behavior: Attitudes, Intentions, and Perceived Behavioral Control. *Journal of Experimental Social Psychology*. Vol.22 No.5. Pp. 453–474.
- Bahmanziari, T., and Odom, M. D. 2015. Prospect Theory and Risky Choice in The Ecommerce Setting: Evidence of A Framing Effect. *Academy of Accounting and Financial Studies Journal*. Vol. 19 No.1. Pp. 85–106.
- Bang, H., Odio, M. A., and Reio, T. 2014. The Moderating Role of Brand Reputation and Moral Obligation: An Application of The Theory of Planned Behavior. *Journal of Management Development*. Vol.33 No.4. Pp. 282–298.
- Barber, N. A., and Taylor, D. C. 2013. Experimental Approach to Assessing Actual Wine Purchase Behavior. *International Journal of Wine Business Research*. Vol.25 No.3. Pp. 203–226.

- Bhatti, A. 2018. Sales Promotion and Price Discount Effect on Consumer Purchase Intention with the Moderating Role of Social Media in Pakistan. *Science Arena Publications International journal of Business Management*. Vol.3 No.4. Pp. 50–58.
- Boulding, W., and Kirmani, A. 1993. A Consumer-Side Experimental Examination of Signaling Theory: Do Consumers Perceive Warranties as Signals of Quality?. *Journal of Consumer Research*. Vol.20 No.1. Pp. 111–123.
- Chang, M. K. 1998. Predicting Unethical Behavior: A Comparison of The Theory of Reasoned Action and The Theory of Planned Behavior. *Journal of Business Ethics*. Vol.17 No. 16. Pp. 1825–1834.
- Chen, M. F., and Lee, C. L. 2015. The Impacts of Green Claims on Coffee Consumers' Purchase Intention. *British Food Journal*. Vol.117 No.1. Pp. 195–209.
- Covid19.go.id. 2022. *Peta-Sebaran*. Diakses pada 18 Maret dari <https://covid19.go.id/peta-sebaran>.
- Dachyar, M., and Banjarnahor, L. 2017. Factors Influencing Purchase Intention Towards Consumer-To-Consumer E-Commerce. *Intangible Capital*. Vol. 13 No.5. Pp. 946–966.
- Del Río, A. B., Vázquez, R., and Iglesias, V. 2001. The Effects of Brand Associations on Consumer Response. *Journal of Consumer Marketing*. Vol.18 No.5. Pp. 410–425.
- Fedorko, R., Bačík, R., and Kerul'ová, V. 2017. The Analysis on The Importance of The Reputation Management in Relation To E-Commerce Subjects. *Polish Journal of Management Studies*. Vol. 15 No.1. Pp. 48–56.
- Frisch, D. 1993. Reasons for Framing Effects. In *Organizational Behavior and Human Decision Processes*. Vol. 54 No.3. Pp. 399–429.
- Gabriella, D. R., and Agus, A. A. 2020. Product cognition, platform emotion, behavior intention, and actual behavior stage in cross border e-commerce (Case study: Shopee as the biggest cross border e-commerce in Indonesia). *Proceeding of 2020 3rd International Conference on Computer and Informatics Engineering (IC2IE)*. IEEE, Yogyakarta, 15-16 September 2020.
- Gendall, P., Hoek, J., Pope, T., and Young, K. (2006). Message Framing Effects on Price Discounting. *Journal of Product and Brand Management*. Vol.15 No.7. Pp. 458–465.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. 2010. *Multivariate Data Analysis* (7 ed.). New York: Pearson Education.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. 2014. *Multivariate Data Analysis* (International ed). Harlow: Pearson Education Limited.

- Hoehe, M. R., and Thibaut, F. 2020. Going Digital: How Technology Use May Influence Human Brains and Behavior. *Dialogues in Clinical Neuroscience*. Vol.22 No.2. Pp. 93–97.
- Hulland, J., Chow, Y. H., and Lam, S. 1996. Use of Causal Models in Marketing Research: A Review. *International Journal of Research in Marketing*. Vol.13 No.2. Pp. 181–197.
- Jalilvand, M. R., and Samiei, N. 2012. The Effect of Electronic Word of Mouth on Brand Image and Purchase Intention: An Empirical Study in The Automobile Industry in Iran. *Marketing Intelligence and Planning*. Vol. 30 No.4. Pp. 460–476.
- Jayani, D. H. 2021. *Potensi Bisnis Pesan-Antar Makanan Daring Makin Besar*. Diakses pada 3 Maret 2022 dari <https://katadata.co.id>
- Jun, W., Nasir, M. H., Yousaf, Z., Khattak, A., Yasir, M., Javed, A., and Shirazi, S. H. 2021. Innovation Performance in Digital Economy: Does Digital Platform Capability, Improvisation Capability and Organizational Readiness Really Matter?. *European Journal of Innovation Management*. Vol. ahead-of-print No. ahead-of-print.
- Kahneman, D., and Tversky, A. 1979. Prospect Theory: An Analysis of Decision Making Under Risk. *Econometrica*. Vol. 47 No.2. Pp. 263–291.
- Kemenparekraf. 2020. *Buku Tren Pariwisata 2021*. Jakarta: Kemenparekraf.
- Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., and Abdullah, S. 2016. Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *Procedia Economics and Finance*. Vol. 35 No.2. Pp. 401–410.
- Liu, M. W., Wei, C., Yang, L., and Keh, H. T. 2022. Feeling Lucky: How Framing The Target Product as A Free Gift Enhances Purchase Intention. *International Journal of Research in Marketing*. Vol. 1 No.1. Pp. 1-48
- Liu, Y., Segev, S., and Villar, M. 2017. Comparing Two Mechanisms for Green Consumption: Cognitive-Affect Behavior Vs. Theory of Reasoned Action. *Journal of Consumer Marketing*. Vol. 34 No.5. Pp. 442–454.
- Lv, J., Wang, Z., Huang, Y., Wang, T., and Wang, Y. 2020. How Can E-Commerce Businesses Implement Discount Strategies Through Social Media?. *Sustainability*. Vol. 12 No.18. Pp. 1-19.
- McKechnie, S., Devlin, J., Ennew, C., and Smith, A. 2012. Effects of Discount Framing in Comparative Price Advertising. *European Journal of Marketing*. Vol. 46 No.11. Pp. 1501–1522.

- Pasek, G. W., and Kasih, N. L. S. 2021. Price Discount Framing: How it Can Increase the Purchase Intention? *International Journal of Social Science and Business*. Vol. 5 No.1. Pp. 133–139.
- Patsiotis, A., Atik, M., and Perrea, T. 2020. The Influence of M-Marketing Tools on Consumer Buying Process: Evidence from The Dining Sector. *International Journal of Retail and Distribution Management*. Vol. 48 No.10. Pp. 1037–1056.
- Permatasari, D. 2021. *Kebijakan COVID-19 dari PSBB hingga PPKM Empat Level*. Diakses pada 18 Februari 2022 dari <https://kompaspedia.kompas.id>.
- Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong Thuy, T. T., and Merani, S. H. 2021. Effects of Perceived Service Quality, Website Quality, and Reputation on Purchase Intention: The Mediating and Moderating Roles of Trust and Perceived Risk in Online Shopping. *Cogent Business and Management*. Vol. 8 No.1. Pp. 1–20.
- Rani, N. S. A., and Suradi, Z. 2017. International Brand Vs. Local Brand: An Evaluation of Brand Trust, Brand Reputation, Customer Satisfaction and Purchase Intention of Malaysian Customers. *Journal of Business and Retail Management Research*. Vol. 11 No.3. Pp. 179–185.
- Rehman, S. U., Bhatti, A., Mohamed, R., and Ayoup, H. 2019. The Moderating Role of Trust and Commitment Between Consumer Purchase Intention and Online Shopping Behavior in The Context of Pakistan. *Journal of Global Entrepreneurship Research*. Vol 9 No.43. Pp. 1-25.
- Rindell, A., and Iglesias, O. 2014. Context and Time in Brand Image Constructions. *Journal of Organizational Change Management*. Vol. 27 No.5. Pp. 756–768.
- Ryan, J., and Casidy, R. 2018. The Role of Brand Reputation in Organic Food Consumption: A Behavioral Reasoning Perspective. *Journal of Retailing and Consumer Services*. Vol. 41 Pp. 239–247.
- Sahara, W. 1 Juli 2021. *PPKM Darurat, Dilarang Makan di Restoran, Boleh Delivery atau Take Away*, (Online), (<https://nasional.kompas.com>), diakses 18 Februari 2022.
- Saleem, A., Aslam, J., Kim, Y. B., and Nauman, S. 2022. Motives towards E-Shopping Adoption Among Pakistani Consumers: An Application of The Technology Acceptance Model and Theory of Reasoned Action. *Sustainability*. Vol. 14 No.4180. Pp. 1–16.
- Shakti, D. N., dan Zuliarni, S. 2019. Pengaruh Price Discount Framing terhadap Purchase Intention Pada Ramayana Department Store, Jodoh, Batam. *Journal of Applied Business Administration*. Vol. 3 No.1. Pp. 132–147.
- Sheehan, D., Hardesty, D. M., Ziegler, A. H., and Chen, H (Allan). 2019. Consumer Reactions to Price Discounts Across Online Shopping Experiences. *Journal of Retailing and Consumer Services*. Vol. 51 Pp. 129–138.

- Sheppard, B. H., Hartwick, J., and Warshaw, P. R. 1988. The Theory of Reasoned Action: A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research. *Journal of Consumer Research*. Vol. 15 No.3. Pp. 325-343.
- Smoląg, K., Ślusarczyk, B., and Kot, S. 2016. The Role of Social Media in Management of Relational Capital in Universities. *Prabandhan: Indian Journal of Management*. Vol. 9 No. 10. Pp. 34-41.
- Spence, M. 1973. Job Market Signaling. *The Quarterly Journal of Economics*. Vol. 87 No. 3. Pp. 355-374.
- Subagio, D. P. W., and Hastari, S. 2021. Price Discount: Pengaruhnya terhadap Online Customer Review dan Purchase Intention pada Konsumen Online Marketplace Platform pada Masa Pandemi COVID-19. *Jurnal Manajemen Dan Kewirausahaan*. Vol. 9 No.1. Pp. 15-25.
- Sugiharto, H. T., Zein, S. R., Setiawan, E. B., and Lesmini, L. 2019. *Increasing Purchase Intention through Delivery and Brand Reputation in E-commerce. Proceeding of Global Research on Sustainable Transport and Logistics*. Trisakti Institute of Transportation and Logistics, Jakarta, 1-2 August 2019.
- Taran, Z., and Betts, S. C. 2007. Using Curvilinear Spline Regression to Empirically Test Relationships Predicted by Prospect Theory. *Journal of Business and Economics Research*. Vol. 5 No.1. Pp. 59-66.
- Thaler, R. 1985. Mental Accounting and Consumer Choice. *Marketing Science*. Vol. 4 No.3. Pp. 199-214.
- Tuu, H. H., and Olsen, S. O. 2012. Certainty, Risk and Knowledge in The Satisfaction-Purchase Intention Relationship in A New Product Experiment. *Asia Pacific Journal of Marketing and Logistics*. Vol. 24 No.1. Pp. 78-101.
- Tversky, A., and Kahneman, D. 1974. Judgement Under Uncertainty: Heuristics and Biases. *Science*. Vol. 185 No.4157. Pp. 1124-1131.
- Tversky, A., and Kahneman, D. 1981. The Framing of Decisions and The Psychology of Choice. *Science*. Vol. 211 Pp. 453-458
- Velavan, T.P., and Meyer, C. G. 2020. The COVID-19 Epidemic. *Tropical Medicine and International Health*. Vol. 25 No.3. Pp. 278-280.
- Wee, C. S., Ariff, M. S. B. M., Zakuan, N., Tajudin, M. N. M., Ismail, K., and Ishak, N. 2014. Consumers Perception, Purchase Intention and Actual Purchase Behavior of Organic Food Products. *Advanced Science, Engineering and Medicine*. Vol. 3 No.2. Pp. 378-397.
- Weisstein, F. L., Asgari, M., and Siew, S. W. 2014. Price Presentation Effects on Green Purchase Intentions. *Journal of Product and Brand Management*. Vol. 23 No.3. Pp. 230-239.