

THE INFLUENCE OF THE GENERATION Z'S PERCEPTION AND PSYCHOLOGICAL OWNERSHIP ON REPURCHASE INTENTION OF E-SHOPPING: EVIDENCE FROM VIETNAM

Diep T. Ngoc Nguyen

Tomas Bata University in Zlin, Faculty of Management and Economics, Czech Republic
Faculty of Business Administration, Ho Chi Minh City Open University, Vietnam

Sinh Duc Hoang

Tomas Bata University in Zlin, Faculty of Management and Economics, The Czech Republic
Ho Chi Minh City University of Foreign Languages – Information Technology, Vietnam

Miloslava Chovancová

Tomas Bata University in Zlin, Faculty of Management and Economics, Czech Republic

Khang Hoang Tran

Tomas Bata University in Zlin, Faculty of Management and Economics, Czech Republic

ABSTRACT

One of the most significant achievements of Information Communication Technology (ICT) in commerce is e-shopping, which changes shopping behavior in the retail sector. This research examines how Generation Z's perceptions of e-shopping benefits and drawbacks and a qualitative method through in-depth interviews and a quantitative method via a questionnaire survey is employed to assess the Generation Z-ers' attitudes, perceptions, and psychology toward the benefits and drawbacks of e-shopping and their intention of choosing this channel for repurchasing. PLS-SEM will be associated to discover the relationships between Generation Z-ers' psychological ownership, perceptions of e-shopping benefits and drawbacks, and their online repurchase intention. Findings suggest that Generation Z-ers' online repurchase intention is due to perceived benefits, psychological ownership, and is regardless of perceived drawbacks. Furthermore, as a moderator of the effect of perceived drawbacks on repurchase intention, psychological ownership may lessen the Generation Z-ers' concerns of e-shopping drawbacks and enhance their online repurchase intention.

Keywords: E-shopping, Generation Z (Gen Z), **Perceived** benefits, **Perceived** drawbacks, Psychological ownership, Repurchase intention.

DOI: <http://dx.doi.org/10.15549/jeecar.9i2.792>

INTRODUCTION

With the rapid development of information

technology, enhanced accessibility to the Internet, and possession of more mobile devices than ever before, e-commerce has soared

dramatically in recent years. Worldwide, retail e-commerce sales have witnessed a sharp growth from USD1,336 billion in 2014 to USD4,280 billion in 2020 (Statista, 2021a). Moreover, e-commerce is projected to grow to USD6,388 billion by 2024 (Statista, 2021a). Thus, e-retail sales share accounted for 18% of total global retail sales in 2020 and is projected to reach 21.8% by 2024 (Statista, 2021b).

In practice, one of the more visible motivational factors that positively contributed to the increase in sales of e-shopping was the ease of connecting to the Internet and the ability to own mobile communication devices more efficiently than ever before. According to Mah (2019), in Vietnam Gen Z-ers born between 1996 and 2010 (Fromm & Read, 2020) will increase to 15 million by 2025 and shape Vietnam's future markets, especially in shopping and food and beverage consumption. Predictably, this consumer group may significantly contribute to the growth of e-shopping in the future. Therefore, this research aims to discover why Gen Z-ers exhibit repurchase intention of shopping online through their psychological ownership and perceptions of e-shopping benefits and drawbacks.

LITERATURE REVIEW AND CONCEPTUAL MODEL

Gen Z consumers' characteristics and shopping behavior

Ingelhart discussed Generational Cohort Theory in 1977, describing that populations can be classified into segments called generational cohorts based on year of birth. Pendergast's research published in 2009 emphasized that this theory provides an approach to analyzing and explaining population changes and their behaviors over time. According to Lisstasa and Kol (2019), the last four generations that researchers usually discussed are the Baby Boomers (born between 1946 and 1965), Gen X (born between 1966 and 1980), Gen Y (born between 1981 and 1994), and Gen Z (born between 1995 and later). However, the definitions of these generations are subjected to several debates on a birthyear basis. For instance, Fromm and Read (2020) define Boomers to be born between 1946 to 1964, Gen X-ers between 1965 to 1978, Gen Y-ers (Millennials) between 1979 to 1995, and Gen Z-ers (Pivotals) between 1996 to 2010.

Since the outbreak of ICT, research on Gen Z's behavior has been increasing because they are an essential proportion of the labor market (Dolot, 2018) and will lead the changes in the retail industry (Fromm & Read, 2020; Jílková & Králová, 2020; Mah, 2019; Priporas, Stylos, Fotiadis, 2017) in the future. Practically, Gen Z-ers are the first digital natives raised on technology (Fromm & Read, 2020; Peck and Shu, 2018) with global, social, and visual tendencies (Jílková & Králová, 2020); therefore, they prefer to consume in e-shopping channels because it is more convenient and efficient than in physical stores. Additionally, Wood (2013) noted that Gen Z-ers were born in the decade when the World Wide Web - which has four characteristics: (i) focus on innovation, (ii) emphasis on convenience, (iii) desire for security, and (iv) preference for escapism which may affect their e-shopping behavior - emerged. In addition, Peck and Shu (2018) claimed that the digital world has affected the psychological ownership of today's youth; therefore, it may open further research, especially on Gen Z-ers' behavior in e-shopping.

In recent studies about Gen Z consumers' expectation of the interaction in smart retailing and e-shopping, researchers mentioned the different shopping behavior of Gen Z-ers and their characteristics of higher expectations, more focus on experience, but less brand loyalty (Dabija and Lung, 2019; Priporas et al., 2017; Thangavel, Pathak, and Chandra, 2021). The studies also discovered that Gen Z-ers prefer e-shopping with smartphones and customized applications (Dabija and Lung, 2019; Priporas et al., 2017; Thangavel et al., 2021) because of convenience and suitability; however, they are concerned about the potential negative consequences of innovative technology applied in retailing (Priporas et al., 2017). Although, Katawetawarak and Wang (2011) claimed that purchase decisions usually depend on two emotional motives - awareness and post-purchasing behavior - Thangavel et al. (2021) indicated that saving, convenience, and social desirableness are the primary purchasing decision-styles of Gen Z-ers, especially in India. Therefore, researching the e-shopping behavior of Gen Z consumers in emerging markets is very interesting for scholars and challenging for practitioners.

Repurchase intention, Perceived benefits, and Perceived drawbacks in e-shopping

In recent years, the significant development of e-shopping has transformed the latter into a powerful sales channel for retailers with its undeniable benefits. Because of aggressive competition, retailers strive to create distinction advantages to enhance customers' repurchase intention (RI) (Simanjuntaka, Nurb, Sartonoa, and Sabric, 2019). According to Chen and Chen (2017), RI is defined by Bayratar and colleagues in 2012 as the personal intention to rebuy a service or product. In previous studies in e-shopping, authors claimed that perceived values directly affect RI (Chen and Chen, 2017; Fang, Wen, George, and Prybutok, 2016). Furthermore, other studies illustrated that the key factors influencing consumers' online repurchasing intention or decision include positive attitudes and beliefs (Eri et al., 2011; Katawetawarak & Wang, 2011; Kulviwat et al., 2016; Nittala, 2015), perceived benefits (Jiang, Yang, & Jun, 2013; Lim, Osman, Salahuddin, Romle, & Abdullah, 2016; Park & Kim, 2003; Patro, 2019, Pham, Tran, Misra, Maskeliunas, & Damaševičius, 2018), and perceived risks (Chiu et al., 2009; Eri et al., 2011; Jiang et al., 2013; Nittala, 2015; Park & Kim, 2003; Patro, 2019). Patro (2019) mainly defined that online shoppers' benefits are derived from retailers' website functions, product variety, innovativeness, personalization, convenience, reliability, financial advantage, and security and privacy. In additional, Patro (2019) believed that delivery encourages them to increase intention in e-shopping as perceived value. Customers can also benefit from their money-saving, timesaving, positive experience, and trust in e-shops (Nittala, 2015). In addition, diversified merchandise, customer service and promotions, user interface quality, product information quality, service information quality, security perception, site awareness (Park & Kim, 2003), navigation, and convenience (Nittala, 2015; Park & Kim, 2003) are essential factors motivating customers to repurchase online. While Eri et al. (2011) and Lim et al. (2016) only focused on student shopping behavior, in this study, the author concentrates on Gen Z consumers, who are expected to make an essential contribution to changing smart retailing (Priporas et al., 2017), especially Vietnam's online shopping market share in the following year (Mah, 2019).

Therefore, the first hypothesis is formulated as below:

H1: Gen Z consumers' perceived benefits positively affect their repurchase intention in e-shopping.

However, e-shopping benefits also come alongside perceived potential risks (Patro, 2019) such as product risk, financial risk (Jain & Kulhar, 2019; Nittala, 2015; Patro, 2019); security and privacy risk (Jain & Kulhar, 2019; Patro, 2019) convenience risk, and health risk (Patro, 2019).

According to Chiu et al. (2009), Eri et al. (2011), Jain and Kulhar (2019), Nittala (2015), Park and Kim (2003), Patro (2019), perceived risk is one of the most significant barriers to reducing RI online. In addition, Jain and Kulhar (2019) argued that the benefits of e-shopping that are not as expected can turn into bad experiences and drawbacks for customers' repurchasing. For instance, e-shopping can bring convenience to customers; however, broken services such as late delivery, unwanted products received due to the complexity of navigation and placing the order, or website problems can compel customers to do shopping in physical stores (Jain & Kulhar, 2019). Therefore, this study examines the effect of negative factors, including perceived risks and so-called perceived drawbacks on RI in e-shopping.

Therefore, the second hypothesis is formulated as follows:

H2: Gen Z consumers' perceived drawbacks negatively affect their repurchase intention in e-shopping.

Psychological ownership

Psychological ownership (PO) is defined as the individuals' feelings of ownership or senses of possessiveness to a target thing (Dawkins, Tian, Newman, and Martin, 2015; Pierce and Peck, 2018, in Peck and Shu, 2018). According to Dawkins et al. (2015), the feel of possessions of objectives can enhance efficacy because of a sense of power, control, or influence. Besides, Zhao, Chen, and Wang (2016) argued that feelings of PO to an object might lead individuals to experience, control, or possess it. It was also illustrated that psychological ownership has a significant effect on customer loyalty (Zhao et al. 2016). Peck and Luangrath (2018, in Peck and Shu, 2018) argued that the reflections of PO of various generations are very different. Also, Gen

Z-ers are growing up in the digital technology era, and, thus, they usually use social media as their primary way to establish and maintain their social relationships.

Consequently, Gen Z-ers will have different consuming behaviors under PO influence (Peck and Luangrath (2018 in Peck and Shu, 2018). Therefore, studying how PO affects the online repurchase intention of Generation Z is also essential as a new point of the current research. Although Dawkins et al. (2015) and Zhao et al. (2016) considered PO as a mediator, in this article, PO is hypothesized to positively affect RI and moderate the effects between PB, PD and RI. Regarding the measurements of PO, Peck and her colleagues (2018, p.240) discussed and developed over the years the three scales that are used in this study: a sense of ownership, sense of connection, and sense of closeness (detailed in Table 1). The hypotheses are formulated as follows:

H3a: Gen Z consumers' psychological ownership positively affects their repurchase intention in e-shopping.

H3b: Gen Z consumers' psychological ownership moderates the effect of

perceived benefits on repurchase intention in e-shopping and enhances their repurchase intention despite the perceived drawbacks in e-shopping.

H3c: Gen Z consumers' psychological ownership moderates the effect of perceived drawbacks on repurchase intention in e-shopping and enhances their repurchase intention despite the perceived drawbacks in e-shopping.

Formulation of the conceptual model

In the scope of this study, the factors affecting repurchase intention are the perceived benefits, perceived drawbacks of e-shopping, and PO of Gen Z-ers, which are the factors collected from the existing models and studies through literature reviews. The second foundation to build the constructs with relevant indicators in the conceptual model originates from the results of an in-depth interview to enhance the comprehensive and match the questionnaire to the Vietnamese e-shopping context and thus satisfy the research purposes (Pham et al., 2018). This is detailed as in Table 1.

Table 1: Constructs and Indicators of the Conceptual model

Constructs	Indicators and descriptions	Sources
Repurchase Intention (RI)	(RI_1) Continuation: Keeping doing e-shopping at e-retailer(s)/ e-platform(s)	Chiu et al. (2009); Jiang et al. (2013); Park & Kim (2003)
	(RI_2) Increase frequency: Shopping at e-retailer(s)/ e-platform(s) more regularly	Chiu et al. (2009); Jiang et al. (2013)
	(RI_3) Recommendation: recommend others for doing e-shopping at retailer(s)/ platform(s)	Jiang et al. (2013)
Psychological Ownership (PO)	(PO_1) Sense of ownership: feel like possessing the website/ application	Peck and Luangrath (2018); Peck and Shu (2018); Zhao et al. (2016)
	(PO_2) Sense of closeness: feel a strong sense of familiarity with website/ application	Peck and Luangrath (2018); Peck and Shu (2018)
	(PO_3) Sense of connection: feel connected to the website/ application	Peck and Luangrath (2018); Peck and Shu (2018)
Perceived Benefits (PB)	(PB_1) Convenience: Easy to access, Search, Evaluation, Transaction, and Possession	Chiang & Dholakia (2003); Nittala (2015); Park & Kim (2003); Pham et al. (2018)
	(PB_2) Reasonable price: Offered good and comparable prices (among suppliers and from different e-platforms)	Chiang & Dholakia (2003); Jain & Kulhar (2019); Nittala (2015)
	(PB_3) Flexible order: placing order everywhere at any time via PC or mobile devices	Eri et al. (2011); Jain & Kulhar (2019); Jiang et al. (2013)

Table 1: Continued.

Constructs	Indicators and descriptions	Sources
	(PB_4) Flexible payments: Paying through any payment methods, e.g., cash-on-delivery, bank transfer, credit/debit card, e-wallet (e.g., Mono, Zalopay, Vnpay)	Jiang et al. (2013)
	(PB_5) Information accessibility: Available tone of information of products/services for comparison and consideration before purchasing	Jain & Kulhar (2019); Nittala (2015); Park & Kim (2003)
	(PB_6) Money-saving: Discount and promotion schemes offered regularly	Nittala (2015)
	(PB_7) Time-saving: Time saved for traveling, picking, queuing for checking out	Eri et al. (2011); Nittala (2015)
Perceived Drawbacks (PD)	(PD_1) Non-experience: Impossible physical experiencing (e.g., touch, test, smell, fit) before purchasing	Chiang & Dholakia (2003); Jain & Kulhar (2019); Eri et al. (2011)
	(PD_2) Shipping costs: High shipping costs required (because of different suppliers per order)	Jain & Kulhar (2019); Nittala (2015)
	(PD_3) Delivery time: More than one day taken for delivery	Jain & Kulhar (2019); Tham, Dastane, Johari, & Ismail (2019)
	(PD_4) Unexpected products: Wrong product type/size/color, broken, old/expiry date, or inferior quality products.	Jain & Kulhar (2019); Nittala (2015); Tham et al. (2019).
	(PD_5) Poor services: Late delivery, difficulty in exchange/ return, warranty, technology support after-sales	Chiu et al. (2009); Jain & Kulhar (2019); Jiang et al. (2013); Tham et al. (2019)
	(PD_6) Technology problems: Website/ Internet errors, inaccessibility or low speed of the Internet, mobile device problems	Chiu et al. (2009); Jain & Kulhar (2019)
	(PD_7) Category limitation: Leading to the impossibility of product categories mixed in the same order at the exact delivery time (e.g., fresh food and non-food)	Chiang & Dholakia (2003)
	(PD_8) Security risks: Financial, Security, Privacy, Fraud, or Cyber threats.	Chiu et al. (2009); Eri et al. (2011); Jiang et al. (2013); Nittala (2015); Park & Kim (2003)

Based on the review of previous theories and existing studies as the results of primary research through in-depth interviews, the conceptual model is presented as follows (Figure 1)

In this study, PO's moderation role is hypothesized to enhance the effects of

independent variables (PB & PD) on the dependent variable (Hair, Hult, Ringle, and Sarstedt, 2017).

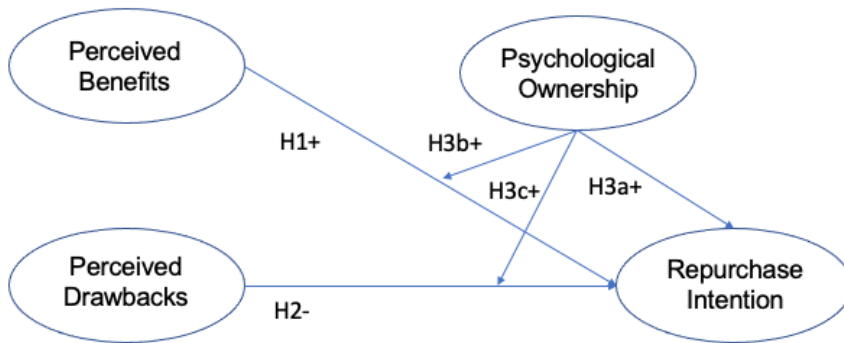


Figure 1: Conceptual model— Gen Z consumers' PB, PD and PO affect RI in e-shopping

Source: The authors' work

METHODOLOGY

The research was conducted through qualitative methods with in-depth interviews to consult and verify the constructs and indicators of the conceptual model. Ten interviewees selected were managers of e-retailers and market research firms in Vietnam. The quantitative method via the questionnaire survey examines the relationships of Gen Z-ers' perceptions of benefits and drawbacks and psychology on their online RI. Additionally, data collected are analyzed by PLS-SEM to discover the correlations between Gen Z-ers' perceptions of the benefits and drawbacks of e-shopping, PO and their RI in e-shopping. Additionally, thanks to SmartPLS, the moderating effect of PO on the relationships between PB, PD and RI will be illustrated in this research.

The target respondents are Gen Z consumers, including students and shoppers aged 18 to 25 years old (born from 1996 to 2004, following Fromm and Read, 2020), who do e-shopping at least once a month. Sample selection is non-probability with a 5-Likert questionnaire designed in Google form accessible via PC or mobile devices and sent to respondents via social network (i.e., Facebook, LinkedIn, Twitter, Instagram) and Over-the-top application for information transfer (i.e., Zalo, Viber, Telegram, etc.). According to Hair et al. (2017), the minimum sample size of 107 calculated by G*Power is acceptable. However, the larger sample size will increase the PLS-SEM estimations' statistical power, precision, consistency, and reliability. Therefore, with the number of target respondents of 1,000 whose response rate is 25%, the acceptable sample size is 250 (Sauder, Lewis, & Thornhill, 2016).

FINDINGS AND DISCUSSION

Consumers' demography and e-shopping habits

The in-depth interview was conducted in June 2021 with ten managers of top players in e-commerce (Lazada, Shopee, and Tiki) and market research (Nielsen Vietnam and Kantar Vietnam). The hypothesized constructs and relevant indicators agreed upon were developed in the questionnaire for quantitative analysis in stage 2. The survey was completed with 297 out of 1,000 questionnaires answered with quality that satisfies the research requirements.

In Table 2, the figures show that up to 59.93% of female respondents usually do e-shopping, while male respondents account for 40.07%. Most respondents are students (76.43%) and employees (20.54%). The respondents typically choose the three top e-commerce platforms (Shopee, Lazada, and Tiki) and retailers' e-shopping applications or websites for shopping with their mobile devices, such as smartphones and tablets (94.33%). Incredibly, 39.39% of respondents confirm that they do e-shopping 3 to 4 times a month, and 25.93% of them purchase online more than once a week on average. The two biggest categories bought online are dry food and beverages (51.85%) and soft goods, such as textile, fashion, health and beauty care, and household (73.06%). In contrast, fresh food & ultra-fresh food are rarely purchased online because of their specifications and limited conditions in delivery.

Table 2: Demographic information of respondents

Criteria		No. of Responses	Percentage (%)
Gender	Male	119	40.07
	Female	178	59.93
Occupation	Student	227	76.43
	Non-student (Officer/ Staff)	61	20.54
	Other	9	3.03
E-shopping frequency	Once a month	61	20.54
	Twice a month	42	14.14
	Three times a month	54	18.18
	Four times a month	63	21.21
	More than four times a month	77	25.93
Platform shopped (more than one option)	Lazada	98	33.00
	Tiki	73	24.58
	Shopee	254	85.52
	Others	37	12.46
	Retailers' e-shopping app	88	29.63
Categories (more than one option)	Fresh-food & Ultra fresh-food	18	6.06
	Dry food and beverages	154	51.85
	Softgoods (e.g., Textile, Fashion, Health and beauty care, Household, etc.)	217	73.06
	Hardgoods (e.g., Decorations, Electric & Electronics, DIY, etc.)	96	32.32
	Others	78	26.26
Device used for shopping	PC	17	5.72
	Mobile device (smartphone, tablet)	280	94.28

Generally, the survey results coincide with the opinions of Dabija and Lung (2019) and Fromm and Read (2020) that being born and growing up in the era of the ICT outbreak, possessing and using mobile devices at an early age can be an excellent impetus for Gen Z consumers-shopping habit.

Gen Z-ers' perceptions of benefits and drawbacks, PO and RI in e-shopping

As the figures in Table 3, the convergence validity of the conceptual model is built when internal loadings are between 0.730 to 0.956, significantly higher than the threshold of 0.7 (Hair et al., 2017; 2018). Plus, the average variance extracted (AVE) values of RI, PO, PB and PD are from 0.676 to 0.815, more significant than 0.5, satisfying the test requirements (Hair et al., 2017; 2018). With these findings, convergence

validation of the conceptual model can be suggested (Hair et al., 2017; 2018). The results in Table 3 also indicate that the internal consistency reliability of the model is confirmed when its factors have the value of composite reliability between 0.870 to 0.906 and Cronbach's alpha coefficients in the interval of 0.779 to 0.906 (Hair et al., 2017). Moreover, the Heterotrait-Monotrait Ratio (HTMT) is used to examine the discriminant validity of the model. Given that the figures of all constructs in Table 4 are less than 0.9, the reliability and validity of the model have been double-checked (Hair et al., 2017).

Table 3: Construct Reliability and Validity

Constructs	Indicators	Convergent Validity		Internal Consistency Reliability		Discriminant validity
		Loadings	AVE	Composite Reliability	Cronbach's Alpha	HTMT confidence interval does not include 1
Repurchase Intention (RI)	RI_1	0.883	0.691	0.870	0.779	≤0.762
	RI_2	0.858				
	RI_3	0.747				
Psychology Ownership (PO)	PO_1	0.832	0.786	0.906	0.862	≤0.552
	PO_2	0.956				
	PO_3	0.866				
Perceived Benefits (PB)	PB_1	0.753	0.676	0.892	0.902	≤0.511
	PB_2	0.848				
	PB_3	0.840				
	PB_4	0.832				
	PB_5	0.846				
	PB_6	0.821				
	PB_7	0.812				
Perceived Drawbacks (PD)	PD_1	0.904	0.815	0.902	0.896	≤0.762
	PD_2	0.885				
	PD_3	0.906				
	PD_4	0.911				
	PD_5	0.914				
	PD_6	0.913				
	PD_7	0.885				
	PD_8	0.906				

Refer to the finding presented in Table 4. The conceptual model and data collected are consistent because the standardized root mean square residual (SRMR) is 0.056, less than 0.08 (Hair et al., 2017; Vinzi, Chin, Henseler, & Wang, 2010), and NFI is 0.896, less than 0.9 (Bentler & Bonett, 1980). Apart from goodness-of-fit measures, chi-square (χ^2), is 516.122, which means that the constructs have dependent correlations with each other. This finding demonstrates that the model is entirely consistent with the research data.

Table 4: Suitability of the model (Model fit)

	Estimated Model	Threshold
SRMR	0.056	<0.08
Chi-Square (χ^2)	516.122	
NFI	0.896	<0.9

Findings in Table 5a show the positive effects of PB and PO and the negative effect of PD on RI with medium and significant influences when p-

value, the significance level, is less than 0.5 (i.e., 5%). With the effect size f^2 (f-square) values of 0.275 (>0.15), 0.818 (>0.35), and 0.1440 (>0.02), the influence degree of the effects of PB, PD and

PO on RI can be suggested as Medium, Large and Small, respectively (Cohen, 1988).

Table 5a: Summary of Structural Model (without moderation effect)

Outer relationships	Original weight	f-square	t-value	p-value	Degree of influence
H1: PB → RI	0.319	0.275	6.208	0.000	Medium impact
H2: PD → RI	-0.570	0.818	15.232	0.000	Large impact
H3a: PO → RI	0.239	0.144	5.685	0.000	Small impact
	R²		Adjusted R²		
Repurchase intention (RI)	0.644		0.640		

With SmartPLS's support, the findings can also be displayed in a diagram as Figure 2a.

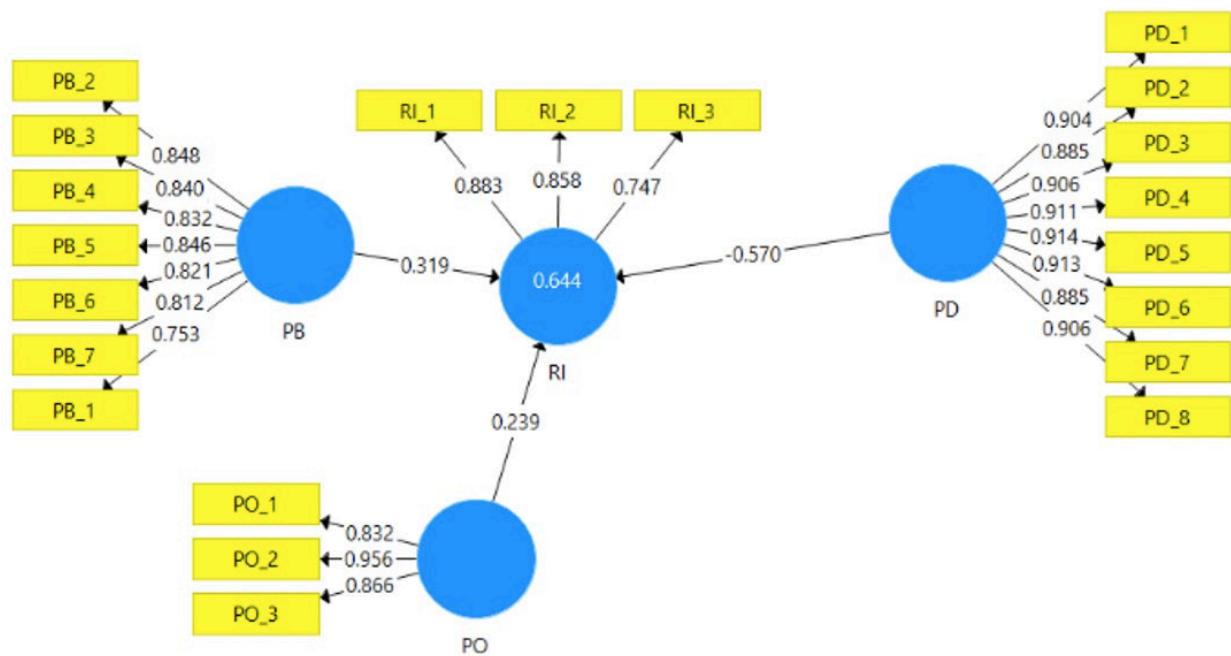


Figure 2a: Model of estimation (without moderation effects)

Source: The authors' work

To examine the moderation role of PO, moderating effecting is added into the model with a two-stage approach (Ramayah, Cheah, Chuah, Ting, & Memon, 2018). The results calculated by SmartPLS in Table 5b and Figure 2b show the significant level of PO moderation on the relationships between PB and RI, and PD and RI. Significantly, the findings show that PO has no impact on the relationship between PB and RI

because $f^2 = 0.018$ (<0.02 as Cohen, 1988), but it strongly affects the relationship between PD & RI, leading to an increase in R^2 of RI from 0.644 to 0.682, equivalent to 3.8%. Consequently, this proves that PO has a moderating effect on the relationship between DP and RI (Ramayah et al., 2018).

Table 5b: Summary of Structural Model (with moderation effects)

Outer relationships	Original weight	f-square	t-value	p-value	Degree of influence
H1: PB → RI	0.250	0.142	5.731	0.000	Small impact
H2: PD → RI	-0.579	0.945	17.890	0.000	Large impact
H3a: PO → RI	0.171	0.074	4.323	0.000	Small impact
H3b: PB*PO → RI	-0.057	0.018	2.043	0.042	No impact
H3c: PD*PO → RI	0.184	0.093	4.577	0.000	Small impact
	R ²		Adjusted R ²		
Repurchase intention (RI)	0.682		0.676		

In summary, the study results allow the conclusion that hypotheses H1, H2, H3a, and H3c are accepted, but H3b is not because PO

does not moderate the effect of PB on RI as initially hypothesized.

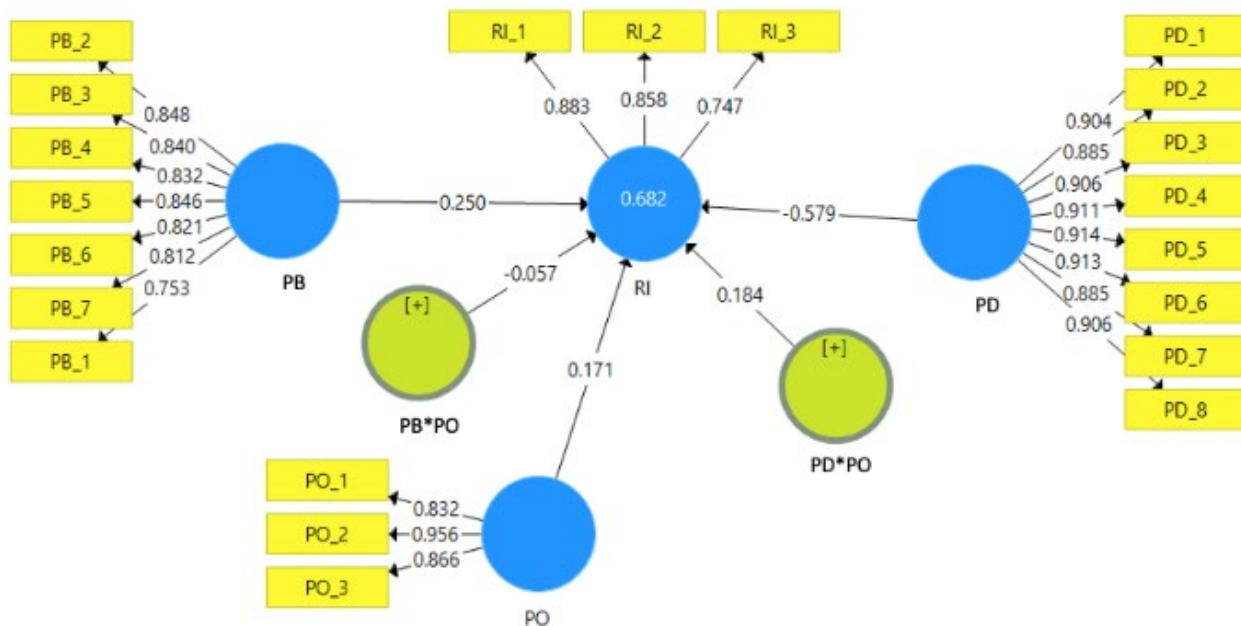


Figure 2b: Model of estimation (with moderation effects)

Source: The authors' work

Like Gen Z in emerging countries, Gen Z in Vietnam also possesses the most common characteristics of this unique generation. They are clearly aware of e-shopping benefits because of convenience, flexible order placing, more payment options, and tons of information about products/services to enhance their e-shopping habit. These benefits also help them save time commuting, searching and picking up physical items and queuing for checkout (Eri et al., 2011;

Nittala, 2015), as well as save money with comparable prices among e-retailers (Chiang & Dholakia, 2003; Jain & Kulhar, 2019; Nittala, 2015), attractive promotions, and discount policies. However, while conducting the survey, many respondents revealed that their expectations of e-shopping should be satisfied, otherwise the benefits may become drawbacks, and they may leave for different e-retailers or decrease their e-shopping frequency.

Furthermore, this study discovers that almost all Gen Z-ers respondents are aware of and consider the drawbacks of e-shopping, but they do not reduce their intention to shop online. They are afraid that they cannot have a physical experience before purchasing online and receive unexpected products or wrong items (Jain & Kulhar, 2019; Nittala, 2015). They also deal with the limitation that all kinds of products cannot be in the same order or received in the preferred time due to goods specification or sales conditions. While Jain & Kulhar (2019), Tham et al. (2019) argued that delivery of e-shopping is one of the most significant factors positively impacting RI, this research discovers that delivery is one of the drawbacks for Gen Zers when shopping online. Practically, e-shopping often takes them from one to several days for receiving the ordered items, and not free of charge. The research results also show that Gen Z consumers are concerned about the quality of expected services (e.g., delivery, aftersales services), and technical problems, website/Internet errors, or even mobile device problems when shopping online. Last but not least, the findings allow the suggestion that Gen Z-ers have an aversion to risk, and are deeply aware of e-shopping risks (financial risk, security risk, fraud, cyber threats, or privacy risk) as one of the critical drawbacks, however they still keep e-shopping and increase frequency of shopping, and even encourage their relatives, friends, and colleagues to shop online.

As far as we know, this is the first time the effect of Gen Z-ers' PO on their RI of e-shopping is discussed. The research findings have demonstrated that PO directly impacts Gen Z-ers' RI, moderates PD's effect on RI, and enhances RI despite PD of e-shopping. Practically, it can be inferred that because of the sense of ownership, closeness, and connection of the e-shopping website or applications, Gen Z consumers are engaged in and keep e-shopping. This finding is also a part of the rationale that Gen Z-ers perceive the e-shopping drawbacks, but they continue and increase the frequency of e-shopping due to their PO.

CONCLUSION

Generally, Gen Z-ers are proactive, progressive, and acquainted with technology and digital devices (Fromm & Read, 2020; Jílková & Králová, 2020), and will be a vital force changing the retail

market in the coming years (Fromm & Read, 2020; Mah, 2019). Although Gen Z-ers are still undergraduates or have just joined the workforce, they prefer e-shopping because of its benefits such as convenience, speedy transactions, efficiency, and effectiveness. In addition, they carefully consider the drawbacks and risks when shopping online as their characteristics and PO. In other words, for Gen Z consumers, experience in e-shopping is better than in-store shopping for its added benefits. However, they are usually careful to decide whether they will repurchase at an e-commerce platform or e-retailer.

Academically, the interest of this study is to demonstrate that Gen Z consumers' RI online is motivated by their PB and PO despite PD in e-shopping. This study also contributes to previous theories by showing that PO moderates the effect of PD of e-shopping on RI of Gen Z-ers in the retail industry. This study has not illustrated how PO moderates the effect of PB on RI of Gen Z in the Vietnam e-shopping context; however, it can open further studies in Gen Z consumer e-shopping behavior or e-retail trend in emerging countries.

For practitioners (e.g., retailers, e-retailers, and marketers), these research findings are the basis for predicting future consumption trends when Gen Z-ers become a significant part of the labor market, creating wealth and consuming products provided via retail channels. Moreover, it can expectedly be a reliable reference for e-retailers to improve their short-term business policies for Gen Z customers in coming years.

Submission Declaration Statement

We hereby confirm that the manuscript has no actual or potential conflicts of interest with any parties, including any financial, personal, or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence or be perceived to influence.

We confirm that the paper has not been published previously, it is not under consideration for publication elsewhere, and the manuscript is not being simultaneously submitted elsewhere.

ACKNOWLEDGMENT

The authors are thankful to the Internal Grant

Agency of FaME TBU in Zlín no. IGA/FaME/2020/011 - Investigation of the current economic topics in the Southeast Asia region for financial support to carry out this research.

REFERENCES

- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Chen, C.V. and Chen, C. (2017). The role of customer participation for enhancing repurchase intention. *Management Decision*, 55(3), 547-562. DOI 10.1108/MD-06-2016-0380
- Chiang, K. P., & Dholakia, R. R. (2003). Factors driving consumer intention to shop online: An empirical investigation. *Journal of Consumer Psychology*, 13(1–2), 177–183. https://doi.org/10.1207/s15327663jcp13-1&2_16
- Chiu, C. M., Chang, C. C., Cheng, H. L., & Fang, Y. H. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, 33(4), 761–784. <https://doi.org/10.1108/14684520910985710>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Science* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dabija, D. and Lung, L. (2019). Millennials Versus Gen Z: Online Shopping Behaviour in an Emerging Market. *Springer Proceedings in Business and Economics*. <https://doi.org/10.1007/978-3-030-17215-2>
- Dawkins, S., Tian, A.W., Newman, A. and Martin, A. (2015). Psychological ownership: A review and research agenda. *Journal of Organizational Behavior*, 38, 163–183. DOI: 10.1002/job.2057
- Dolot, A. (2018). The characteristics of Generation Z. E-mentor. <https://doi.org/10.15219/em74.1351>
- Eri, Y., Aminul Islam, Md., & Ku Daud, K. A. (2011). Factors that Influence Customers' Buying Intention on Shopping Online. *International Journal of Marketing Studies*, 3(1), 128–139. <https://doi.org/10.5539/ijms.v3n1p128>
- Fang, J., Wen, C., George, B. and Prybutok, V.R. (2016). Consumer Heterogeneity, Perceived Value, and Repurchase Decision-making in Online Shopping: The Role of Gender, Age, and Shopping Motives. *Journal of Electronic Commerce Research*, 17(2), 116-131. Retrieved October 14, 2021 from <http://www.jecr.org/node/490>
- Fromm, J. and Read, A. (2020). *Marketing to Gen Z*. US: American Management Association.
- Hair, J.F., Hult, G, T.M., Ringle, C.M., and Sarstedt, M. (2017). *A Premier on Partial Least Squares Structural Equation Modelling (PLS-SEM)*. US: Sage.
- Inglehart, R. (1977). *The silent revolution: changing values and political styles among Western publics*. UK: Princeton University Press.
- Jain, R., & Kulhar, M. (2019). Barriers to online shopping. *International Journal of Business Information Systems*, 30(1), 31–50. <https://doi.org/10.1504/IJBIS.2019.097043>
- Jiang, L. (Alice), Yang, Z., & Jun, M. (2013). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, 24(2), 191–214. <https://doi.org/10.1108/09564231311323962>
- Jílková, P. and Králová, P. (2020). Customer insights and Online Shopping attitude of Gen-Z. *The 14th International Days of Statistics and Economics (Conference proceedings)*, 408-417. Retrieved August 01, 2021 from https://msed.vse.cz/msed_2020/article/340-jilkova-Petra-paper.pdf
- Katawetawaraks, C., & Wang, C. L. (2011). Online Shopper Behavior: Influences of Online Shopping Decision. *Asian Journal of Business Research*, 1(2), 66–74. <https://doi.org/10.14707/ajbr.110012>
- Kulviwat, S., Zhang, Y., Fan, J., and Zheng, L. (2016). Understanding consumer shopping behavior: a comparison of three theories of emotions in predicting online flow. *Int. J. Electronic Marketing and Retailing*, 7 (1), 3–21. DOI: 10.1504/IJEMR.2016.075322
- Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *Procedia Economics and Finance*, 35, 401–410. [https://doi.org/10.1016/s2212-5671\(16\)00050-2](https://doi.org/10.1016/s2212-5671(16)00050-2)

- Lissitasa, S. and Kol, O. (2019). Four generation cohorts and hedonic m-shopping: association between personality traits and purchase intention. *Electronic Commerce Research*, 545–570. <https://doi.org/10.1007/s10660-019-09381-4>
- Mah, K. (2019). Vietnam's New Age Consumers: Generation Z. Vietnam Briefing. Retrieved July 29, 2021 from <https://www.vietnam-briefing.com/news/vietnams-new-age-consumers-generation-z.html/>
- Nittala, R. (2015). Factors Influencing Online Shopping Behavior of Urban Consumers in India. *International Journal of Online Marketing*, 5(1), 38–50. <https://doi.org/10.4018/ijom.2015010103>
- Park, C. H., & Kim, Y. G. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *International Journal of Retail & Distribution Management*, 31(1), 16–29. <https://doi.org/10.1108/09590550310457818>
- Patro, C.S. (2019). Influence of Perceived Benefits and Risks on Consumers' Perceived Values in Online Shopping: An empirical Study. *International Journal of Applied Behavioral Economics*, 8 (3). DOI: 10.4018/IJABE.2012070102.
- Peck, J. and Luangrath, A.W. (2018). Looking Ahead: Future Research in Psychological Ownership. In Peck, J., and Shu, S.B. (2018). *Psychological Ownership and Consumer Behavior*. Switzerland: Springer. <https://doi.org/10.1007/978-3-319-77158-8> (e-book)
- Peck, J. and Shu, S.B. (2018). *Psychological Ownership and Consumer Behavior*. Switzerland: Springer. <https://doi.org/10.1007/978-3-319-77158-8> (e-book)
- Pendergast, D. (2009). Generational Theory and Home Economics: Future Proofing the Profession. *Family and Consumer Sciences Research Journal*, 37 (4), 504–522. DOI: 10.1177/1077727X09333186
- Pham, Q. T., Tran, X. P., Misra, S., Maskeliunas, R., & Damaševičius, R. (2018). Relationship between convenience, perceived value, and repurchase intention in online shopping in Vietnam. *Sustainability (Switzerland)*, 10(1). <https://doi.org/10.3390/su10010156>
- Pierce, J.L. and Peck, J. (2018). The History of Psychological Ownership and Its Emergence in Consumer Psychology, in Peck, J., and Shu, S.B. (2018). *Psychological Ownership and Consumer Behavior*. Switzerland: Springer. <https://doi.org/10.1007/978-3-319-77158-8> (e-book)
- Priporas, C. V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374–381. <https://doi.org/10.1016/j.chb.2017.01.058>
- Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using SmartPLS 3.0: An updated guide and practical guide to statistical analysis (2nd ed.). Malaysia: Pearson.
- Sauder, M, Lewis, P. and Thornhill, A. (2016). *Research Method for Business Students* (7th ed). UK: Pearson.
- Simanjuntaka, M., Nurb, H.R., Sartonoa, B., and Sabric, M.F. (2019). A general structural equation model of the emotions and repurchase intention in modern retail. *Management Science Letters*, 10, 801–814. DOI: 10.5267/j.msl.2019.10.017
- Statista (2021a). Retail e-commerce sales worldwide from 2014 to 2024. Retrieved June 14, 2021 from <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/>
- Statista (2021b). E-commerce share of total global retail sales from 2015 to 2024. Retrieved June 14, 2021 from <https://www.statista.com/statistics/534123/e-commerce-share-of-retail-sales-worldwide/>
- Tham, K.W., Dastane, O., Johari, Z., and Ismail, N.B. (2019). Perceived Risk Factors Affecting Consumers' Online Shopping Behaviour. *Journal of Asian Finance, Economics, and Business*, 6(4), 249–260. DOI:10.13106/jafeb.2019.vol6.no4.249
- Thangavel, P., Pathak, P., and Chandra, B. (2021). Millennials and Generation Z: a generational cohort analysis of Indian consumers. *Benchmarking: An International Journal*, 28(7), 2257–2177. DOI: 10.1108/BIJ-01-2020-0050

- Vinzi, E., Chin, W.W., Henseler, J., and Wang, H. (2010). *Handbook of Partial Least Squares: Concepts, Methods, and Applications*. UK: Springer.
- Wood, S. (2013). *Generation Z as consumers: Trends and innovation*. Institute for Emerging Issues: NC State University. Retrieved July 02, 2021, from <https://iei.ncsu.edu/wp-content/uploads/2013/01/GenZConsumers.pdf>
- Zhao, Q., Chen, C. and Wang, J. (2016). The effects of psychological ownership and TAM on social media loyalty: An integrated model. *Telematics and Informatics*, 33, 959-972. <http://dx.doi.org/10.1016/j.tele.2016.02.007>

Appendix: Questionnaire for quantitative research

ACKNOWLEDGEMENT

We are conducting research entitled “**The influence of Generation Z's Perception on Repurchasing Intention in E-shopping: An Evidence of Vietnam**” to identify the impacts of Gen Z-ers' perception of e-shopping benefits and drawbacks on their repurchasing intention to shop online. Your contributions will serve as the basis to update academic theories in the e-shopping behavior of Gen Z consumers, who shape smart retailing in the following years in Vietnam and develop reliable scholarly knowledge that can be widely shared for educational and training purposes.

I hereby undertake that:

- The information you provide is confidential (answers will be deleted immediately after being transcribed and encoded).
- This research survey does not harm any person or organization.

Responding to this questionnaire will take approximately 5-7 minutes by selecting the available answers and adding your own opinion (if any) in the "Other" section.

Thank you very much for your participation.

Section 1: Demographic information

Please provide your personal information by choosing the available answers.

1. Year of birth: Before 1996 From 1996 to 2004 After 2004

If your birth year is before 1996 or after 2004, you are not a target interviewee of this survey.

2. Gender: Male Female

3. Occupation: Student Non-student (Officer/Staff/Professional) Others

4. How often do you do shopping online?

- Less than once a month
- Once a month averagely
- Twice a month averagely
- Three times a month averagely
- Four times a month averagely
- More than four times a month averagely

If you do shopping online less than once a month, you are not a target interviewee of this survey.

5. Which e-commerce platform/ e-shopping websites or applications is your preference for doing the shopping? (You can choose more than one)

- Lazada
- Shopee
- Tiki
- Others, please indicate.....
- Website of retailers

6. Which categories of products do you usually purchase online? (You can choose more than one)

- Fresh-food & Ultra fresh-food
- Dry food and beverages
- Soft goods (Textile, Fashion, Health care and beauty care, Household, etc.)

- Hardgoods (Decorations, Electric & Electronics, DIY¹, etc.)
- Others

7. What kind of device do you usually use for e-shopping?

- Mobile device (Smartphone, tablet)
- Computer/ laptop

Section 2: Online Repurchasing Intention

8. You keep doing shopping at your preferred e-commerce platform/ e-shopping websites or applications.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

9. You increase the frequency of shopping at your preferred e-commerce platform/ e-shopping websites or applications.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

10. You recommend others to shop at your preferred e-commerce platform/ e-shopping websites or applications.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Section 3: Perceived e-shopping benefits

11. You shop online for safety and convenience (quickly and easily done by PC and mobile devices).

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

12. You shop online because of price transparency and comparability (comparable with different suppliers or websites).

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

¹ Do-it-yourself

13. You shop online because you can order anytime, anywhere, and receive your ordered items on time and in any place.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

14. You shop online because of various acceptable forms of payment: cash on delivery (COD), credit/debit card, bank transfer, e-wallet (Momo, NVPay, ZaloPay), voucher/gift code ...

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

15. You shop online because there is a lot of information about goods and services to consider before deciding to purchase.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

16. You shop online because you can save costs with discounts or promotions offered regularly.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

17. You shop online because you save time traveling, seeking and picking goods, waiting for check-out, etc.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Section 4: Perceived e-shopping drawbacks

18. You are not concerned that you cannot experience the physical goods (see, touch, smell, hear, taste, check) before buying.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

19. You are not concerned that the shipping cost is high due to multiple deliveries and significantly different suppliers.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

20. You are not concerned that you will receive your goods after 1-2 days or more instead of on the same day or immediately upon purchase.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

21. You are not concerned that you will receive the unexpected item(s) (wrong product, wrong size or color, inferior quality products, e.g., broken, torn packaging, old/outdated or expired date, etc.).

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

22. You are not concerned that you will not receive service(s) as expected (e.g., late delivery or no delivery, complex and time-consuming for exchange/ return, poor service delivery, or after-sales service is not attentive, etc.).

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

23. You are not concerned that you may deal with technical errors (website lags or does not work, the connection is slow or inaccessible, equipment failure, etc.).

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

24. You are not concerned that some goods cannot be purchased online (e.g., fresh and ultra-fresh products) in the same order, or you must place several orders in different places.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

25. You are not concerned about dealing with safety and security risks (scams, leaked personal information, cybercrime) when e-shopping.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Section 5: Psychological Ownership

26. You feel like you possess your preference e-commerce platform/ e-shopping websites or applications.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

27. You feel a strong sense of familiarity with your preferred e-commerce platform/ e-shopping websites or applications.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

28. You feel like you are personally connected to your preferred e-commerce platform/ e-shopping websites or applications.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

29. Should you purchase or repurchase online for other reason(s), please provide rationale
.....

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

ABOUT THE AUTHORS

Ms. Diep T.N. Nguyen, email: t1.nguyen@utb.cz;
diepntn1309@icloud.com

Ms. Diep T.N. Nguyen, Ph.D. candidate at Faculty of Management and Economics of Tomas Bata University in Zlin (Czech Republic), has interests in Finance Management, Operations management, and Operational risk management, especially in retail industry. She possesses working experience in banking, finance, and retail operations as a senior manager and trainer. Currently, she teaches Operations management, Operational risk management as a lecturer at Ho Chi Minh city Open University, Vietnam.

Mr. Sinh Duc Hoang, Ph.D. candidate at Tomas Bata University in Zlin, Czech Republic, and a lecturer at Ho Chi Minh city the University of Foreign Language and Information Technology, Vietnam. He has research interests in Marketing, Financial behaviour, Banking and Finance. He possesses more than ten-year experience in the banking and finance sector and teaches many courses on Principal of Marketing Financial Modeling and Financial Management.

Dr. Miloslava Chovancova, Ass. Professor currently works at the Department of Management and Marketing, Tomas Bata University in Zlín, Czech Republic. She does research in Behavioural Economics, Consumer Economics and Business Administration.

Mr. Khang Hoang Tran, Ph.D. candidate at Tomas Bata University in Zlin (Czech Republic), has several years of working experience in the financial market. His interests are Finance, Investment, Management and E-commerce. He also used to be an investment and financial advisor at Deloitte Vietnam and Vietcapital securities (Vietnam), and currently, he is a senior officer at Ho Chi Minh city Stock Exchange, Ministry of Finance and visiting lecturer at Ho Chi Minh city University of Economics, Vietnam.