Push-Pull-Mooring, Perceived Risk and Consumer Mobility: Shaping e-Loyalty Behavior in Online Grocery Shopping during Large Scale Restriction in Covid-19 Pandemic Era

Evi Rinawati Simanjuntak
Faculty Member in Masters Management Program
Binus Business School
Bina Nusantara University
Jakarta, Indonesia
esimanjuntak@binus.edu

Matthew Abyra
Alumni of Business Management and Marketing Program
Binus Business School
Bina Nusantara University
Jakarta, Indonesia
matthewabyra@gmail.com

Abstract

This paper draws a model based on push, pull and mooring (PPM) framework which acts as drivers of consumer e-loyalty in the context of online grocery shopping. The theoretical framework describes the potential influences of push, pull, and mooring on consumer e-loyalty intention. Taking covid-19 pandemic era as the context of the study, consumer mobility and perceived risk are relevant to be added, considering the large scale restriction in the society . This is a descriptive research that measures individual's perceptions to understand the influence of PPM components toward their e-loyalty behaviour. The unit of analysis in this study is individual purchasing groceries through online platform. Data collection used convenience sampling. Pre-test on 30 respondents was done to test reliability and validity of measurement item. Another 218 usable responses were analysed using multiple regression to test the hypothesis. Potential influences of perceived risk and consumer mobility towards the relationship of push, pull and mooring framework will also be demonstrated in the framework. The finding shows that the component of push (technical excellence), pull (word of mouth), and mooring (past switching behavior) are significantly influencing grocery shoppers' e-loyalty. However, we cannot find support on the effect of customer services, excellence in delivered products, price perception (push components), alternative attraction (pull component), and low switching cost toward e-loyalty behaviour. Meanwhile, the moderating effect of perceived risk and limited consumer mobility in pandemic area is evident in all linkages of push, pull and mooring components towards behavioural e-loyalty. This research fills the gap of the e-loyalty drivers by not only taking the PPM framework, but also specific aspects to large scale restriction during pandemic era; that is consumer mobility and perceived risk. This research sheds light to the understanding of how to maintain the e-loyalty of the consumers in the uncertainty period of the pandemic.

Keywords
Push, pull and mooring, online shopping, behavioural e-loyalty, consumer mobility, perceived risk.

1. Introduction
Customer loyalty refers to the ongoing positive relationship between customers, businesses, products, and services. Loyalty in businesses is considered an essential necessity due to the effort of maintaining loyal customers is considerably less than the effort of finding new customers. As the situation changes consumer behaviour and loyalty to businesses may change. During the COVID-19 pandemic, consumers are required to adopt a 'new normal'; 82% of consumers change their habits due to the fear of their health and others around them (Wright and Blackburn 2020). Adopting new technology has been a critical issue for a business to improve products and services version (Hashim

et al. 2015). Technological advancement may influence the behaviour shift of consumers due to the efficiency they provide for consumers. Using internet-enabled devices, consumers can get the products and services they want in an instant and efficient way (Katawetawaraks and Wang 2011). The loyalty of consumers to online usage may be caused by technology, innovations, demographics, and advertising.

1.1 Objectives

This research is conducted to investigate the loyalty behavior from online shopping method used by grocery shoppers during the COVID 19 large scale restrictions and to discover if shopping behavior will switch if the situation changes in the future. The target of this study is grocery shoppers that currently shop grocery through online services platforms. This study targets routine grocery shoppers who use mobile devices to buy fresh products and personal needs online during the COVID-19 pandemic and large-scale restrictions.

2. Literature Review

Push, Pull, and Mooring (PPM) Framework

Earlier on, the usage of the Push, Pull, and (PPM) Framework can be traced to the "Laws of Migration" that was introduced in 1885 (Lee 1966). From then, the framework is used as a theoretical foundation to support findings for human migration studies with several modified variables used through time (Jackson 1986). The PPM framework also has been extended to consumer behaviors marketing literature. The framework proposes that switching in the online platform is not always driven by the retailer and previous transactions. Still, the movement of consumers is also driven by the presence of other retailers, which may act as a competitor which pulls consumers to switch to an alternative and mooring factor which hardens the consumers to switch (Bansal et al., 2005).

Push Effect

Push variable is the effect caused by factors on "motivations that drives people to leave an origin" (Stimson 1998). In their framework, the push effect indicates low customer satisfaction, low service quality, low trust, commitment, and value. Push factors are considered negative factors that push people away from an original location (Bogue 1977). According to Bansal et al. (2005), there is a conceptual similarity between the construction of push factors from the literature of migration and service switching intention: satisfaction, value, quality, trust, commitment, and price perception.

Hypothesis 1: Good customer services, excellence in delivered products, technical excellence and positive price perception, and are creating behavioral e-loyalty in online grocery shopping.

Customer Services

Customer service is defined as support that a company and business may offer before, during, and after purchasing a product. It is considered a series of activities designed to enhance the experience of a consumer. The primary purpose of customer service in an industry is to help consumers meet expectations to gain satisfaction from the outcome given. Customer services have evolved, leading to the creation of automated customer services (Cyr et al. 2007). Technology has been helping companies, businesses, and retail chains expand their customer services ability and produce efficient outcomes in direct contact to answer queries, complaints, and service needs (Riel et al.2004). Customer service is one of the essential aspects and plays a significant role in maintaining customer retention. The majority of consumers will return and retain in using products or services that satisfy them regarding the customer service aspects (Rosen n.d). Poor customer service is viewed as an "important construct of satisfaction" (Troy and Baker 1994). Service quality is defined as the consumer's way of judgment about an entity's overall excellence and performance (Parasuraman et al. 1985). Failure in maintaining customer service may lead to disconfirmation of the service expectation by consumers and is negatively related to the service quality. This disconfirmation may lead shoppers to switch channels (Wolfinbarger and Gilly 2003).

H1a: Good customer service pushes consumers to stay loyal to online grocery shopping

Excellence in Delivered Product

Delivery is one of the most critical parts of e-commerce ,and the future development of the e-commerce industry relies on the improvement and maintenance of the delivery services given. Zeithaml et al. (2002) has analyzed various literature that delivery aspects of e-commerce and online shops are crucial aspects to the successes of the company in comparison of price and online presence. Online grocery shopper seeks a good quality of products which are delivered

to them conveniently. This makes the product quality of the grocery shop and the convenience in buying the product the main key of motivation for online grocery shopper switching intention (Hansen et al. 2004). According to Parasuraman (1991), product quality has equal importance for the customer service quality in retaining customer satisfaction with the channels. By having a good and reliable delivery services customers can be prevented in leaving a service which is a very easy today due to many other options available in the market. Delivery services is considered a link in a supply chain that will deal with customers directly and called the driver of customers satisfaction which is linked to customer loyalty (Hedin et al. 2006).

H1b: Excellence in delivered products pushes customers to stay loyal to online grocery shopping

Technical Excellence
By definition, technical excellence is a component that covers the overalls of a website, such as the functions of the website and the website's interface appearance (Lowry et al. 2008). Hsu et al. (2012) stated that technical excellence could be referred to by the system's quality, information, and service that online platforms offer to the consumers. An online platform with high standard manoeuvrability and accessibility that allows the users to gain easy access to the website would likely result in loyalty towards the online platform (Law and Bai, 2008). According to Pavlou and Geffen (2004), shoppers who have less experience and first-time online platform users will likely use the technical quality and simplicity of the online platform to measure their future behaviour towards the online platform. In today's era, customers are expecting lightning-fast loading screen times and a frictionless smooth online experience during online shopping. The expectations of the website technical excellence will keep on rising as more customers are switching to online shopping (Solanski 2019).

H1c: Technical excellence pushes customers to stay loyal to online grocery shopping

Price Perception
Price perception plays a significant role in consumer switching behaviour. Yu and Wu (2007) indicated that online shopping consumers are more concerned with monetary value, lower price market, and special events. Therefore, the product price range is one of the reasons consumers are likely to choose online shopping rather than conducting offline shopping activities. However, higher price tends to have negative impact on the probabilities of purchasing (Sternquist and Jin 2003). Consumers are likely to conduct switching if the price there are perceiving is relatively high (Singh and Rosengren 2020). In COVID-19 restrictions, online grocery shoppers will likely stay loyal to using online grocery shopping if prices given by the service are reasonable.

H1d: Positive price perception pushes customers to stay loyal to online grocery shopping

Pull Effect
The pull effect is the factor that " draws prospective migrants to come to the destination"(Moon and Bruce 1995). Like the push factors, the pull factors are not characteristics associated with the migrant. According to the paradigm of push and pull, the pull factors describe the factors at the destination that attracted the migrant to be pulled toward the destination (Bansal et al., 2005).

Hypothesis 2: Word of mouth and alternative attractiveness of the online grocery platform creates behavioural e-loyalty in online grocery shopping.

WOM (Word of Mouth)
Word of Mouth is a marketing process when a daily dialogue reflects a consumer's interest in a specific product or service. WOM plays a critical role in trust-building in an online environment, and purchasing decisions based on the experience of others will result in high trust towards the online businesses (Lee and Kwon 2011). Word of Mouth marketing may succeed if consumers gain an emotional bond with the company. This is gained if the company can give the best performance, service, and interaction. Businesses having positive word of mouth allows easier promotion of the products and services and building a long-term relationship with their customers, thus gaining loyalty and higher profit. This indicates that word of mouth is an important factor businesses need to build loyalty for their customers (Alhulail et al. 2018).

H2a: Word of mouth pull customers to stay loyal in using online grocery shopping

Alternative Attraction
Alternative attractiveness is defined as the perception of consumers on the extent of competing alternatives available in the business marketplace (Ghazali. 2016). Alternative attraction is regarded as an important presence on migration and emphasized that destinations play an essential role in the decision to move (Walmsey and Young 1998). A shopper is likely to stay loyal from other service provider if only when the offering provided by the current service being used is perceived to have better performance and benefit than the other providers available in the market (Dick and Basu 1994). When consumers are planning to stay loyal to a service provider, their intention of loyalty may depend on the company's ability and skills to provide satisfactory benefits for the consumers when they are staying loyal to the current providers (Scholsser et al. 2016).

H2b: Alternative attraction pull customers to stay loyal in using online grocery shopping

Mooring Effect
Mooring effect is a term used to indicate hindrances that prevent migration from happening (Chiu et al. 2009). The switching behavior could not only be explained by the push and pull variable. This is due to other factors which may affect or intervene in the process of consumer switching. The effects of the mooring variables included factors which indicate unfavourable factors towards the switching process.

H3: Low switching cost and past switching behaviour hinders customers to stay loyal in using online grocery shopping

Switching Cost
Switching cost is defined as the estimation of the loss and sacrifice of money, effort, and time associated with switching to other service providers (Hellier et al. 2003). The switching cost is the total summation of the cost bear by the consumers and the cost that is bear by the company itself (Shapiro and Varian 1999). This implies that both consumers and the company have an equivalent effort in the importance of determining the cost of switching. Upon the switching process, the cost being evaluated are not only evaluated through the economic aspect, thus also include the physical and emotional costs (Burnham et al. 2003). Before switching movement is considered by a consumer, the consumer will have a second thought before switching even though there is less satisfaction in using the current providers. This is because switching will impact the loss of money, energy, time, and relationship (Anderson, 1998).

H3a: Low switching cost hinders customers to stay loyal in using online grocery shopping

Past Switching
Past switching behaviour is defined as a previous switch done by a consumer regarding to the usage of products or services. Past switching behavior is considered to receive considerable attention in studies regarding consumer switching behavior (Bansal et al. 2005). The consumer who had a previous successful switching process is considered to be more inclined in moving to other providers (Hou et al. 2011). Past behavior is regarded as the best predictor for future behavior, thus prior switching behavior will impact future tendency to switch instead of staying loyal (Ajzeen 2002). Prior switching behavior will affect loyalty in online shopping, especially in the grocery shopping context. This is due to high-frequency past habit of switching behavior is a predictive marker for future shopping behavior (Franklin 2013).

H3b: Past switching behavior hinders customer to stay loyal in using online grocery shopping

Moderating effect of perceived risk
Perceived risk is a conceptual approach which involves uncertainty and adverse consequences associated during a purchase of product or services (Boksberger et al. 2007). Researchers might expect to exert risk as a moderating effect on several variables that are related to the field of consumer behaviour study. Shopping has been regarded as an activity involving risks as shoppers may be caught in an uncertain condition of a purchase decision and the consequences of a poor decision (Bauer 1967). Perceived risk is available in most purchasing decisions. Non-store purchase decisions tend to have a higher level of perceived risk associated (Lai-Ming 2012). The research found that consumers which are risk-averse are unlikely to conduct non-store purchases (Tan 1999).

H4: Perceived risk moderates the relationship between push (customer services, excellence in delivered products, technical excellence, low price perception), pull (word of mouth, alternative attraction), and mooring (low switching cost, past switching behavior) towards behavior e-loyalty

Moderating effect of consumer mobility

In the business and consumer behavior contexts, mobility is defined as a movement of people inside the business circle (Sean 2017). Due to large scale restrictions, mass transportation activities including land, air, and sea transportations are limited (Abu-Rayash and Dincer 2020). This causes many people living in highly affected areas of COVID-19 to have limited mobility in travelling activities. Individuals are adjusting their regular activities schedule and changing most activities to an in-home-activities (Fatmi 2020). The consumer mobility will likely to affect the relationship of the push, pull and mooring effect to the loyalty intention. Lower mobility will likely result in altering switching intention into staying loyal, even though the online grocery retailer attracts consumers with the pull effects (Handayani et al. 2020).

H5: Consumer mobility moderates the relationship between push (customer services, excellence in delivered products, technical excellence, low price perception), pull (word of mouth, alternative attraction), and mooring (low switching cost, past switching behavior) towards behavior e-loyalty

Based on the above hypothesis, we draw the conceptual model that shows the hypothesized relationships, as can be seen in Figure 1.

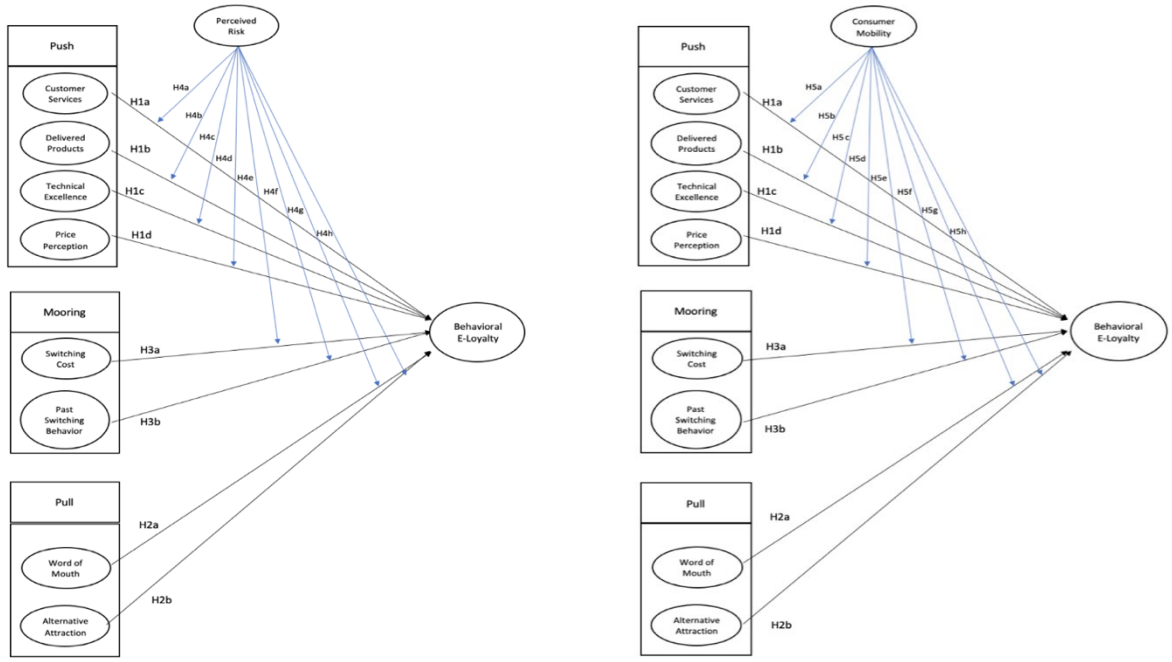

Figure 1. Theoretical Framework

3. Methods

The unit of analysis in this study are those who never uses online grocery shopping before the pandemic and has fully switched to using online grocery platforms during the COVID-19 pandemic. The questionnaire was distributed using a convenience sampling method, with a filter question to assess the eligibility of the respondent to answer the questions. A six-point Likert scale is used in the questionnaire, ranging from 'strongly disagree' to 'strongly agree'. A pilot test to the questionnaire was conducted using undergraduate students; resulting in minor modifications to the questions. The questionnaire was distributed using online messengers and emails. Measurement items were tested for reliability and validity prior to the distribution of the questionnaire. We collected 218 usable responses out of

231 collected ones. We analyzed it using multiple regression in SPSS to test the hypothesis. To test the moderation effect, we use interaction method.

4. Data collection

In the push construct, four dimensions were taken as part of the construct: customer services, excellence in delivered products, technical excellence and price perception. The measurement items for all those variables were taken from Collier and Bienstock (2006). Six questions are used for customer services, seven question are used for excellence in delivered products, four questions are used for technical excellence and two questions are used for price perception. The pull construct comprises of two dimensions: word of mouth and alternative attractions. Word of mouth is measured using the items from Florian and Bayon (2004) and alternative attraction was measured using three questions from Ghazali et al. (2016). The mooring construct which consist of switching cost and past switching behavior are measured using the items from Bansal et al. (2005) and Burnham et al. (2003) respectively. The moderating variables of perceived risk and consumer mobility measurements are taken from Handayani et al. (2020). Four questions are used to measure perceived risk and three questions are used for consumer mobility. The measurement for behavioral e-loyalty was taken from three items from Husain (2017).

5. Results and Discussion

5.1 Numerical result

The pretest result shows that Cronbach's Alpha for each variable is higher than 0.6, indicating the data is reliable. The results from the factor analysis also show that all the questions are having good validity, shown in the factor loading that is higher than 0.7 (Table 1).

Table 1. Reliability test result

Variable	Cronbach's Alpha	Variable	Cronbach's Alpha
Customer Services	.909	Switching Cost	.959
Excellence in Delivered Products	.948	Past Switching Behavior	.948
Technical Excellence	.944	Perceived Risk	.925
Price Perception	.949	Consumer Mobility	.952
Word of Mouth	.950	Behavioral E-Loyalty	.946
Alternative Attraction	.905		

Table 2. Validity test result

Variable	Factor Loading	Variable	Factor Loading	Variable	Factor Loading
Customer Services	CS1: 0.855 CS2: 0.841 CS3: 0.810 CS4: 0.803 CS5: 0.826 CS6: 0.836	Excellence in Delivered Products	IDP1: 0.895 IDP2: 0.857 IDP3: 0.866 IDP4: 0.874 IDP5: 0.887 IDP6: 0.864 IDP7: 0.886	Technical Excellence	TI1: 0.919 TI2: 0.917 TI3: 0.936 TI4: 0.935
				Price Perception	PP1: 0.976 PP2: 0.976

Table 2. Validity test result (continued)

Variable	Factor Loading	Variable	Factor Loading	Variable	Factor Loading
Word of Mouth	WOM1: 0.976 WOM2: 0.976 AA1: 0.918	Past Switching Behavior	SBT1: 0.975 SBT2: 0.975 SC1: 0.965	Perceived Risk	PR1: 0.890 PR2: 0.860 PR3: 0.944

Variable	Factor Loading	Variable	Factor Loading	Variable	Factor Loading
Alternative Attraction	AA2: 0.916 AA3: 0.921	Switching Cost	SC2: 0.960 SC3: 0.960		PR4: 0.923
Behavioural E- Loyalty	BHV1: 0.945 BHV2: 0.949 BHV3: 0.955	Consumer Mobility	CM1: 0.960 CM2: 0.944 CM3: 0.960		

The multiple regression was used to identify the hypothesized relationship. The result can be seen on Table 3.

Table 3. Multiple regression results

Dependent Variable	Independent Variable	R Square	Constant		β	Sig.	Conclusion
Behavioral E - Loyalty	Customer Services	.128	1.107		0.158	.133	H1a rejected
	Excellence in Delivered Products				0.068	.437	H1b rejected
	Technical Excellence				0.156	.038	**H1c accepted**
	Price Perception				-0.112	.148	H1d rejected
	Word of Mouth				0.141	.047	**H2a accepted**
	Alternative Attraction				0.131	.224	H2b rejected
	Switching Cost				-0.043	.585	H3a rejected
	Past Switching Behavior				0.131	.037	**H3b accepted**

The interaction effect test was conducted on behavioural e-loyalty as the dependent variable to investigate if perceived risk and consumer mobility affect the relationship between dependent and independent variables. The result is provided in Table 4 and Table 5.

Table 4. Interaction Result – Perceived risk as moderator

Dependent Variable	Independent Variable	R Square	Constant	β	Sig.	Conclusion
Behavioral E-Loyalty	Perceived Risk*Customer Services	.310	2.989	.142	0.000	H4a accepted
	Customer Services			-0.466		
Behavioral E-Loyalty	Perceived Risk* Excellence in Delivered Products	.310	3.280	.143	0.000	H4b accepted
	Excellence in Delivered Products			-0.531		
Behavioral E-Loyalty	Perceived Risk * Technical Excellence	.296	3.279	.150	0.000	H4c accepted
	Technical Excellence			-0.560		

Table 4. Interaction Result (continued)

Dependent Variable	Independent Variable	R Square	Constant	β	Sig.	Conclusion
Behavioral E-Loyalty	Perceived Risk * Price Perception	.268	3.602	.178	0.000	H4d accepted
	Price Perception			-0.748		

Behavioral E-Loyalty	Perceived Risk * Word of Mouth	.286	3.322	.159	0.000	H4g accepted
	Word of Mouth			-0.595		
Behavioral E-Loyalty	Perceived Risk * Alternative Attraction	.331	2.819	.166	0.000	H4h accepted
	Alternative Attraction			-0.501		
Behavioral E-Loyalty	Perceived Risk * Switching Cost	.288	3.655	.152	0.000	H4e accepted
	Switching Cost			-0.654		
Behavioral E-Loyalty	Perceived Risk * Past Switching Behaviour	.261	3.611	.156	0.000	H4f accepted
	Past Switching Behaviour			-0.670		

Table 5. Interaction Result – Consumer mobility as moderator

Dependent Variable	Independent Variable	R Square	Constant	β	Sig.	Conclusion
Behavioral E-Loyalty	Consumer Mobility * Customer Services	.442	2.815	.151	0.000	H5a accepted
	Customer Services			-0.435		
Behavioral E-Loyalty	Consumer Mobility * Excellence in Delivered Products	.430	3.079	.157	0.000	H5b accepted
	Excellence in Delivered Products			-0.510		
Behavioral E-Loyalty	Consumer Mobility * Technical Excellence	.398	3.154	.158	0.000	H5c accepted
	Technical Excellence			-0.529		
Behavioral E-Loyalty	Consumer Mobility * Price Perception	.419	3.644	.197	0.000	H5d accepted
	Price Perception			-0.801		
Behavioral E-Loyalty	Consumer Mobility * Word of Mouth	.392	3.377	.160	0.000	H5g accepted
	Word of Mouth			-0.574		
Behavioral E-Loyalty	Consumer Mobility * Alternative Attraction	.448	2.981	.178	0.000	H5h accepted
	Alternative Attraction			-0.558		
Behavioral E-Loyalty	Consumer Mobility * Switching Cost	.399	3.488	.154	0.000	H5e accepted
	Switching Cost			-0.587		
Behavioral E-Loyalty	Consumer Mobility Past Switching Behaviour *	.421	3.344	.158	0.000	H5f accepted
	Past Switching Behaviour			-0.574		

5.2 Proposed Improvements

In this research, the author only focuses on e-loyalty based on loyalty towards online usage from offline usage. This means that the research is based on the loyalty to online platforms, i.e. not returning to on-site grocery shopping. For future study, the author recommend to research loyalty between online to the online platform. It is advised to analyse the loyalty of grocery shoppers in current platform preference in the prevention of movement to another online grocery platform. Further research could also examine attitudinal loyalty as the measurement of loyalty. In this research, the author uses behavioural loyalty. This resulted in variables that cause push, pull, and mooring does not necessarily reflect on positive evaluation such as happiness, excitement, and positive brand preferences, which reflects attitudinal loyalty.

5.3 Validation

Technical excellence is an essential factor which results in loyalty for an online platform. According to previous research on online grocery shopping (Singh and Rosengren 2020), it is stated that When shopping online, customers are looking for ease of use; how to navigate between menus so that grocery shopping can be done quickly and trouble-free. Contrary to what has been widely known, finding shows that good customer service is not sufficient in making shoppers stay loyal. When there are only a few trusted platforms available in the online grocery market, the consumer has less bargaining power. Although the services may not be as expected, they still use the platforms. Similar to this is the response toward delivered products quality. Findings show that excellent product quality is not predicting online the behavioural e-loyalty. Pandemic situations and partial lockdown may cause scarcity of goods and services (Naeem 2020), and customers become more lenient towards the quality of delivered products.

Attractive price is not showing a significant impact on behavioural e-loyalty. In online grocery shopping, buyers lack the look and feel of the product. They might use price as the quality proxy (Lambert 1972). Thus, higher-priced products do not always drive customers away, and the attractiveness of low prices may indicate lower quality.
Consumers can influence and become influenced by the knowledge and experience of other people. Word of mouth provides good support toward behavioural e-loyalty (Alhulail et al. 2018). Customers are pulled toward the online groceries store by the excellent shopping reviews. However, discounts, promotions, and exciting programs offered by the online grocery platform cannot guarantee behavioural e-loyalty. The result of the multiple regression shows that alternative attractiveness doesn't show support in showing a significant impact on loyalty. Guens et al. (2001) stated that shopping for essential goods is considered more towards utilitarian instead of hedonic activity in which shopping is regarded as an exciting and experiential activity. Therefore, the attractive offering is not a key factor to drive customers to continue shopping in the online grocery store. While switching cost is theoretically affecting customer churn, finding shows no support that it can predict behavioural e-loyalty. However, findings support past switching behaviour to affect behavioural e-loyalty. Consumers who have successful switching experience tend to switch again (Hou 2011). This will negatively impact behavioural e-loyalty, especially if there was a high frequency of past switching behaviour in the shoppers (Franklin 2013).

Findings confirm the moderating role of perceived risk the moderating role of perceived risk in all aspects of push, pull, and mooring dimensions. High perceived risk strengthens the PPM effect on behavioural e-loyalty. The moderating role of consumer mobility is also evident in this research. When mobility is limited, shoppers tend to show behavioural e-loyalty. COVID-19 has a significant impact on mobility. According to research on mobility by Zhang et al. (2021), In the case of COVID-19, the “stay-at-home” regulations of social distancing measures s, aim to “flatten the curve” of the spread of COVID-19. Due to the limited mobility society faces, shoppers make their purchases online as many physical outlets are closed due to lockdown restrictions or having limited capacities to reduce mobility to maintain social distancing.

6. Conclusion

This research shows that technical excellence, word of mouth, and past switching behaviour are crucial factors in generating behavioural e-loyalty in online grocery shopping. Online grocery retailers should keep maintaining technical excellence and quality, which will boost satisfaction and retain grocery shoppers using the online platform. This is important because technical issues likely influence shoppers to prefer on-site grocery shopping when the situation allows. Businesses operating online should also focus on word-of-mouth marketing as it is considered an essential factor in creating loyalty towards online platform usage. The research also found that a shopper's past switching behaviour will affect their loyalty. During the pandemic, shoppers who frequently switch grocery retailers will likely switch back and be disloyal in online shopping. Thus retailers operating online should create retention programs and loyalty benefits to prevent shoppers with a high tendency of switching to churning to other channels. During the pandemic, online grocery retailers and businesses can enjoy the advantage of high perceived risk and limited consumer mobility, as these factors strengthen the PPM component in creating behavioural e-loyalty.

References

Ajzen, I., Perceived Behavioral Control, Self-efficacy, Locus of Control, and the Theory of Planned Behavior1. *Journal of Applied Social Psychology*, vol. 30, no. 4, pp. 665–683, 2002.

Alhulail, H., Dick, M., and Abareshi, A.,International Conference on Information Resources Management. In *The Influence of Word-of-Mouth on Customer Loyalty to Social Commerce Websites*, Ningbo, China, May 2018.

Anderson, J.C., and Gerbing, D.W., Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, vol 103, no. 3, pp. 411, 1988.

Bansal, H.S., Taylor, S.F., and James, Y.S., Migrating" to new service providers: toward a unifying framework of consumers' switching behaviors. *Journal of the Academy of Marketing Science*, vol *33*, pp. 96–115, 2005.

Bansal, H. S., and Taylor, S. F., The Service Provider Switching Model (SPSM). *Journal of Service Research,* vol *2, no.* 2, pp. 200-218, 1999.

Bauer, R.A.,*Consumer Behavior as Risk Taking*. (Cox, D.F., Ed.).*Risk Taking and Information Handling in Consumer Behavior*, Graduate School of Business Administration, Harvard University, Boston, 23-33, 1967

Burnham, T.A., Frels, J.K., Mahajan, V., Consumer Switching Costs: a Topology, Antecedent and Consequences. *Journal of Academy Marketing Science,31* (2), 109–126, 2003.

Chiu, C., Chang, C., Cheng, H., and Fang, Y., Determinants of Customer Repurchase Intention in Online shopping. *Online Information Review*, vol *33*, pp. 761–784, 2009.

Cyr, D., Hassanein, K., Head, M., and Ivanov, A., The role of social presence in establishing loyalty in e-Service environments. *Interacting with Computers*, vol 19, no 1, pp. 43–56, 2007

Dick, A.S., and Basu, K., Customer loyalty: toward an integrated conceptual framework. *Journal of the Academy of Marketing Science,* vol 22, pp. 99–113, 1994.

Bogue, D., *A migrant's-eye view of the costs and benefits of migration to a metropolis. In A. A. Brown and E. Neuberger (eds.), Internal migration: A comparative perspective.*167–182. New York: Academic Press, 1977.

Fatmi, M. R. ,COVID-19 impact on urban mobility. *Journal of Urban Management, 9*(3), 270-275, 2020

Franklin, K., *The Best Predictor of Future Behavior Is Past Behavior*. Psychology Today, Available: https://www.psychologytoday.com/us/blog/witness/201301/the-best-predictor-future-behavior-is-past-behavior., 2013.

Ghazali, E., Nguyen, B., Mutum, D.S., and Mohd Any, A.A., Constructing online switching barriers: examining the effects of switching costs and alternative attractiveness on e-store loyalty in online pure-play retailers. *Journal of Electronic Marketing*, vol. 26, no. 2, pp. 157–171, 2016.

Handayani, P., Nurahmawati, R., Pinem, A., and Azzahro, F., Switching Intention from Traditional to Online Groceries Using the Moderating Effect of Gender in Indonesia. *Journal of Food Products Marketing*, vol 26, no.6, pp.425-439, 2020.

Hansen, T., Møller Jensen, J., and Solgaard, H.S., Predicting online grocery buying intention: a comparison of the theory of reasoned action and the theory of planned behavior*. International Journal of Information Management*, vol. 24, pp. 539–550, 2004.

Hashim, N. M., Pandit, A., Alam, S. S., and Manan, R. A., Why resist? examining the impact of technological Advancement and perceived usefulness on Malaysians' switching intentions: The moderators. *The Journal of Developing Areas*, vol. *49, no.* 3, pp. 65–80, 2015.

Hellier, P.K., Geursen, G.M., Carr, R.A., and Rickard, J.A., Customer repurchase intention. European Journal of Marketing, vol *37*, pp. 1762–1800, 2003.

Hou, A.C.Y., Chern, C.C., Chen, H.G., and Chen, Y.C., Migrating to a new virtual world: exploring MMORPG switching through human migration theory. *Computers in Human Behavior*, vol 27, pp. 1892–1903, 2011.

Hsu, C.L., Chang, K.C., and Chen, M.C., The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management,* vol 10, pp. 549–570, 2012.

Husain, S., The determinants of loyalty in online commerce - an exploratory study in India. *The Electronic Journal of Information Systems in Developing Countries*, vol. *81, no.* 1, pp. 1–17, 2017.

Jackson, J.A. (1986). *Migration: In Aspects Modern Sociology: Social Process*. London and New York: Longman

Katawetawaraks, C., and Wang, C. L., Online Shopper Behavior: Influences of Online Shopping Decision. *Asian Journal of Business Research,* vol 1, no. 2, 2011

Lambert, Z., Price and Choice Behavior. *Journal of Marketing Research*, vol. 9, pp. 35–40, 1972.

Lai-Ming Tam, J., The moderating role of perceived risk in loyalty intentions: an investigation in a service context. *Marketing Intelligence and Planning*, vol. 30, no.1, pp. 33–52, 2012.

Law, R., and Bai, B., How do the preferences of online buyers and browsers differ on the design and content of travel websites*? International Journal of Contemporary Hospitality Management,* vol 20, no. 3, pp. 388-400, 2008.

Lowry, P. B., Vance, A., Moody, G. D., and Beckman, B., Explaining and Predicting the Impact of Branding Alliances and Web Site Quality on Initial Consumer Trust of E Commerce Web Sites*. Journal of Management Information Systems,* vol 24, no. 4, pp. 199-244, 2008.

Moon, B., Paradigms in migration research: exploring 'moorings' as a schema. *Progress in Human Geography*, vol. 19, no. 4, pp. 504–524, 1995.

Naeem, M., Understanding the customer psychology of impulse buying during COVID-19 pandemic: implications for retailers. *International Journal of Retail and Distribution Management*, vol 49, no. 3, pp 377–393, 2020.

Parasuraman, A., Zeithaml, V., and Berry, L., A conceptual model of service quality and its implications. *Future Research,* vol. 49, pp. 41-56, 1985.

Parasuraman, A., Zeithaml, V., and Berry, L., Understanding customer expectations of service understanding customer expectations of service sloan. *International Journal of Management Review*, vol. 32, no.39, 1991.

Pavlou, P. A., and Gefen, D., Building effective online marketplaces with institution based trust. *Information Systems Research,* vol. 15, no. 1, pp. 37-59, 2004.

Riel, A. C. R., Lemmink, J., Streukens, S., and Liljander, V. Boost customer loyalty with online support: the case of mobile telecoms providers. *International Journal of Internet Marketing and Advertising*, vol 1, no.1, pp. 4–23, 2004.

Shapiro, C. and Varian, H.R. *Information Rules-A Strategic Guide to the Network Economy* (Harvard Business School Press, Boston, 1998.

Singh, R., and Rosengren, S., Why do online grocery shoppers switch? An empirical investigation of drivers of switching in online grocery. *Journal of Retailing and Consumer Services,* vol. 53, no. 101962, 2020.

Stimson, R.J., and Minnery, J., Why people move to the' sun-belt': a case study of long-distance migration to the Gold Coast, Australia*. Urban Study*, vol. 35, no. 2, pp. 193–214, 1998

Tan,J.J., Strategies for reducing consumer's risk aversion in internet shopping. *Journal of consumer marketing, vol. 16, no.* 2, pp. 163-180, 1999.

Wolfinbarger, M., and Gilly, M.C., Dimensionalizing, measuring and predicting retail quality. *Journal of Retail*ng, vol. 79, no. 3, pp. 183–198, 2003.

Yu, T. and Wu, G., Determinants of internet shopping behavior: An application of reasoned behavior theory, *International Journal of Management*, vol. 24, no.4, pp. 744-762, 2007.

Zeithaml, V. A., Parasuraman, A., and Malhotra, A., Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge. *Journal of the Academy of Marketing Science*, vol. 30, no.4, pp. 362-375, 2002.

Zhang, J., Feng, B., Wu, Y., Xu, P., Ke, R., and Dong, N., The effect of human mobility and control measures on traffic safety during COVID-19 pandemic. *PLOS ONE*, vol.16, no. 3, 2021.

Biographies

Dr. Evi Rinawati Simanjuntak, MM. is currently teaching as a full-time professor in Masters of Management Program in Binus Business School, Jakarta, Indonesia. Between 2012-2014, she served as the Head of School in Marketing Program at the same university. She holds an undergraduate degree in Electrical Engineering Department of Faculty of Industrial Technology – Bandung Institute of Technology (ITB), Indonesia; a Master's in Management Program from IPMI Business School, and a Ph.D. degree in Management at University of Indonesia. She is also an affiliate faculty member for Institute for Competitiveness, Harvard Business School, teaching Microeconomics of Competitiveness. Before joining Bina Nusantara University, she worked in Telecommunication industry for 14 years, and her last position was Transmission Network Planning manager. She also involved in project consultancy tasks from Trade Cooperation Facility (TCF) - European Union project in Indonesia; one of it is about Nation Branding in 2015. In addition to her academic activities, she also involves in giving trainings and coaching programs for middle management level, in which she received an award as Best Facilitator. Her research interests are in digital business, interactive marketing and luxury marketing. She takes part in writing a chapter in a book "Strategic Management – Firm Performance Series" in 2020, and one chapter in "The Essence of Luxury: An Asian Perspective" in 2016.

Matthew Abyra was a student of Binus International University, where he received his Bachelor degree in Business Management and Marketing. Currently he is running a family business in the field of factory and laboratory equipment trade in Indonesia. He conducts his internship program as a product management intern in PT Erajaya Swasembada Tbk. Mr. Matthew has an interest in music. He was a brand ambassador and endorsee for Denish Custom Drums Indonesia from 2013 - 2016, Singapore Drum Competition 2017 Finalist and Singapore Drum Competition 2018 Semi-Finalist. He also served as a band manager and head of logistics for BIMUS (Binus International Music Society) and FUSE 2018 (BIMUS Event)